The Islamia University of Bahawalpur

FACULTY OF PHYSICAL & MATHEMATICAL SCIENCES

THE ISLAMIA UNIVERSITY OF BAHAWALPUR

A Chronicle of Growth, 2022–2026

PROF. DR. GHULAM MUSTAFA

Dean, Faculty of Physical & Mathematical Sciences

The Islamia University of Bahawalpur, Pakistan

Faculty of Physical & Mathematical Sciences

The Islamia University of Bahawalpur

A Chronicle of Growth, 2022–2026

Prof. Dr. Ghulam Mustafa
Dean, Faculty of Physical & Mathematical Sciences (FPMS)
The Islamia University of Bahawalpur, Pakistan

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Faculty of Physical & Mathematical Sciences

The Islamia University of Bahawalpur

A Chronicle of Growth, 2022–2026

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Compiled and Edited by Prof. Dr. Ghulam Mustafa

Prof. Dr. Ghulam Mustafa
Dean, Faculty of Physical & Mathematical Sciences (FPMS)
The Islamia University of Bahawalpur (IUB), Pakistan

Prof. Dr. Ghulam Mustafa served for eight years as Chairperson of the Department of Mathematics at IUB and has been a Professor of Mathematics since 2016.

He earned his Ph.D. from the University of Science and Technology of China (USTC) and completed postdoctoral and visiting fellowships at Durham University, UK, and USTC, China.

Dedication

To my dear mother,

whose prayers, sacrifices, and quiet strength
have been the foundation of everything I am.

To my beloved wife,

whose patience, love, and unwavering encouragement
carried me through every page of this work.

You believed in this book even on the days I did not.

And to my son,

may you always find joy in learning,
and may this book remind you
that patience and dedication bear beautiful fruit.

To the faculty members, students, and staff
whose daily dedication gives this institution its purpose,

and to all who believe that knowledge,
patiently built, becomes a lasting gift to the next generation.

Preface

This book brings together, for the first time in a single volume, the story of the Faculty of Physical & Mathematical Sciences (FPMS) at The Islamia University of Bahawalpur, Pakistan — its founding, its departments, its people between 2022 and 2026, and their achievements through their services. It is written both as an institutional record and as a source of pride for everyone who has contributed to building this faculty from its earliest days. It presents a chronicle of the growth of the faculty over these years, with all teachers who served during this period included along with their achievements.

The volume opens with the messages of the Vice Chancellor and the Dean, reflecting their vision and support for the faculty's academic journey, followed by the Vision and Mission of the Faculty of Physical & Mathematical Sciences. It then presents an introduction to the Faculty, tracing its establishment and its place within the university. The book subsequently presents, in turn, the Department of Geography and Geoinformatics, the Department of Mathematics, and the Institute of Physics, followed by the Department of Mathematics and the Department of Physics at the University's Bahawalnagar and Rahim Yar Khan campuses, describing their programs and activities. Each department's account includes an overview, a profile of its Chairperson, Director, or Head of Department, and profiles of its faculty members, each accompanied by a photograph.

A dedicated section further documents the research grants and projects obtained by individual faculty members to complete their work, reflecting the faculty's contribution to funded research activity. This is followed by a record of the research publications of individual faculty members, offering an account of the scholarly output produced across the faculty's departments and campuses. In addition, the number of research scholars supervised at the M.Phil. and Ph.D. levels by individual faculty members has been compiled, providing a further measure of the faculty's contribution to postgraduate research and academic mentorship.

It is hoped that this book will serve not only as a reference for the present community of students, faculty, and staff, but also as a lasting record for those who join the faculty in the years to come.

Prof. Dr. Ghulam Mustafa
Dean, Faculty of Physical & Mathematical Sciences
The Islamia University of Bahawalpur
Bahawalpur, Pakistan

Vice Chancellor's Messages

Prof. Dr. Muhammad Kamran, WVC, IUB

The Islamia University of Bahawalpur was established in the year 1975 by upgrading historical institute of the Jamia Abbasia. In the past for over three decades, the University has played a major role in furthering the nation's social, cultural, business and economic development by providing highly skilled manpower.

The Islamia University of Bahawalpur continues to grow rapidly pursuing the vision of being an internationally recognized institution. This is being achieved through improvement in the academic and research policies and facilities; having strong presence in Southern Punjab, with an ever growing students community and diversified academic disciplines. The government is generously providing funds for development projects, scholarships and other incentives for students. These are positive endorsements to continued progress and ultimate goal of being recognized as one of the top academia in Pakistan.

Currently, there are 142 academic departments in the University with an overall students' strength exceeding sixty five thousand. Major focus of the University has been to maximize educational opportunities, as well as personal and professional advancement of students from diverse backgrounds. We focus on producing a class of people who are not only experts in their fields but also become good citizens of Pakistan. The University offers an array of baccalaureate, masters and doctoral programs.

Our strategies highlight the University's mission and values to meet the challenges, our graduates will be facing over the coming years. We are committed to excellence in teaching and research and continuously review and develop our courses in accordance with future requirements. These strategies will improve and help us realize our ambition to be recognized as one of the leading universities of the region. We are also highly proud of the fact that our graduates are playing a major role in the progress of Pakistan. Furthermore, doors always remain open to them for further support they need.
The progress made by the Islamia University of Bahawalpur gives me confidence that its efforts will contribute in nurturing a well-trained and socially conscious generation of future leaders.

Prof. Dr. Muhammad Kamran
Vice Chancellor
The Islamia University of Bahawalpur

Dean's Messages

Prof. Dr. Ghulam Mustafa, Dean, FPMS

The Islamia University of Bahawalpur continues to reshape its academic and administrative landscape to meet the demands of a rapidly evolving world. New faculties have taken root, fresh disciplines have emerged, and ambitious programs have been launched, each designed to prepare our students for the realities of tomorrow. The Faculty of Physical & Mathematical Sciences stands as a proud outcome of this transformation. It was established to bring sharper focus, stronger administrative support, and a clearer sense of direction to the disciplines it represents.

This Faculty is home to the Department of Geography, the Department of Mathematics, and the Institute of Physics, with eleven diverse specializations between them. It occupies a unique place in the scientific landscape of our university. These are not merely subjects taught within classroom walls. They are the foundational languages through which we read the Earth, model our world, and unlock the laws that govern the universe. Students are drawn to these disciplines not only for the promising career pathways they open, but for the deeper reward of mastering tools of thought that remain relevant across every field of human endeavour.

I firmly believe this Faculty carries within it the potential for extraordinary growth. It can produce research that matters, nurture minds that lead, and build a skilled workforce that gives back to society many times over. It is this vision, of a Faculty that combines academic excellence with real-world relevance, that continues to guide our efforts every day. This book is proud to record that journey.

Prof. Dr. Ghulam Mustafa
Dean, Faculty of Physical & Mathematical Sciences
The Islamia University of Bahawalpur

Vision, Mission and Core Values of the FPMS

Vision

To be a leading faculty of physical and mathematical sciences, advancing knowledge in mathematics, physics, and geospatial sciences, and serving as a catalyst for the socioeconomic transformation of the region envisioned by The Islamia University of Bahawalpur.

Mission

To produce human and intellectual capital of high socioeconomic value through quality academic and research programs in mathematics, physics, and geography and geoinformatics, and by sustaining an environment conducive to teaching, learning, research, innovation, and community engagement across the physical, mathematical, and spatial sciences.

Our Core Values

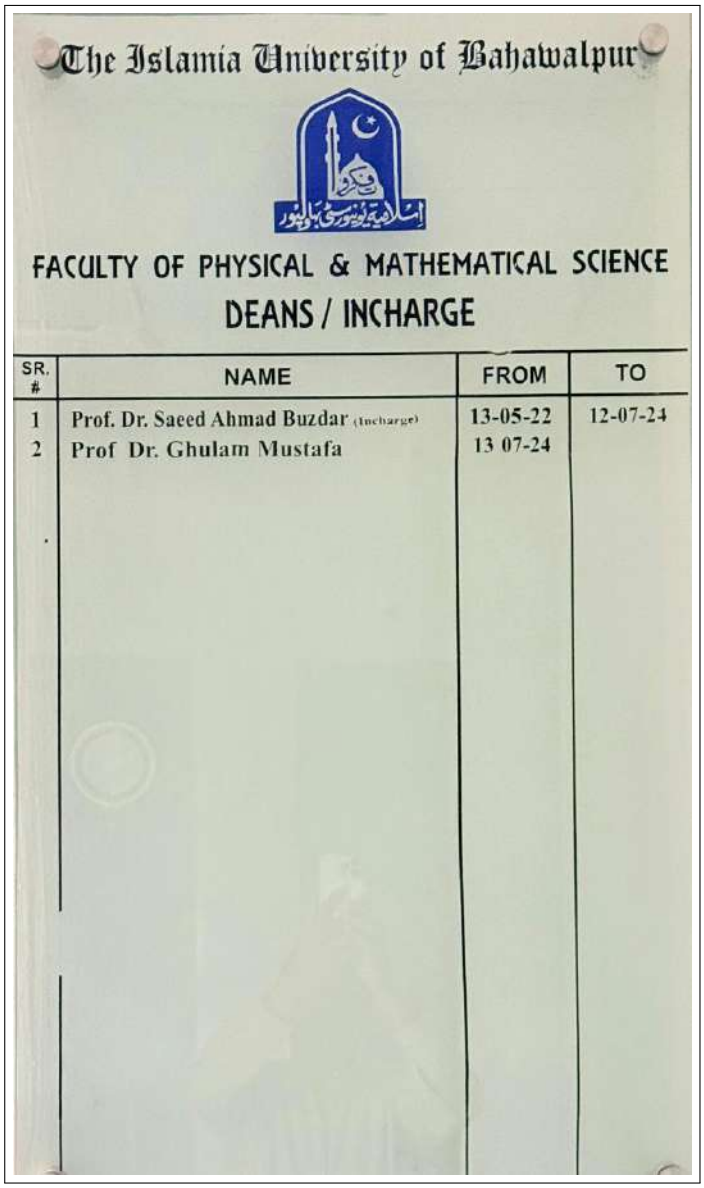
F: Fact-driven — Upholding rigor, evidence, and analytical precision across mathematics, physics, and geospatial research

P: Pioneering — Encouraging original thinking, innovation, and interdisciplinary collaboration among our three constituent departments

M: Meritocratic — Recognizing and rewarding excellence, integrity, and dedication among faculty and students alike

S: Service-oriented — Committed to community engagement and the socioeconomic advancement of the region through teaching, research, and outreach

A Tribute to Those Who Have Led the Faculty



The Islamia University of Bahawalpur

FACULTY OF PHYSICAL & MATHEMATICAL SCIENCE

DEANS / INCHARGE

SR. #	NAME	FROM	TO
1	Prof. Dr. Saeed Ahmad Buzdar (Incharge)	13-05-22	12-07-24
2	Prof Dr. Ghulam Mustafa	13 07-24	

Board displaying the Deans and Incharges of the Faculty of Physical & Mathematical Sciences

Profile of the Dean FPMS

Prof. Dr. Ghulam Mustafa, Dean, FPMS

Prof. Dr. Ghulam Mustafa has been serving as the Dean of the Faculty of Physical and Mathematical Sciences at The Islamia University of Bahawalpur (IUB) since 13-07-2024. He served for about eight years as Chairperson of the Department of Mathematics at The IUB. He earned his Ph.D. in Mathematics in 2004 from the University of Science and Technology of China (USTC), P.R. China, under the Cultural Exchange Scholarship Program. He obtained his M.Sc. and M.Phil. degrees from Bahauddin Zakariya University, Multan, and completed his B.Sc. from The Islamia University of Bahawalpur at Dera Nawab College, Ahmadpur East. In 2010, he visited the School of Mathematical Sciences, USTC, to conduct collaborative research under the "Pakistan Program for Collaborative Research – Foreign Visit of a Local Faculty Member."

In 2011, he completed a postdoctoral fellowship at Durham University, UK, funded by the Association of Commonwealth Universities. From 2013 to 2014, he was a visiting fellow at USTC, sponsored by the Chinese Academy of Sciences. Prof. Dr. Mustafa has been a Professor of Mathematics since 2016. He has organized numerous national and international conferences, webinars, and Mathematical Olympiads. He has also presented his research at various national and international academic events. He has completed two research projects funded by the Higher Education Commission (HEC) of Pakistan under the National Research Program for Universities (NRPU) and the Start-up Research Grant Program (SRGP). He has also supervised three students under the Science Talent Farming Scheme (STFS), sponsored by the Pakistan Science Foundation (PSF). He has served and continues to serve as a chairman or member of various important university bodies, including the Senate, Finance and Planning Committee, Academic Council, Advanced Studies and Research Board, Affiliation Committee, Appeal Committee, Board of Studies, and the Board for the Management of Group Insurance Funds. He is the author of several books, including:

- Mustafa, G. (2010). Subdivision its applications in solid modeling and signal compression, Publisher: VDM Verlag, 2010, Language: English, ISBN-10: 3639263561, ISBN-13: 978-3639263565
- Mustafa, G. (2021). Memories and Achievements of the Department of Mathematics, The Islamia University of Bahawalpur, Pakistan from 1979–2021 (Version First Edition). Zenodo. https://doi.org/10.5281/zenodo.21363013
- Mustafa, G. (2024). The 20-years Journey of the Computer Aided Geometric Design Research Group Pakistan. Language: English, Published by University printing press

Throughout his academic career, he has published more than 146 research papers and successfully supervised 15 Ph.D. and 98 M.Phil. scholars. His WhatsApp number and e-mail address are +92 300 6855221 and ghulam.mustafa@iub.edu.pk, respectively.

Profile of the Former Incharge of FPMS

Prof. Dr. Saeed Ahmad

Prof. Dr. Saeed Ahmad is a physicist and academic leader who currently serves as the Vice Chancellor of Thal University Bhakkar, a position he has held since November 14, 2024, following his appointment by the Government of Punjab. He holds a PhD in Physics from The Islamia University of Bahawalpur in collaboration with University College London (2009) and completed a Postdoctoral Fellowship in Medical Physics and Bioengineering at University College London in 2012, with over 26 years of combined teaching, research, and administrative experience.

Before joining Thal University Bhakkar, he held several positions at The Islamia University of Bahawalpur (IUB). He served as Incharge of the Faculty of Physical and Mathematical Sciences (May 2022 to July 2024), Director of the Institute of Physics (2020–2024), where he played a key role in developing the department into a full-fledged institute, Chairman of the Department of Physics (2018–2024), and Director of the Quality Enhancement Cell (2014–2022).

His research focuses on Medical Physics. He has supervised 16 PhD theses and over 150 MPhil research theses and projects, with collaborations with Queen Mary University of London and University College London, and research projects funded by the British Council, the Pakistan Science Foundation, and the Higher Education Commission of Pakistan.

He has served on the syndicates, academic councils, and selection boards of several Pakistani universities, including IUB, Punjab Tianjin University of Technology, Mir Chakar Khan Rind University of Technology, and the University of Jhang, and is a Quality Assurance Agency expert panel member and NAHE Master Trainer for university governance and administration.

In 2022, Prof. Dr. Saeed Ahmad received the Best University Teacher Award from the Higher Education Commission of Pakistan. He is also the author of “Ilm Ki Rahadariyan,” a book that explores the landscape of higher education in Pakistan. He has delivered keynote lectures on topics such as Medical Physics, Research Methodology, Quality Assurance, Bloom’s Taxonomy, Outcome-Based Education, and Effective Learning at various academic institutions across the country. His WhatsApp number and e-mail address are +92 300 8682973 and saeed.buzdar@iub.edu.pk, respectively

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Chapter 1

Introduction to the Faculty of Physical & Mathematical Sciences

Where Numbers Meet Nature, and Theory Meets Application

Science does not exist in isolation; it breathes through the patterns of the Earth, the equations of the universe, and the curiosity of those who dare to ask, "Why?" The Faculty of Physical & Mathematical Sciences at The Islamia University of Bahawalpur was founded on this very spirit. It is based on the conviction that mathematics, physics, and geography are not separate disciplines, but different dialects of the same universal language.

A Young Faculty with a Bold Beginning

Established on January 19, 2022, and becoming operational on May 13, 2022, the Faculty took its first steps under the guidance of Prof. Dr. Saeed Ahmad, who managed its initial affairs on the directions of the Vice Chancellor. A new chapter began on July 13, 2024, when Prof. Dr. Ghulam Mustafa was appointed as the Faculty's first Dean by the Honourable Governor of Punjab and Chancellor of the University. This appointment marked an important milestone and placed the Faculty on a path of structured growth and visionary leadership.

Three Pillars, One Purpose

Beneath its academic roof, the Faculty unites three distinct yet complementary disciplines, each with a story of its own.

- **Department of Geography**
  Established in 1985 and currently chaired by Prof. Dr. Sher Muhammad Malik, this department reads the story written across landscapes, cities, and climates. Alongside its ADP, BS, MPhil, and PhD programs, it offers BS Geographic Information Systems (GIS) and Remote Sensing (RS), and also intends to offer a BS Disaster Management with Artificial Intelligence. The department has 09 faculty members and is shaping the minds of nearly 140 students.

- **Department of Mathematics**
  Founded in 1979 and currently chaired by Prof. Dr. Zaheer Abbas, this department has evolved from a traditional centre of mathematical learning into a gateway to future opportunities. It offers BS Mathematics with Artificial Intelligence, ADP, BS, MPhil, and PhD programs. It offers a BS Mathematics programme in Pure, Applied, Computational, Financial, and Industrial Mathematics, complemented by allied courses in Artificial Intelligence, Information Technology, Data Science, Computer Science, Computer Engineering, Freelancing and e-Rozgaar, Management, and Finance. This broad academic spectrum reflects the reality that mathematics today serves as the language of every discipline.

- **Institute of Physics**
  Tracing its roots to 1977 and elevated from Department of Physics to Institute of Physics in July 2020 under the directorship of Prof. Dr. Saeed Ahmad, this institute pushes the boundaries of the known universe. Built on a foundation of Quantum Physics, Solid State Physics, and Electrodynamics, it branches into eleven applied specializations: Medical Physics, Biomedical Physics, Medical Imaging and Electronics, Particle Physics,

Computational Physics, Condensed Matter Physics, Semiconductor Physics and Nanotechnology, Materials Science, Space Science, Earth Science, and Renewable Energy. Prof. Dr. Altaf Hussain is currently the director of the Institute of Physics.

A Presence Across Three Campuses

The Faculty's influence extends across three vibrant campuses, each with its own character, energy, and leadership.

- At the flagship Baghdad-ul-Jadeed Campus, the Department of Mathematics has 25 faculty members and serves nearly 988 students in its BS and MPhil programmes. The Institute of Physics comprises 42 faculty members who guide approximately 1,037 students.
- At the Rahim Yar Khan Campus, Dr. Naeem Shafqat currently leads the Department of Mathematics with a team of 9 faculty members, mentoring around 203 students. Dr. Muhammad Gul currently heads the Department of Physics, where 5 faculty members serve approximately 203 students.
- At the Bahawalnagar Campus, Dr. Sidra Razaq currently leads the Department of Mathematics with 9 faculty members, guiding roughly 302 students. Dr. Muhammad Nasir Rasul currently heads the Department of Physics, where 4 faculty members serve nearly 385 students.

Strength in Numbers, Vision Beyond Them

Together, these three campuses form a unified academic community comprising 104 dedicated faculty members and more than 3,258 students across undergraduate, postgraduate, and doctoral programmes. Yet, the true strength of the Faculty cannot be measured by numbers alone. It is reflected in the scholars, thinkers, and problem-solvers who graduate each year and carry their knowledge and skills into the wider world.

Building Tomorrow, One Equation at a Time

Rooted in rigorous inquiry and inspired by innovation, the Faculty of Physical and Mathematical Sciences continues to nurture a new generation of researchers who connect the timeless principles of mathematics and physics with the changing needs of technology, industry, and society. In only a few remarkable years, it has evolved from a bold vision into a vibrant academic community. Today, it stands not only as a faculty, but also as a testament to what clear vision, collective commitment, and dedicated leadership can achieve.

Chapter 2

Department of Geography and Geoinformatics

This section presents the history of the Department of Geography and Geoinformatics, along with the profiles of the Chairman and faculty members. Information on research grants and projects, publications, and MPhil and PhD theses supervised is provided in subsequent chapters.

2.1 Overview

The Department of Geography was established in 1985 at The Islamia University of Bahawalpur and has been a pioneer in spatial sciences in South Punjab. Since its inception, the department has steadily grown into a centre of academic excellence, producing graduates who have gone on to serve in important positions in academia, government organizations, and industry. Its alumni are contributing to institutions such as the Geological Survey of Pakistan, the Pakistan Meteorological Department, the Bureau of Statistics, the Urban Unit, the Pakistan Agricultural Research Council, the Punjab Urban Land Systems Enhancement project, multinational companies, and numerous educational and research institutions.

In response to recent advances in geospatial technologies and satellite data applications, the department has expanded its scope and evolved into the Department of Geography and Geoinformatics. It now draws upon specialized expertise in Remote Sensing and Geographic Information Systems (GIS) to address emerging academic and industrial needs. At present, the department offers a range of academic programmes, including the ADP in Geography, BS Geography, BS in GIS and Remote Sensing, MPhil in Geography, and PhD in Geography. BS Disaster Management with Artificial Intelligence will be offered in the coming academic session.

2.2 Chairman

Prof. Dr. Sher Muhammad Malik

Prof. Dr. Sher Muhammad Malik is the Chairman of the Department of Geography and Geoinformatics at The Islamia University of Bahawalpur (IUB). He is a distinguished academic and experienced educator with more than two decades of service in higher education. Throughout his career, he has made significant contributions to teaching, research, and academic leadership. Prof. Dr. Sher Muhammad Malik earned his Ph.D. in Geography. His research interests cover a wide range of topics in geography and geoinformatics, and he has published numerous research articles in national and international peer-reviewed journals. As Chairman, he has played a key role in promoting academic excellence, fostering research, and supporting student development through seminars, workshops, and other scholarly activities. He actively supervises M.Phil. and Ph.D. scholars and serves on several academic and scientific committees within the university. Widely respected for his dedication, academic excellence, and visionary leadership, Prof. Dr. Sher Muhammad Malik continues to inspire students and colleagues alike. He has made significant contributions to the advancement of geographical and geospatial sciences in Pakistan and beyond. He can be contacted via WhatsApp at +92 345 5820158, +92 300 9685907 or by email at sher.malik@iub.edu.pk

2.3 Profiles of Faculty Members

Dr. Sana Arshad

Dr. Sana Arshad is an Assistant Professor in the Department of Geography and Geoinformatics at The Islamia University of Bahawalpur. She has a strong academic and research background and holds a PhD in Geography. Her research specializes in remote sensing, with particular emphasis on optical data (multispectral and hyperspectral) and Synthetic Aperture Radar (SAR), especially Sentinel-1 data, for environmental and land resource management. She employs machine learning and deep learning techniques to generate advanced geospatial insights. Since May 2026, Dr. Sana has been serving as a Postdoc Research Fellow under the MSCA-Charleston Programme at the Department of Applied Geoinformatics and Cartography, Faculty of Science, Charles University, Prague, Czech Republic, extending her research on geospatial analysis and remote sensing in an international collaborative setting. Dr. Sana Arshad has published 25 research articles in peer-reviewed international journals. Her contributions have earned her recognition through various academic awards and honours for excellence in both teaching and research. As a research supervisor, she has guided MPhil and PhD scholars, fostering a culture of innovation, critical inquiry, and scientific excellence. Her work continues to inspire young geographers and promote impactful research in geography and geoinformatics in Pakistan. She can be contacted via WhatsApp at +92 336 2212265 or by email at sana.arshad@iub.edu.pk.

Dr. Munazza Fatima

Dr. Munazza Fatima is an Assistant Professor of Geography with more than 15 years of experience in teaching and research. She is a spatial epidemiologist whose expertise includes Medical Geography, Environmental Health, Geographic Information Systems (GIS), and spatial health analytics. Her doctoral research examined the spatial relationships between respiratory infectious diseases and environmental, meteorological, and socio-economic factors. Dr. Fatima has published numerous high-impact research articles on the spatial epidemiology of diseases including Tuberculosis, Malaria, and Acute Respiratory Infections, with her work appearing in leading international journals, including The Lancet Infectious Diseases. She is a Senior Collaborator of the Institute for Health Metrics and Evaluation (IHME) Global Burden of Disease (GBD) Study and has actively contributed to international scholarly initiatives, notably with the American Association of Geographers (AAG) and the International Geographical Union (IGU). Dr. Fatima has further strengthened her research expertise through advanced international training at the University of Bielefeld (Germany), Columbia University (USA), and the University of Michigan (USA), where she received specialized training in epidemiology, spatial data science, global health, and advanced quantitative research methods, enhancing her interdisciplinary research and international collaborations. She can be contacted via WhatsApp at +92 322 6531083 or by email at munazza.fatima@iub.edu.pk.

Dr. Qurrat-ul-Ain Safdar

Dr. Qurrat-ul-Ain Safdar is an Assistant Professor in the Department of Geography and Geoinformatics at The Islamia University of Bahawalpur (IUB). Her research focuses on the influence of changing climatic patterns on the occurrence and severity of natural disasters. She has contributed to various research projects and has published numerous articles in national and international journals. Passionate about teaching and mentoring, Dr. Qurrat-ul-Ain Safdar actively guides undergraduate and postgraduate students in their academic

and research activities. She is committed to promoting scientific inquiry and developing the next generation of geographers and researchers. In addition to her teaching and research responsibilities, she actively participates in departmental and academic initiatives. She can be contacted via WhatsApp at +92 321 6805281 or by email at qurratulain.safdar@iub.edu.pk.

Dr. Adila Shafqat

Dr. Adila Shafqat is an Assistant Professor in the Department of Geography and Geoinformatics at The Islamia University of Bahawalpur (IUB). Her areas of expertise include Medical Geography, Environmental Health, and Geographic Information Systems (GIS). She has contributed to various research projects and has published numerous articles in national and international journals. Passionate about teaching and mentoring, she actively guides undergraduate and postgraduate students in their academic and research development. Through her scholarly activities, she continues to promote innovation, critical thinking, and excellence in geographical sciences. She also participates in departmental and academic responsibilities assigned by the university from time to time. She can be contacted via WhatsApp at +92 345 8777266 or by email at adila.shafqat@iub.edu.pk.

Dr. Zahir Ahmad

Dr. Zahir Ahmad has been a Lecturer at the Department of Geography and Geoinformatics, The Islamia University of Bahawalpur, since 2022. He previously served as a Lecturer (2018–2022) at Islamia College Peshawar, as a Research Associate (2016–2018) on an HEC-funded project at the Department of Geography and Geomatics, University of Peshawar, and as a Researcher at the Wildlife Department, Government of Khyber Pakhtunkhwa. With over a decade of teaching and research experience, his expertise spans Mountain Geography, Glaciology, Climate Change, Glacier Lake Outburst Floods (GLOFs), Water Resource Management, Mountain Agropastoralism, and Deforestation Analysis using Remote Sensing and GIS. Dr. Ahmad was awarded the HEC Doctoral Research Fellowship, conducting part of his doctoral research at Justus Liebig University Giessen, Germany (January–July 2018). He has since built an active international research network, collaborating with ICIMOD and institutions including Michigan State University, Justus Liebig University Giessen, Indiana University, the University of British Columbia, and the National and Kapodistrian University of Athens, and has presented at international conferences in Germany (2018), Saudi Arabia (2019), and Nepal (2025). At ICIMOD, he contributes to the development of early warning systems for disaster risk management in the HKH region of Pakistan. He can be contacted via WhatsApp at +92 347 8018584 or by email at zama.mehmod@iub.edu.pk.

Mr. Muhammad Hussain

Mr. Muhammad Hussain is a Lecturer in the Department of Geography and Geoinformatics at The Islamia University of Bahawalpur. He holds MPhil and PhD degrees from the University of Peshawar, Pakistan. His area of specialization includes the application of Geographic Information Systems (GIS), Remote Sensing, mapping techniques, and deep learning models for assessing flood damage and water extent using optical and radar data. He has served as a researcher in several projects, including those funded under the National Research Programme for Universities (NRPU) and various National Parks projects. He remains actively involved in teaching, research, and academic activities within the department. He can be contacted via WhatsApp at +92 300 7334562 or by email at muhammad.hussain@iub.edu.pk.

Mr. Zama Mahmood

Mr. Zama Mahmood is a Lecturer in the Department of Geography and Geoinformatics at The Islamia University of Bahawalpur (IUB). He completed his Master's degree and MPhil from The Islamia University of Bahawalpur during the 2009–2011 and 2013–2015 sessions, respectively. He is actively involved in teaching and academic activities and contributes to the intellectual and professional development of his students. He can be contacted via WhatsApp at +92 347 8018584 or by email at zama.mehmood@iub.edu.pk.

Ms. Amna Hassan

Ms. Amna Hassan is a Lecturer in the Department of Geography and Geoinformatics at The Islamia University of Bahawalpur (IUB). Her areas of expertise include Medical Geography, Environmental Health, and Geographic Information Systems (GIS). She has contributed to various research projects and has published numerous articles in national and international journals. Passionate about teaching and mentoring, she actively guides undergraduate and postgraduate students in their academic and research activities. She is committed to promoting scientific inquiry and fostering excellence in geographical studies. She can be contacted via WhatsApp at +92 337 7142603 or +92 307 8534603.

Chapter 3

Department of Mathematics: Baghdad-ul-Jadeed Campus

This section provides an overview of the history of the Department of Mathematics, the Chairman's profile, and the faculty profiles. Information on research grants and projects, publications, and MPhil and PhD theses supervised is provided in subsequent chapters.

3.1 Overview

The Department of Mathematics was established in 1979. In its early years, MSc classes were conducted at the Khawaja Fareed Campus. Later, under the leadership of Hafiz Ali Muhammad, the Department moved to the Baghdad-ul-Jadeed Campus. Evening MSc classes began there in 2003. The Department continued to grow with the launch of the MPhil programme in 2004, the PhD programme in 2007, and the BS programme in 2017. Today, it brings together experts in pure, applied, and computational mathematics within a vibrant academic community.
The Department has also expanded beyond the main campus. At the Bahawalnagar Campus, MSc, BS, and MPhil programmes were introduced in 2013, 2020, and 2021, respectively. At the Rahim Yar Khan Campus, the BS programme started in 2019, followed by the MSc and MPhil programmes in 2021. Across all three campuses, the Department now has 43 faculty members, and serves 1,493 students.
The real strength of the Department lies in its people. Its faculty members are dedicated teachers, active researchers, and committed mentors. They supervise MPhil and PhD scholars in a wide range of specialisations, giving students the opportunity to pursue diverse academic interests. The Department's research has received recognition through various awards and funded projects. Its curriculum is both comprehensive and rigorous, covering major areas of the mathematical sciences while allowing students to develop expertise in their chosen fields.
The Department remains committed to producing mathematicians who can contribute to society, education, industry, and research. Its programmes prepare students for meaningful and rewarding careers. The achievements of its alumni are a source of pride, as they continue to serve in universities, schools, government organisations, and many other professional sectors.

3.2 Chairman

Prof. Dr. Zaheer Abbas

Prof. Dr. Zaheer Abbas has been the Chairman of the Department of Mathematics at The Islamia University of Bahawalpur (IUB) since February 2026. He received his M.Sc. degree in Mathematics from the Islamia University of Bahawalpur in 2002. He completed his M.Phil. and Ph.D. in Applied Mathematics from Quaid-i-Azam University, Islamabad, in 2005 and 2010, respectively. He is now a Professor of Mathematics in the Department of Mathematics at the Islamia University of Bahawalpur, Pakistan. His research focuses specifically on the nonlinear analysis of various engineering problems, and he has constructed several analytical and numerical solutions for nonlinear problems. His work is mainly in Fluid Me-

chanics (Newtonian and non-Newtonian fluids, stretching sheet flows, boundary layer flows), Two/Three-Phase Flows in Channels/Pipes, Fluid Dynamics of Peristaltic/Blood Flows, Numerical Solutions of DEs/Numerical Methods, Heat and Mass Transfer Analysis, Lie Group Analysis/Symmetries of DEs, and the Homotopy Analysis Method. Dr. Zaheer Abbas has published more than 370 research papers in well-reputed international journals with a cumulative impact factor of more than 915. He has more than 12,756 citations with an h-index of 4956. He is also a regular reviewer for renowned international research journals and a member of the Editorial Board of two international journals. In recognition of his outstanding work, he was awarded the Dr. Raziuddin Siddiqui Prize for Young Scientists in Mathematics (2014) by the Pakistan Academy of Sciences and the RPA (2010, 2011, 2012, 2016) by the Pakistan Council for Science and Technology. Furthermore, 23 PhD and 112 MPhil students have completed their degrees under his supervision, and 2 PhD and 4 MPhil students are currently working under his supervision. His WhatsApp number and e-mail address are +92 300 5241634 and zaheer.abbas@iub.edu.pk, respectively.

3.3 Profiles of Faculty Members

Prof. Dr. Ghulam Mustafa

Prof. Dr. Ghulam Mustafa has been serving as the Dean of the Faculty of Physical and Mathematical Sciences at The Islamia University of Bahawalpur (IUB) since 13-07-2024. He served for about eight years (13-10-2016 to 29-10-2024) as Chairperson of the Department of Mathematics at The IUB.

He earned his Ph.D. in Mathematics in 2004 from the University of Science and Technology of China (USTC), P.R. China, under the Cultural Exchange Scholarship Program. He obtained his M.Sc. and M.Phil. degrees from Bahauddin Zakariya University, Multan, and completed his B.Sc. from The Islamia University of Bahawalpur at Dera Nawab College, Ahmadpur East.

In 2010, he visited the School of Mathematical Sciences, USTC, to conduct collaborative research under the "Pakistan Program for Collaborative Research – Foreign Visit of a Local Faculty Member." In 2011, he completed a postdoctoral fellowship at Durham University, UK, funded by the Association of Commonwealth Universities. From 2013 to 2014, he was a visiting fellow at USTC, sponsored by the Chinese Academy of Sciences.

Prof. Dr. Mustafa has been a Professor of Mathematics since 2016. He has organized numerous national and international conferences, webinars, and Mathematical Olympiads. He has also presented his research at various national and international academic events.

He has completed two research projects funded by the Higher Education Commission (HEC) of Pakistan under the National Research Program for Universities (NRPU) and the Start-up Research Grant Program (SRGP). He has also supervised three students under the Science Talent Farming Scheme (STFS), sponsored by the Pakistan Science Foundation (PSF).

He has served and continues to serve as a chairman or member of various important university bodies, including the Senate, Finance and Planning Committee, Academic Council, Advanced Studies and Re-search Board, Affiliation Committee, Appeal Committee, Board of Studies, and the Board for the Management of Group Insurance Funds. He is the author of several books, including:

- Mustafa, G. (2010). Subdivision its applications in solid modeling and signal compression, Publisher: VDM Verlag, 2010, Language: English, ISBN-10: 3639263561, ISBN-13: 978-3639263565

- Mustafa, G. (2021). Memories and Achievements of the Department of Mathematics, The Islamia University of Bahawalpur, Pakistan (1979–2021) (Version First Edition). Zenodo. https://doi.org/10.5281/zenodo.21363013

- Mustafa, G. (2024). The 20-years Journey of the Computer Aided Geometric Design Research Group Pakistan. Language: English, Published by Department of Mathematics, University press

Throughout his academic career, he has published more than 146 research papers and successfully super-vised 15 Ph.D. and 98 M.Phil. scholars. He serves as an editor, associate editor, guest editor, and reviewer for several reputed journals and regularly reviews M.Phil. and Ph.D. theses from various universities. His research interests include geometric modeling, subdivision schemes, applied approximation theory, the numerical solution of differential equations, picture fuzzy graph, fuzzy set and decision-making. His WhatsApp number and e-mail address are +92 300 6855221 and ghulam.mustafa@iub.edu.pk, respectively.

Prof. Dr. Hafiz Fakhar-Ud-Din

Prof. Dr. Hafiz Fakhar-Ud-Din retired on 04-02-2026 from the Department of Mathematics at The Islamia University of Bahawalpur (IUB). He served as Chairman of the Department of Mathematics for about one year. He has more than two decades of experience in higher education, with contributions to teaching, research, and academic leadership. Dr. Hafiz Fakhar-Ud-Din earned his PhD in Mathematics with a specialization in fixed point theorems, approximate fixed point sequences, their convergence, and BCI/BCH algebras. Prior to this, he completed his MPhil and MSc degrees. His research interests encompass various areas of pure and applied mathematics, and he has published in national and international peer-reviewed journals. February 2015 to Sep. 2019, Associate Prof., Department of Mathematics and Statistics, King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, Saudi Arabia. February 2012 to January 2015, Assistant Prof., Department of Mathematics and Statistics, KFUPM, Dhahran, Saudi Arabia. His WhatsApp number and e-mail address are +92 301 7730198 and hfdin@yahoo.com, respectively.

Prof. Dr. Muhammad Ramzan

Prof. Dr. Muhammad Ramzan received the degree of Doctor of Philosophy in Mathematics from the Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Topi, Swabi, KPK, Pakistan in 2009. His PCD#837. He is a Professor of Mathematics at The Islamia University of Bahawalpur, Pakistan. He is approved supervisor of HEC to supervise PhD scholars. Furthermore, 10 PhD and 80 MPhil students have completed their degrees under his supervision. Further more 05 PhD and 05 MPhil students are working under his psupervision. He has published more than 55 research articles. He is also a regular reviewer of the national and international renowned research journals. His WhatsApp number and e-mail address are +92 300 6848679 and muhammad.ramzan@iub.edu.pk, respectively.

Prof. Dr. Muhammad Faheem Khan

Prof. Dr. Muhammad Faheem Khan is the first PhD graduate student of Prof. Dr. Ghulam Mustafa. He is currently working as a Professor in the Department of Mathematics at the Baghdad ul Jadeed Campus of The Islamia University of Bahawalpur since July 15, 2023. He appointed as a Associate Professor on April 15,2022 at the Department of Mathematics IUB. He served as an assistant professor in the Department of Mathematics at the University of Sargodha from April 13, 2011 to April 14, 2022. He belongs to Multan, which is an historical city in Pakistan. He completed his M.Sc. from Bahauddin Zakariya University in Multan. He earned his doctoral degree, major in CAGD from The Islamia University of Bahawalpur in 2011. During his PhD, he also visited the School of Mechanical Engineering, University of Birmingham, B15 2TT, United Kingdom, and worked as a Research Associate and did collaborative research with Dr. R. J. Cripps

(Head of Geometric Modeling Group). He is an HEC approved supervisor and has supervised 61 MPhil and 03 PhD students. He is the reviewer of many journals of mathematics and an active member of many mathematical societies. He has published 48 research papers, 04 book chapters and 04 conference papers in international and national high-repute journals and publishers. He also got the award for the National Research Project for Universities of Rs. 2, 702, 694/- as a co-investigator funded by HEC, Pakistan. He is a member of the Board of Studies of several universities. In addition, he performs various academic and administrative duties assigned by the Chairman and the competent authority from time to time. He is currently serving as the In-charge Examiner for the BS, MSc, and BS (ADP) programmes. He previously served as the Deputy Director of Student Affairs (DSA) at The Islamia University of Bahawalpur (IUB) and is currently serving as the Additional Director of Student Affairs (Additional DSA). His WhatsApp number and e-mail address are +92 300 637 9940 and faheem.khan@iub.edu.pk, respectively.

Prof. Dr. Nargis Aslam Khan

Prof. Dr. Nargis Aslam Khan is a highly respected academic in the field of mathematics, with over 23 years of experience in teaching, research, and academic leadership. Currently serving as a professor at The Islamia Universitey of Bahawalpur, she has made significant contributions to both pure and applied mathematics. Prof. Dr. Nargis Aslam Khan holds an MPhil and PhD in Mathematics, and her research spans a broad spectrum of mathematical disciplines, including Numerical Analysis, Fluid Mechanics, Functional Analysis, Number Theory, Heat Transfer, Mechanics, Quantum Mechanics, Topology, Algebra, Complex Analysis . Throughout her career, she has published extensively in peer-reviewed journals, supervised numerous postgraduate theses, and presented her work at international conferences. Her WhatsApp number and e-mail address are +92 321 6804886 and nargis.khan@iub.edu.pk, respectively.

Dr. Ghulam Abbas

Dr. Ghulam Abbas is currently serving as a Tenured Associate Professor of Mathematics in Pakistan and has more than 11 years of post-PhD teaching and research experience. He possesses a comprehensive set of academic and professional skills that have contributed significantly to higher education and research. In his role as Associate Professor, he teaches mathematics courses at both undergraduate and postgraduate levels, supervises and guides MS and PhD students in their research, coordinates conferences, seminars, and webinars within the department, and actively participates in academic council activities and quality enhancement initiatives. He has also served as the in-charge of admission and examination committees in the department. Over the years, he has developed numerous course curricula and outlines.

Dr. Abbas has successfully supervised 34 MS theses and 12 PhD dissertations in areas related to his research interests. From July 2023 to December 2023, he completed a postdoctoral research project at the Chinese Academy of Sciences, China. He maintains strong collaborations with both national and international scholars to promote conferences, seminars, and research activities. He was recognized among the world's top 2 percent most-cited scientists by researchers at Stanford University in 2020, 2021, and 2022. His scholarly contributions include 150 research articles published in international journals. In addition, he has served as a guest editor for two special issues of research journals. His WhatsApp number and e-mail address are +92 302 7862183 and ghulamabbas@iub.edu.pk, respectively.

Dr. Muhammad Awais Yousaf

Dr. Muhammad Awais Yousaf has been serving as an Associate Professor in the Department of Mathematics at The Islamia University of Bahawalpur since June 2015. He obtained his PhD in Group Theory and its generalizations from Quaid-i-Azam University, Islamabad. His research interests span Group Theory, Group Graphs, Chemical Graph Theory, and the application of group-based algorithms in cryptography. Over the years, he has successfully supervised 16 MPhil scholars in the fields of Group Theory and its generalizations (AMS: 05C20, 05C25, and 20G40). At present, he is supervising four PhD and seven MPhil scholars. He has published numerous research articles in reputable peer-reviewed journals. His WhatsApp number and e-mail address are +92 334 5152656 and awais.yousaf@iub.edu.pk, respectively.

Dr. Muhammad Salman

Dr. Muhammad Salman is currently serving as a Tenured Associate Professor of Mathematics. He received his MSc degree in Mathematics from The Islamia University of Bahawalpur, Pakistan, in 2006. He completed his MPhil in Mathematics with distinction from the Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), Bahauddin Zakariya University, Multan, Pakistan, in 2009. In recognition of his outstanding academic performance, he was awarded a Gold Medal in 2016 for securing distinction in his MPhil studies. He earned his PhD in Mathematics, specializing in Graph Theory, from CASPAM, Bahauddin Zakariya University, Multan, in 2015. Since November 2017, he has been serving in the Department of Mathematics at The Islamia University of Bahawalpur, Pakistan. He initially joined the department as an Assistant Professor and currently holds the position of Tenured Associate Professor. His WhatsApp number and e-mail address are +92 332 6026668 and muhammad.salman@iub.edu.pk, respectively.

Dr. Abdul Shakoor

Dr. Abdul Shakoor received his MSc degree in Applied Mathematics from Department of Mathematics, The Islamia University of Bahawalpur, Pakistan in September 2009. He started his professional career in October 2009 as Lecturer at Ali Post Graduate College of Sciences, Khanpur, Rahim Yar Khan. Later he got the Chinese Government Scholarship for PhD degree in Mathematics and went to China in September 2010. He completed his PhD degree in June 2014 under the supervision of Prof. Dr. Hu Yang at College of Mathematics and Statistics, Chongqing University, Chongqing, China. His core competencies are in the field of Generalized Inverse Theory for Matrices, Matrix Inequalities and Integral Inequalities. During his doctorate study, he has established some results for the Drazin Inverses of the Sum of Two Matrices, Block Matrices and Modified Matrices. He has published research articles in well reputed international journals, and recognized as Outstanding International Graduate of Chongqing University, China for his excellence performance. He worked as Assistant Professor from August 2014 to August 2015 at Department of Mathematics, COMSATS University, Islamabad, Pakistan. He served as Assistant Professor from August 2015 to April 2022 in Mathematics Department, Khwaja Fareed University of Engineering & Information Technology, Rahim Yar Khan, Pakistan.He joined as Associate Professor in April 2022 at Department of Mathematics, The Islamia University of Bahwalpur, Pakistan. Up to now, 40 MPhil students have completed their degrees under his supervision. His WhatsApp number and e-mail address are +92 333 6355734 and ashakoor313@yahoo.com, ashakoor313@iub.edu.pk, respectively.

Dr. Muhammad Aqeel Ahmad Khan

Dr. Muhammad Aqeel Ahmad Khan is an Associate Professor of Mathematics at The Islamia University of Bahawalpur (IUB), with more than a decade of academic and research experience. He holds a PhD in Mathematics and has built a distinguished career in both theoretical and applied mathematical research. His research interests include Fixed Point Theory and its applications, Equilibrium Problem Theory, Variational Inequality Theory, Convex Optimization in non-positively curved spaces, and Mathematical Logic for Proof Mining. He has published numerous research articles in reputable national and international journals and continues to contribute actively to the advancement of mathematical sciences through his teaching, research, and academic service. His WhatsApp number and e-mail address are +92 333 6388559 and amaqeelkhan@iub.edu.pk, respectively.

Dr. Shafqat Ali

Dr. Shafqat Ali is an Assistant Professor. He began his academic career at The Islamia University of Bahawalpur. He was appointed as a Lecturer in the Department of Mathematics at the Baghdad-ul-Jadeed Campus on December 22, 2009. He earned his MSc and MPhil degrees in Applied Mathematics from the same university. In addition, he obtained an MCS (Master of Computer Science) and an MLIS (Master of Library and Information Science) from IUB. While continuing his professional responsibilities, he pursued his doctoral studies and was awarded a PhD in Applied Mathematics from The Islamia University of Bahawalpur in 2019. He completed his doctoral research under the supervision of Prof. Dr. Ghulam Mustafa and the co-supervision of Dr. Shehraz Akhtar. He was appointed an assistant professor on February 2, 2021, in the same department. He was In-charge of student affairs for the department from December 2009 to December 2016, and again from October 2019 to the present. He was In-charge of the department's timetable from December 2009 to December 2016, and again from March 2021 to March 2022. He has been In-charge of online examinations and then physical examinations for the department from March 2020 to March 2022. He has published 10 research papers, and a few more are in the pipeline. He has supervised 9 M.Phil. students, whose theses have been submitted. His WhatsApp number and email address are +92 300 9683645 and shafqat.ali@iub.edu.pk, respectively.

Dr. Madiha Sana

Dr. Madiha Sana is currently working as an Assistant Professor in the Department of Mathematics at The Islamia University of Bahawalpur. She joined the department as a Lecturer in 2006. She earned her MPhil degree in Mathematics from the same university. Her research interests are in Computational Mathematics, particularly Finite Element Methods. She has published research articles in reputable international impact-factor journals and has extensive experience teaching mathematics at different academic levels. She also represents the department in matters related to the Quality Enhancement Cell. Her WhatsApp number and e-mail address are +92 300 0401916 and madiha.sana@iub.edu.pk, respectively.

Dr. Muhammad Shahzad Shabbir

Dr. Muhammad Shahzad Shabbir has been serving as an Assistant Professor in the Department of Mathematics at the Baghdad-ul-Jadeed Campus of The Islamia University of Bahawalpur. He received his PhD in Mathematics from the same university in 2019 under the HEC Indigenous PhD Fellowship Programme for 5,000 Scholars (Phase II). He is actively involved in teaching, research, and various academic activities within

the department. His WhatsApp number and e-mail address are +92 301 2165001 and shahzad.shabbir@iub.edu.pk, respectively.

Dr. Muhammad Mustahsan

Dr. Muhammad Mustahsan is an Assistant Professor in the Department of Mathematics at the Baghdad-ul-Jadeed Campus of The Islamia University of Bahawalpur. He has published numerous research articles in both national and international journals. Passionate about mentoring, he actively guides undergraduate and postgraduate students in their academic and research activities. He also performs the responsibilities assigned to him by the Chairman and the competent authority from time to time. He can be contacted via WhatsApp at +92 323 5908974 or by email at muhammad.mustahsan@iub.edu.pk.

Dr. Muhammad Asghar

Dr. Muhammad Asghar complete his PhD in Mathematics from The Islamia University of Bahawalpur (IUB) in 2019. During his PhD, he worked as Research Associate at Department of Mathematics, IUB, on HEC funded Research Project No. 3183. Dr. Muhammad Asghar worked as Lecturer in NCBA&E Bahawalpur campus from 20-10-2013 to 10-02-2019, as Assistant Professor from 11-02-2019 to 10-01-2021. He also worked as Director QEC at NCBA&E Bahawalpur campus. Currently, he is working as an Assistant professor (BPS-19) in the Department of Mathematics, Bagdad-ul-Jadeed Campus, IUB since 11th January 2021. He is also working as Deputy Director Alumni IUB. He is HEC approved supervisor and 102 M. Phil Scholars have been successfully completed their research under his supervision currently 2 M. Phil and 1 PhD Scholar are doing research under his supervision. His filed of specialization is Computational Mathematics, CAGD, subdivision schemes numerical geometry and fractional calculus. He is actively involved in research. He can be contacted via WhatsApp at +92 343 7179955 and by email at m.asghar@iub.edu.pk, respectively.

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Dr. Muhammad Yousuf Rafiq is a Lecturer in the Department of Mathematics at The Islamia University of Bahawalpur. He holds both MPhil and PhD degrees in Mathematics and combines academic rigour with a practical approach to teaching, making complex concepts accessible and engaging for his students. His research interests include Fluid Mechanics, Peristaltic Flow, Viscous and Non-Newtonian Fluids, Nanofluid Flow, Heat and Mass Transfer Analysis, Computational Fluid Dynamics, and Perturbation Methods. He is actively

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Dr. Sana Goher is a Lecturer at The Islamia University of Bahawalpur. With a strong academic background and a passion for teaching, she has been inspiring university students in the field of mathematics. She holds both MPhil and PhD degrees in Mathematics. Her research interests include Fluid Mechanics, Two-Phase Flow, Viscous and Non-Newtonian Fluids, Nanofluid Flow, Heat and Mass Transfer Analysis, Computational Fluid Dynamics, and Perturbation Methods. Her scholarly work reflects a strong commitment to research and to the advancement of mathematical sciences. She can be contacted via WhatsApp at +92 300 8824686 or by email at sana.gohar@iub.edu.pk.

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Dr. Muhammad Nadeem is a Lecturer in the Department of Mathematics at The Islamia University of Bahawalpur. He earned his MPhil and PhD degrees in Mathematics from IUB. His research interests include Graph Theory, Calculus and Analytic Geometry, Linear Algebra, Mathematical Methods, Group Theory, Numerical Analysis, Algebra, Complex Analysis, Partial Differential Equations, Real Analysis, Topology, Functional Analysis, Differential Equations, Fixed Point Theory, and Measure Theory. He has published several research articles in peer-reviewed journals and has presented his work at various national and international conferences. He is committed to teaching, research, and academic development and actively contributes to the intellectual growth of his students. His dedication to curriculum development and innovative teaching practices has earned him the respect of both colleagues and students. He can be contacted via WhatsApp at +92 346 4950411 or by email at nadeem.qadir@iub.edu.pk.

Dr. Sufyan Asif

Dr. Sufyan Asif is a mathematician with a strong interest in emerging areas of pure and applied mathematics. He received his M.Sc., M.Phil., and Ph.D. degrees from the Institute of Mathematics, University of the Punjab, Lahore. In recognition of his academic performance, he was awarded multiple scholarships during his studies. Dr. Asif began his teaching career in 2019 as a Part-Time Lecturer at the Institute of Administrative Sciences (IAS), University of the Punjab, Lahore, where he served for nearly two years. He also provided academic services at the Pak-American Institute of Management Sciences, Lahore. He subsequently joined Military College Murree (MCM) as a Civil Lecturer (BPS-17). Following his success in competitive examinations, he was selected as a Lecturer (BPS-17) in Mathematics by the Punjab Public Service Commission (PPSC) for the Higher Education Department. In September 2022, he was also selected as a Lecturer (BPS-18) in Mathematics at The Islamia University of Bahawalpur, Baghdad-ul-Jadeed Campus, and he chose to join the university. Dr. Asif has published several research articles in reputable international journals. His research interests include Number Theory, Modular Arithmetic, Algebra, Graph Theory, and Fuzzy Mathematics. He can be contacted via WhatsApp at +92 303 6189256 or by email at sufyan.asif@iub.edu.pk.

Dr. Tahira Noreen

Dr. Tahira Noreen was born in Khanpur, Pakistan. She received her MSc degree in Computational Mathematics and her MPhil degree in Pure Mathematics from The Islamia University of Bahawalpur, Pakistan, in 2016 and 2019, respectively. Since July 15, 2023, she has been serving as a Lecturer in the Department of Mathematics at The Islamia University of Bahawalpur. Following the completion of her MPhil studies, she published three research articles, and three additional papers were published during her doctoral studies. Her research interests include Graph Theory, Algebraic Graph Theory, Chemical Graph Theory, Network Theory, and related areas. His WhatsApp number and e-mail address are +92 349 7821800 and tahira.noreen@iub.edu.pk, respectively.

Syed Shahzaib

Syed Shahzaib is a Lecturer in the Department of Mathematics at the Baghdad-ul-Jadeed Campus of The Islamia University of Bahawalpur. He has published research articles in reputable international journals. One of his notable publications is "Classes of Planar Graphs with Constant Edge Metric Dimension" by C. Wei, M. Salman, S. Shahzaib, M. U. Rehman, and J. Fang, published in Complexity (Hindawi) in 2021 (Article ID: 5599274). He also performs academic and administrative responsibilities assigned by the Chairman and the competent authority from time to time. He can be contacted via WhatsApp at +92 302 7760002 or by email at syed.shahzaib@iub.edu.pk.

Dr. Salman Mukhtar

Dr. Salman Mukhtar is a Lecturer in the Department of Mathematics at The Islamia University of Bahawalpur, where he brings a passion for teaching and research to the academic community. He holds both PhD and MPhil degrees in Mathematics and has a strong background in theoretical and applied mathematics. His research interests include Graph Theory and Combinatorics, with particular emphasis on distance-related problems in graphs, Algebraic Graph Theory, Spectral Graph Theory, Chemical Graph Theory, Fuzzy Graph Theory, Facility Location Problems, and Graph Labeling. He continues to explore innovative approaches to solving complex mathematical problems and to advancing research in these areas. In addition to his teaching and research activities, he actively contributes to the academic development of students and performs responsibilities assigned by the Chairman and the competent authorities from time to time. He can be contacted via WhatsApp at +92 300 6904001 or by email at salman.mukhtar@iub.edu.pk.

Syed Muhammad Umair Ud Din

Syed Muhammad Umair Ud Din is currently working as a Lecturer in the Department of Mathematics. He holds an M.Sc. degree from The Islamia University of Bahawalpur and an M.Phil degree from Quaid-i-Azam University, Islamabad. At present, he is pursuing his Ph.D., which is in progress. He is actively engaged in teaching and academic activities, contributing to undergraduate and graduate-level instruction in mathematics. His primary research area is Fixed Point Theory, with a focus on its theoretical framework and applications in analysis and related mathematical disciplines. His WhatsApp number and e-mail address are +92 304 7737459 and m.umairuddin@iub.edu.pk, respectively.

Dr. Muhammad Shahbaz

Dr. Muhammad Shahbaz is a Lecturer in the Department of Mathematics at the Bahawalnagar Campus, The Islamia University of Bahawalpur (IUB). He is an experienced mathematics lecturer and researcher with a PhD in Pure Mathematics, specializing in analysis and topology with a strong publication record in generalized topological structures. Adept at teaching advanced subjects at both MPhil and undergraduate levels, he is passionate about mathematical theory, student mentorship, and academic innovation. A dedicated, resourceful, and goal-driven professional researcher and educator, Dr. Shahbaz maintains a solid commitment to social and academic growth. His WhatsApp number and email address are +92 335 9234320, +92 300 8867948 and muhammad.shahbaz@iub.edu.pk, respectively.

Chapter 4

Institute of Physics: Baghdad-ul-Jadeed Campus

This section outlines the history of the Institute of Physics, together with profiles of the Director and faculty members. Details of research grants and projects, publications, and MPhil and PhD theses supervised are presented in subsequent chapters.

4.1 Overview

The Department of Physics has the distinction of being the oldest department of The Islamia University of Bahawalpur, which was established in 1975 along with the University. Since then, the department is focused on quality education. Department of Physics has been upgraded to Institute of Physics in July 2020. Institute of Physics is devoted to provide quality education through interactive teaching and high-quality research activities. Institute of Physics regularly updates curricula and research projects to latest standards, to encourage students and stay connected to the latest advances in Science & Technology. Institute of Physics has highly qualified foreign trained faculty involving 36 PhD and 06 MPhil members.

Institute of Physics offers BS, MPhil and PhD degree programs which encompass besides core Physics areas like Quantum Mechanics, Solid State Physics, Electrodynamics and some of the modern Applied fields such as: Medical Physics, Materials Science, Condensed Matter Physics, Semiconductor Physics & Nanotechnology, Space Science, Particle Physics, Renewable energy, Computational physics, Medical imaging & electronics, Bio-medical Physics, and Earth Science, where every field is equally important according to the current needs of our country in education and technology sector. A number of quality research articles are being published every year in well reputed international journals.

Institute of Physics has always been the source of innovation in physics, education and research. Our graduates are serving in different research organizations, universities, hospitals, industries and recognized institutes at national and international level.

4.2 Director

Prof. Dr. Altaf Hussain

Prof. Dr. Altaf Hussain is serving as the Director of the Institute of Physics (IoP) and Chairman of the Department of Physics at The Islamia University of Bahawalpur (IUB), Punjab, Pakistan. He is an HEC-approved PhD supervisor and leads the Materials Simulation Group (MSG) at IoP-IUB. He completed his postdoctoral studies at the University of Missouri–Kansas City (UMKC), Missouri, USA, and earned his PhD in Physics from The Islamia University of Bahawalpur. With more than 25 years of teaching and research experience, he has made significant contributions to physics education and scientific research. His teaching areas include Solid State Physics, Materials Science, Electricity and Magnetism, and Mechanics. His current research focuses on the simulation and characterization of Heusler alloys, nitrides, ox-

ides, carbides, and MAX phases. He has published 85 research articles in international peer-reviewed journals, with a cumulative impact factor exceeding 310. Dr. Altaf Hussain has successfully supervised ten (10) PhD scholars and 115 MPhil scholars. He continues to play a leading role in promoting advanced research and fostering academic excellence within the field of materials physics. He can be contacted via WhatsApp at +92 347 3510010 or by email at haltafphy@iub.edu.pk.

4.3 Profiles of Faculty Members

Prof. Dr. Saeed Ahmed

Prof. Dr. Saeed Ahmad is a physicist and academic leader who currently serves as the Vice Chancellor of Thal University Bhakkar, a position he has held since November 14, 2024, following his appointment by the Government of Punjab. He holds a PhD in Physics from The Islamia University of Bahawalpur in collaboration with University College London (2009) and completed a Postdoctoral Fellowship in Medical Physics and Bioengineering at University College London in 2012, with over 26 years of combined teaching, research, and administrative experience. Before joining Thal University Bhakkar, he held several positions at The Islamia University of Bahawalpur (IUB). He served as In-Charge of the Faculty of Physical and Mathematical Sciences (May 2022 to July 2024), Director of the Institute of Physics (2020–2024), where he played a key role in developing the department into a full-fledged institute, Chairman of the Department of Physics (2018–2024), and Director of the Quality Enhancement Cell (2014–2022). His research focuses on Medical Physics. He has supervised 16 PhD theses and over 150 MPhil research theses and projects, with collaborations with Queen Mary University of London and University College London, and research projects funded by the British Council, the Pakistan Science Foundation, and the Higher Education Commission of Pakistan.
He has served on the syndicates, academic councils, and selection boards of several Pakistani universities, including IUB, Punjab Tianjin University of Technology, Mir Chakar Khan Rind University of Technology, and the University of Jhang, and is a Quality Assurance Agency expert panel member and NAHE Master Trainer for university governance and administration. In 2022, Prof. Dr. Buzdar received the Best University Teacher Award from the Higher Education Commission of Pakistan. He is also the author of ”Ilm Ki Rahadariyan,” a book that explores the landscape of higher education in Pakistan. He has delivered keynote lectures on topics such as Medical Physics, Research Methodology, Quality Assurance, Bloom’s Taxonomy, Outcome-Based Education, and Effective Learning at various academic institutions across the country. His WhatsApp number and e-mail address are +92 300 8682973 and saeed.buzdar@iub.edu.pk, respectively.

Dr. Faisal Iqbal

Dr. Faisal Iqbal is an Associate Professor of Physics at The Islamia University of Bahawalpur (IUB). He holds a PhD in Physics and has developed a distinguished academic and research career spanning more than a decade, making significant contributions to both theoretical and applied physics. His research interests focus on the synthesis of nanomaterials and hybrid nanostructures for a wide range of applications, including energy conversion and storage devices, as well as environmental and biomedical technologies. He is particularly interested in tailoring the grain structure and bandgap of nanomaterials for thermoelectric, microwave, and optoelectronic applications. He has authored numerous research articles in reputable national and international journals, reflecting his commitment to scientific innovation and excellence.
Dr. Faisal Iqbal has led and participated in several research projects funded by the Higher Education Commission (HEC) of Pakistan and other organizations. His major projects include the PAK-UK Education Gateway Mobility Partnership for Faculty (F144) during 2023–2024; a project as Co-Principal Investigator entitled “Novel Bismide-Based Mid-Infrared Sensors for Applications in Environmental Protection and Medical Diagnostics,” approved by

HEC in 2018 with a total budget of Rs. 10,026,722; and a project as Principal Investigator entitled "Multi-Functional Materials for Energy Storage, Photocatalysis, and Antibacterial Applications," approved by ORIC, IUB, in 2021 with a total budget of Rs. 450,000. These initiatives have strengthened the research profile of IUB and provided valuable training opportunities for young physicists and researchers.

In addition to his research activities, Dr. Faisal Iqbal is a dedicated educator and mentor. He has successfully supervised numerous MPhil and PhD scholars and is widely respected for fostering academic excellence, critical thinking, and scientific curiosity among his students. Through his scholarly contributions, leadership, and commitment to education, Dr. Faisal Iqbal continues to play an important role in advancing physics research and higher education in Pakistan. His WhatsApp number and e-mail address are +92 301 7729040 and faisal.iqbal@iub.edu.pk, respectively.

Dr. Muhammad Shakil Choudhary

Dr. Muhammad Shakil Choudhary is an Associate Professor in the Institute of Physics at The Islamia University of Bahawalpur (IUB). His research specialization includes the study of structural, electronic, magnetic, elastic, and thermal properties of materials using density functional theory (DFT)-based computational methods. He has contributed to various research projects and has published numerous articles in national and international journals. Passionate about teaching and mentoring, he actively guides undergraduate and postgraduate students in their academic and research activities. He is committed to promoting scientific inquiry and fostering excellence in physics education and research. In addition to his teaching and research responsibilities, he participates in various academic and administrative activities within the institute. He can be contacted via WhatsApp at +92 321 6828243 or by email at m.shakil@iub.edu.pk.

Dr. Muhammad Azhar Khan

Dr. Muhammad Azhar Khan is an Associate Professor in the Department of Physics at The Islamia University of Bahawalpur (IUB). He holds a PhD in Physics and has more than twenty years of research experience, including both pre- and post-doctoral work, in the field of Experimental Condensed Matter Physics. His research interests include Nanomagnetism and Nanomaterials, particularly metal oxides such as soft and hard ferrites, multiferroics, perovskites, garnets, ferrite-polymer composites, composite ferrites, ceramics, and dielectric materials. He specializes in the magnetic and dielectric characterization of materials for applications in memory devices, data storage systems, multilayer chip inductors, microwave absorption technologies, and high-frequency electronic devices. Dr. Muhammad Azhar Khan is widely respected for his commitment to academic excellence and has supervised numerous undergraduate and postgraduate research projects. He actively teaches and mentors students, fostering critical thinking and scientific inquiry through his guidance and supervision.

Throughout his academic career, he has published more than 300 research articles in national and international journals. He has also successfully completed several research projects funded by the Higher Education Commission (HEC) of Pakistan. Notably, he served as the Principal Investigator of an NRPU project worth Rs. 6.67 million entitled "Hexagonal Nanoferrites for High-Frequency Devices and Applications in the GHz Regime." His scientific contributions and dedication to nurturing young physicists have earned him great respect among colleagues and students alike. In addition to his research and teaching responsibilities, Dr. Muhammad Azhar Khan actively contributes to curriculum development, departmental administration, and the organization of scientific seminars and workshops. His efforts continue to promote a culture of innovation, scholarship, and excellence within the university community. He can be contacted via WhatsApp at +92 300 8595616 or by email at azhar.khan@iub.edu.pk.

Dr. Muhammad Saleem

Dr. Muhammad Saleem is an Associate Professor of Physics at The Islamia University of Bahawalpur (IUB). He has a strong academic and research background and holds a PhD in Physics. Over the years, he has made significant contributions to teaching, research, and scientific innovation in the field of materials science and renewable energy technologies. His research interests include X-ray diffraction analysis using the Bruker D8 system, UV-Visible spectroscopy, photocurrent-voltage (J-V) characterization using the Keithley 2400 Source Meter, chemical vapor deposition (CVD) for thin-film preparation, spin coating techniques, and advanced materials simulation using Material Studio and SCAPS-1D. His work primarily focuses on nanomaterials, semiconductors, and their applications in solar energy and optoelectronic devices.

Dr. Muhammad Saleem has led and participated in several research projects funded by the Higher Education Commission (HEC) of Pakistan and other organizations. As Principal Investigator, he completed the project "Metal Oxide Nanostructures: Synthesis, Characterization, and Applications in Dye-Sensitized Solar Cells" with HEC funding of Rs. 0.5 million. He also led the project "Development of Solution-Derived ZnO Nanoflower-Based Photoelectrodes for Dye-Sensitized Solar Cells" funded by CIIT with a grant of Rs. 0.2 million. As Co-Principal Investigator, he contributed to the HEC-funded project "Preparation of Insulating Capillaries to Develop a Tool for Structured Ion Implantation and Fundamental Studies of Ion–Nanostructure Interaction" worth Rs. 0.5 million. He is currently involved as Co-Principal Investigator in the Pak–China collaborative project "Semiconducting Graphene Light-Emitting Field-Effect Transistor" with funding of Rs. 11 million. Dr. Muhammad Saleem has published 66 research articles in reputable national and international journals, contributing significantly to the advancement of scientific knowledge in his field. In recognition of his scholarly achievements, he has received several academic awards and honours. His dedication to research, teaching, and mentorship continues to inspire young physicists and strengthen scientific research at both the national and international levels. He can be contacted via WhatsApp at +92 306 3645433 or by email at msaleem@iub.edu.pk.

Dr. Hafeez Ullah Janjua

Dr. Hafeez Ullah Janjua is an Associate Professor in the Institute of Physics at The Islamia University of Bahawalpur (IUB). He has contributed significantly to scientific advancement, resulting in more than 87 publications in reputable national and international journals. His work has been widely cited, reflecting its impact on scientific knowledge and innovation. Throughout his academic career, Dr. Hafeez Ullah has led and collaborated on several research projects funded by the Higher Education Commission (HEC) of Pakistan and other national organizations. As Principal Investigator, he successfully completed a project worth Rs. 0.5 million under the HEC Start-Up Research Grant Scheme (Project No. 1500008623/454773), entitled "Upgradation of Laser and Optronics Laboratory towards Biophotonics" in 2014. As Co-Principal Investigator, he completed another HEC-funded project (Project No. 21-1798/SRGP/R&D/HEC/2017) worth Rs. 0.5 million, entitled "Synthesis and Application of Cu 2O Nanostructures for Visible Photocatalytic Degradation of Organic Pollutants in Contaminated Water," which concluded successfully in June 2020. He is also associated with a Rs. 10 million research proposal submitted to the Pakistan Science Foundation under its Competitive Research Programme, entitled "Development of Nanofiltration Membranes Decorated with Bismuth Selenide-Based Nanomaterials for Efficient Water Filters," which received first-stage approval in 2024.

In recognition of his academic excellence and research contributions, Dr. Hafeez Ullah has received several prestigious awards. These include the HEC Indigenous PhD Scholarship (2007) and the Research Productivity Award (RPA-2012) from the Pakistan Council for Science and Technology (PCST). He was also recognized as a Productive Scientist of Pakistan (PSP) by PCST for six consecutive years, from 2013 to 2018, acknowledging his sustained contributions to scientific research and publication. Dr. Hafeez Ullah is actively involved in mentoring graduate students and supervising MPhil and PhD research. Through his teaching, supervision, and scholarly activities, he continues to inspire young researchers and promote a strong culture of scientific inquiry and innovation. He can be contacted via WhatsApp at +92 304 6561959 or by email at hafeezullah@iub.edu.pk.

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Dr. Muhammad Hashim is an Associate Professor in the Institute of Physics at The Islamia University of Bahawalpur (IUB). He was born in Bahawalpur and completed his Bachelor's and Master's degrees at The Islamia University of Bahawalpur. In 2008, he was awarded the Cultural Exchange Scholarship by the Ministry of Education, Pakistan, to pursue his PhD studies in China. He earned his PhD in Condensed Matter Physics from Chongqing University, China, in 2012 and received the Honor Graduate Certificate for International Students in recognition of his outstanding academic performance. After completing his doctoral studies, he joined the Department of Applied Physics at the Federal Urdu University of Arts, Science and Technology (FUUAST), Islamabad, as an Assistant Professor, where he served for approximately three years. On July 30, 2015, he joined Khwaja Fareed University of Engineering and Information Technology (KFUEIT), Rahim Yar Khan, as an Assistant Professor of Physics. During his tenure at KFUEIT, he held several administrative positions, including Head of the Department of Basic Sciences and Humanities, Head of the Department of Physics, Super Focal Person for the PM/CM Laptop Scheme, and Director of the Scholarships and Financial Assistance Department.

In October 2020, Dr. Hashim joined the Institute of Physics at The Islamia University of Bahawalpur. He is currently serving as an Associate Professor of Physics and continues to contribute actively to teaching, research, and academic leadership. His research interests focus on the synthesis of nanomaterials using various approaches, particularly the hydrothermal method and the composite molten salt method, as well as the investigation of their structural, optical, electrical, and magnetic properties. Dr. Muhammad Hashim has received several awards and honours throughout his academic career. These include the Certificate of Appreciation for his outstanding performance and dedicated service as Head of the Department of Physics and Director of Scholarships at KFUEIT during the 2019–2020 academic session, the Cultural Exchange Scholarship from the Ministry of Education, Pakistan, for his PhD studies, the Honor Graduate Certificate for Distinguished International PhD Students from Chongqing University in 2012, and a certificate of recognition from the Alumni Liaison Office of Chongqing University, China. His WhatsApp number and e-mail address are +92 300 6834690 and muhammad.hashim@iub.edu.pk, respectively.

Dr. Shahzad Shifa

Dr. Shahzad Shifa is an Associate Professor in the Institute of Physics at The Islamia University of Bahawalpur (IUB). He has a strong academic and research background and has made significant contributions to teaching, research, and scientific innovation. His research interests include Nanoferrites, Texture Analysis, and the structural and surface morphology of oxide films. He has led and participated in several research projects funded by the Higher Education Commission (HEC) of Pakistan. Notably, he secured an NRPU research project worth Rs. 3.857 million, which has contributed to the advancement of research in materials science and condensed matter physics. Dr. Shahzad Shifa has published 25 research articles in reputable national and international journals, contributing significantly to scientific knowledge in his field. In recognition of his scholarly achievements, he has received several academic awards and honours. His dedication to teaching, research, and mentorship continues to inspire young physicists and strengthen scientific research at the national level. He can be contacted via WhatsApp at +92 334 7074310 or by email at shahzad.shifa@iub.edu.pk.

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Dr. Muhammad Arshad Javid is an Associate Professor in the Institute of Physics at The Islamia University of Bahawalpur (IUB). He has a strong academic and research background and has made significant contributions to teaching, research, and scientific innovation. His research interests include Biomaterials, Biomedical Physics, Materials Simulation, MRI Contrast Agents, the Synthesis and Characterization of Magnetic Nanoparticles, Thermoelectric Materials, Piezoelectric Materials, Shape Memory Alloys, and Polymers for Biomedical Applications. He is also experienced in advanced characterization and computational techniques, including XRD, SEM, EDX, VSM, Thermo-Calc, OriginLab, SPIN software, COMSOL Multiphysics, and in vivo and in vitro methodologies. His work further extends to the development of radiotherapy beam modifiers for cancer treatment and the application of MRI in the study of neurodegenerative diseases. Dr. Muhammad Arshad Javid has contributed to various research projects and has published numerous articles in national and international journals. His scholarly work has advanced research in materials science, medical physics, and biomedical applications. Passionate about teaching and mentoring, he actively guides undergraduate and postgraduate students in their academic and research activities. Through his dedication to education and scientific inquiry, he continues to inspire young physicists and researchers. He can be contacted via WhatsApp at +92 333 6345363 or by email at uarshad.javid@iub.edu.pk.

Dr. Alia Nazir

Dr. Alia Nazir is an Associate Professor in the Institute of Physics at The Islamia University of Bahawalpur (IUB). She began her academic career at the university in 2006 as a Lecturer and was later promoted to the position of Assistant Professor before attaining her current rank. Over the years, she has made significant contributions to teaching, research, academic administration, and the promotion of women in science and technology. In 2014, Dr. Alia Nazir received the prestigious Schlumberger Foundation Faculty for the Future (FFTF) Fellowship for postdoctoral research at the University of Dundee, Scotland, United Kingdom. She is among the select group of only 22 women in Pakistan to have been awarded this distinguished fellowship. As an active member and dedicated alumna of the Schlumberger Foundation, she remains deeply committed to advancing opportunities for women in Science, Technology, Engineering, and Mathematics (STEM). To further this mission, she established a Women in STEM Centre at The Islamia University of Bahawalpur. The centre provides an important platform for female students and researchers to develop their academic and professional careers in scientific and technological disciplines. Her efforts continue to inspire and empower young women pursuing careers in STEM fields.

In addition to her teaching and research activities, Dr. Alia Nazir has undertaken several administrative responsibilities, including serving as In-Charge of Student Affairs, In-Charge of Examinations, a member of the Board of Studies, and an active participant in curriculum development committees. Her multifaceted contributions reflect her dedication to academic excellence and institutional development. She is also actively working to establish collaborations between hospitals and universities engaged in research in medical physics and related fields. These partnerships aim to facilitate the exchange of expertise and resources and support the development of advanced technologies and treatments for cancer patients. Through her scholarly contributions, leadership, and commitment to social impact, Dr. Alia Nazir continues to play a vital role in advancing physics education, medical physics research, and women's participation in STEM in Pakistan. Her WhatsApp number and e-mail address are +92 303 6666868 and alia.nazir@iub.edu.pk, respectively.

Dr. Zahida Batool

Dr. Zahida Batool is an Associate Professor at the Institute of Physics, IUB. She completed her PhD in 2014 from the University of Surrey, United Kingdom, and has since built extensive expertise in cutting-edge areas of condensed matter physics, particularly optoelectronics and nanotechnology, with applications in the diagnosis and treatment of abnormalities in the human body. Her research interests span Photonics, Biomaterials, Nanotechnology, and Medical Applications of Advanced Materials. She has published numerous research articles in prestigious international journals and contributed book chapters in the fields of photonics and biomaterials. Dr. Batool is the recipient of research grants from the Higher Education Commission (HEC) of Pakistan, including an NRPU project worth more than Rs. 10 million, awarded in 2017. In recognition of her outstanding scholarly achievements, she received the Best Researcher of the Year Award (2013) from the University of Surrey, UK. Her publications have also been recognized among the top-cited articles in the Journal of Applied Physics (JAP) in 2012, with another of her works selected for a special issue in 2015. Her WhatsApp number and e-mail address are +92 300 4522597 and zahida.batool@iub.edu.pk, respectively.

Dr. Majid Niaz Akhtar

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Dr. Gul Naz

Dr. Gul Naz is an Assistant Professor in the Institute of Physics at The Islamia University of Bahawalpur (IUB). She has a strong academic and research background and holds a PhD in Physics. She has made significant contributions to teaching, research, and scientific innovation in the fields of materials science and nanotechnology. Her research interests include materials science, solid-state physics, and nanotechnology. She has published 32 research articles in peer-reviewed international journals, contributing to the advancement of scientific knowledge in these areas. Her scholarly work reflects a deep commitment to excellence in both research and education. In recognition of her contributions, Dr. Gul Naz has received several academic awards and honours for her achievements in teaching and research. As a dedicated research supervisor, she has successfully supervised 36 MPhil scholars and 6 PhD students, fostering a culture of innovation, critical thinking, and scientific inquiry among young researchers. Through her academic leadership and mentorship, Dr. Gul Naz continues to inspire students and promote impactful scientific research in Pakistan. She can be contacted via WhatsApp at +92 333 1651801 or by email at gul.naz@iub.edu.pk.

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Dr. Muhammad Ramzan Khawar is an Assistant Professor of Physics at The Islamia University of Bahawalpur. He holds a PhD in Physics and has built a strong academic and research portfolio in thin film fabrication and characterization, focusing on multilayer nanostructured films to reduce greenhouse effects in automobiles and on the structural and surface morphology of oxide films. He has successfully led several funded projects under the Higher Education Commission of Pakistan, including the synthesis of single and multilayer films for optical properties and heat mirror applications, and a novel study of transparent conductive oxide nanomaterials for solar energy applications. His work has been published widely in reputed national and international journals, earning him academic awards and recognition for his contributions to scientific knowledge. He continues to inspire young physicists and strengthen research at the national level. His contact details are WhatsApp: +92 301 6928563 and Email: mrkhawar83@gmail.com, mr.khawar@iub.edu.pk.

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Dr. Muhammad Shoaib is an Assistant Professor of Physics at The Islamia University of Bahawalpur. He received his Doctor of Philosophy degree in Physics from the Department of Physics, Quaid-i-Azam University Islamabad in 2017, and completed his postdoctoral fellowship at the National Centre for Physics (NCP) Islamabad from 2017 to 2018. He joined the Department of Physics at The Islamia University of Bahawalpur in 2018 under the IPFP program and is currently serving as an Assistant Professor. He is an HEC-approved PhD supervisor and is actively supervising BS, MS, and PhD students. Dr. Shoaib has published more than 100 research papers in collaboration with RPC and CMS experiments at CERN, contributing to the advancement of experimental high-energy physics. His research interests include particle physics, detector physics, accelerators, and experimental high-energy physics. He has been recognized with several awards and honors, including a Post-Doctoral Fellowship awarded by the National Centre for Physics Islamabad in 2017, the HEC Indigenous Fellowship for PhD, and the RPC project fellowship at CERN. He maintains affiliations with The Islamia University of Bahawalpur, the National Centre for Physics Islamabad, and the European Organization for Nuclear Research (CERN). His contact details are Phone:+92 332 6239665 / +92 62 9255480, Email: muhammad.shoaib@iub.edu.pk.

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Dr. Muhammad Amir Rafiq is an Assistant Professor Institute of Physics with a strong academic and research background. His research focuses on Physics Condense Matter Physics. He is associated with Materials Simulation Group (MSG) since 2016. He has more than eight years of teaching, research, and administrative experience at four different leading institutions, including University College London (UCL). Dr. Muhammad Amir Rafiq has published 27 extensively in reputed national and international journals, contributing to the advancement of scientific knowledge in his field. . His WhatsApp number and email address are +92 300 7850851 and hasankhan683@gmail.com amir.rafiq@iub.edu.pk

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Dr. Maria Atiq is currently serving as an Assistant Professor of Physics at The Islamia University of Bahawalpur, Pakistan. Her academic and research journey is rooted in the field of medical and health physics, with a strong focus on radiation therapy, dosimetry, and the design and biomedical applications of nanomaterials. She did PhD in Physics in 2019, where she worked extensively on evaluating dosimetric properties in external beam radiation therapy, aiming to improve treatment planning and patient safety. In addition to her academic responsibilities, she actively engage in research and supervise BS, MPhil and PhD students in medical physics-related projects. With a strong commitment to advancing both research and education in applied physics and medical science, she continuously strive to contribute to impactful, translational research that benefits both the academic community and the healthcare sector. Her WhatsApp number and e-mail address are +92 334 6484617 and maria.atiq@hotmail.com, respectively.

Dr. Muhammad Irfan

Dr. Muhammad Irfan is serving as an Assistant Professor of Physics at The Islamia University of Bahawalpur (IUB), Baghdad-ul-Jadeed Campus. He holds a Ph.D. and is currently contributing to the Department of Physics with a strong focus on condensed matter physics. His expertise lies in the synthesis and investigation of nanoarchitectures for energy applications, as well as zero- and one-dimensional magnetic nanomaterials for high-density storage media and magnetic sensors. He also works on nano-device design, energy-efficient technologies, and solar applications. Dr. Irfan has published more than 100 international research papers, making significant contributions to the advancement of knowledge in his field. His contact number is +92 324 7077382 / +92 62 9255462 and his e-mail address is muhammad.irfan@iub.edu.pk.

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Dr. Noor-ul-Ain

Dr. Noor-ul-Ain earned her PhD in Physics from The Islamia University of Bahawalpur in 2017. She conducted part of her research work at Linköping University in Sweden, gaining valuable international experience. She began her academic career in 2017 as an Assistant Professor in the Department of Physics at The Government Sadiq College Women University Bahawalpur. Her research interests include semiconductors and nanomaterials, the growth of graphene through CVD and sputtering, contacts on semiconductor materials, and the study of structural properties using characterization techniques such as XRD, EDX, and SEM, along with optical characterization using PL and TRPL. She has published five international research papers and has been recognized with several awards and honors, including the PhD Indigenous Fellowship (Phase-V, 2011), the IRSIP Fellowship (International Research Support Initiative Program, 2015), and the Startup

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Dr. Muhammad Shahid Khan served as a Lecturer until 29-06-2026 in the Institute of Physics at The Islamia University of Bahawalpur. He joined the Department of Physics, University of Okara, as Assistant Professor on 30-06-2026. He completed his PhD in Medical Physics. His research interests include the synthesis of materials using hydrothermal and co-precipitation methods, characterization techniques such as XRD, FTIR, SEM, VSM, and TEM, as well as the antimicrobial activity and applications of magnetic nanoparticles. He is also engaged in research on magnetic resonance imaging (MRI), focusing on relaxivity, T1-weighted and T2-weighted imaging, and the development of contrast agents. His contact details are Phone: +92 300 6421403 / +92 62 9255462, Email: mshahid.khan@iub.edu.pk, mshahid.khan@uo.edu.pk and Address: Institute of Physics, Baghdad-ul-Jadeed Campus, The Islamia University of Bahawalpur.

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Mr. Muhammad Asif is a Lecturer in the Institute of Physics at The Islamia University of Bahawalpur. He received his early education from government institutions in his home district and went on to earn a Bachelor of Science degree in Mathematics (A and B) and Physics from the University of the Punjab. Later, he moved to Lahore, where he completed his Master's degree in Applied Physics with distinction, graduating as a Gold Medalist from the University of Engineering and Technology (UET), Lahore. He further pursued his Master of Philosophy (MPhil) at UET Lahore under the supervision of Prof. Dr. Anwar Latif, Chairman of the Department of Physics. Mr. Asif has seven years of post-academic experience serving as a health and medical physicist at Mayo Hospital, King Edward Medical University, Lahore, one of the pioneer teaching medical institutions in Punjab, Pakistan. His research expertise lies in radiation physics of condensed materials, with a focus on radiation interactions, radiation detection, and the effects of irradiation on the electrical and optical properties of materials. He has hands-on experience with both classical and advanced characterization techniques, including SEM, AFM, XRD, Four Probe conductivity, UV, and FTIR spectroscopy. He was awarded the PEEF merit scholarship during his Master's studies. His contact details are Phone: +92 334 6257643 and Email: asif@iub.edu.pk.

Dr. Faisal Mukhtar

Dr. Faisal Mukhtar is a materials scientist and nanotechnology researcher whose academic journey began in a small village in Bahawalpur, Pakistan, progressing through leading institutions in Pakistan to international research positions in Malaysia, Europe, and Uzbekistan. He holds a Ph.D. in Physics (Semiconductors and Nanotechnology) and has over eight years of research experience in materials science, photocatalysis, electrochemistry, energy storage/conversion, wastewater treatment, and advanced functional nanomaterials. He has authored 62+ international research articles with over 3,300 citations (H-index 36) and was recognized among Stanford University's World Top 2% Scientists (2024-2025). His expertise includes nanomaterial synthesis, semiconductor device fabrication, and advanced characterization techniques such as XRD, XPS, SEM/TEM, Raman, FTIR, UV-Vis, PL, and electrochemical analysis. He has extensive international academic experience through postdoctoral appointments at the University of Ostrava (Czechia) and Universiti Sains Malaysia, and is currently serving as a Visiting Professor at Navoi State University, Uzbekistan, where he contributes to teaching, research supervision, and international collaboration in advanced materials, photocatalysis, and sustainable energy technologies. His contact details are WhatsApp: +92 301 6853346 and Email: faisal.mukhtar@iub.edu.pk.

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Dr. Mamoona Aslam

Dr. Mamoona Aslam is a Lecturer at the Institute of Physics. She has the capability to conduct innovative research, an eagerness to utilize available resources to further develop her skills, and a desire to communicate her passion to others. She is excited to share her passion for science through mentoring and inspiring the next generation of scientists. She looks forward to a career based in research while keeping the mentoring of future scientists of all backgrounds as an utmost priority in her life. His WhatsApp number and e-mail address are +92 3356048743 and mamoona.aslam@iub.edu.pk, respectively.

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relationships in polymer systems, and circular materials for waste-to-value conversion. H He has authored over 17 research articles in reputable international journals, reflecting his active contribution to the field. He is committed to driving innovation in sustainable technologies, aiming to develop environmentally friendly solutions that address global challenges in materials science and engineering. His WhatsApp number and email addresses are +92 303 7759008 and asad.khan@iub.edu.pk.

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Dr. Ghulam Murtaza

Dr. Ghulam Murtaza is a Lecturer and PhD research scholar at the Institute of Physics, The Islamia University of Bahawalpur. His current field of research is Materials Science (Materials Simulation). He earned his Master's in Physics and Master's in Fiber and Textile Technology from The Islamia University of Bahawalpur and The University of Agriculture Faisalabad, respectively. He completed his Master of Philosophy in Physics in 2018. He is a dedicated, resourceful, and goal-driven professional researcher and educator with a solid commitment to social and academic growth. His WhatsApp number and email address are +92 300 7000837 and m.ghulammurtaza@iub.edu.pk.

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Dr. Abdul Rauf Athar is a Lecturer at the Institute of Physics, The Islamia University of Bahawalpur (IUB). His primary research interest lies in Particle Physics, where he focuses on exploring fundamental aspects of matter and energy. He also holds a Bachelor's degree (16 years) in Computational Physics, which provides him with strong analytical and computational skills to support his research work. Dedicated to both teaching and research, Dr. Athar is committed to inspiring students and advancing knowledge in the field of physics. His WhatsApp number and e-mail address are +92 333 8204066 and abdulrauf.athar@iub.edu.pk, respectively.

Dr. Abdul Quader

Dr. Abdul Quader is a Lecturer in the Institute of Physics at The Islamia University of Bahawalpur (IUB). His specialization is in Solid State Physics at the Centre of Excellence in Solid State Physics. He has contributed to various research projects and has 31 publications in national and international journals. Passionate about mentoring, he actively guides undergraduate and postgraduate students in research and academic development. His WhatsApp number and email address are +92 300 8197274 and abdul.quader@iub.edu.pk.

Chapter 5

Department of Mathematics: Bahawalnagar Campus

This section provides an overview of the history of the Department of Mathematics at the Bahawalnagar Campus, along with profiles of the Head of the Department and the faculty members. Details of publications, and MPhil and PhD theses supervised are presented in subsequent chapters.

5.1 Overview

The Department of Mathematics at the Bahawalnagar Campus commenced its MSc programme in 2013 and subsequently introduced the BS and MPhil programmes in 2020 and 2021, respectively. Mr. Ijaz Mehmood (Assistant Professor, Education Training) served as the Head of the Department of the Department of Mathematics, Bahawalnagar Campus, The Islamia University of Bahawalpur (IUB), from 03-10-2013 to 31-08-2020.
https://www.iub.edu.pk/mathematics

5.2 Head of the Department

Dr. Sidra Razaq

Dr. Sidra Razaq is an Assistant Professor and serves as the Head of the Department of Mathematics at The Islamia University of Bahawalpur (IUB). She joined the Department of Mathematics, Bahawalnagar Campus, The Islamia University of Bahawalpur, on 01-09-2019 on deputation as a Lecturer. She has been serving as Assistant Professor since 8th January 2021. She has also been the In-Charge of the Department of Mathematics, Bahawalnagar Campus, since 01-09-2019. She completed her BS and M.Phil. in Applied Mathematics from Lahore College for Women University, where she also worked before joining The Islamia University of Bahawalpur. She completed her PhD under the supervision of Prof. Dr. Ghulam Mustafa in 2025. Her WhatsApp number and e-mail address are +92 332 4810780 and sidrar285@gmail.com, sidra.razaq@iub.edu.pk respectively.

5.3 Profiles of Faculty Members

Dr. Muhammad Naeem Azhar

Dr. Muhammad Naeem Azhar is an Assistant Professor in Mathematics with a strong academic and research background. His research focuses on Graph Theory and Operations Research. He has more than eight years of teaching, research, and administrative experience at four leading institutions. Dr. Muhammad Naeem Azhar has published 8 papers in reputed national and international journals, contributing to the advancement of scientific knowledge in his field. His WhatsApp number and email address are +92 303 6933423 and naeem.azhar@iub.edu.pk.

Dr. Muzammil Mukhtar

Dr. Muzammil Mukhtar obtained his PhD in Mathematics from the Abdus Salam School of Mathematical Sciences (ASSMS), Government College University Lahore, Pakistan. His research interests are in Pure Mathematics, particularly in algebra, ring theory, graph theory and related areas. He has published several research articles in well-reputed international peer-reviewed journals. He is currently serving as an Assistant Professor on regular basis in the Department of Mathematics at The Islamia University of Bahawalpur, Bahawalnagar Campus, a position he has held since 2021. In addition to his teaching responsibilities, he has supervised more than 25 MPhil students, contributing to the academic and research development of postgraduate scholars at Bahawalnagar Campus. Dr. Mukhtar has actively participated in numerous national and international conferences, workshops, and academic meetings. He has presented his research and engaged with the global mathematical community at conferences held in Mexico, the United States, France, South Africa, Norway, and the United Arab Emirates. His academic interests focus on advancing research in pure mathematics while promoting excellence in teaching, supervision, and scholarly collaboration. His WhatsApp number and e-mail address are +92 344 7960797 and muzammil_mukhtar@iub.edu.pk (muzammilmukhtar3@gmail.com), respectively.

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Dr. Abdul Wahhab Mustafa

Dr. Abdul Wahab Mustafa is a Lecturer in the Department of Mathematics at the Bahawalnagar Campus of The Islamia University of Bahawalpur (IUB), Pakistan. He is an active researcher with expertise in fuzzy mathematical modeling and intelligent decision-support systems. His research interests include decision-making, fuzzy algebraic structures, conflict analysis, aggregation operators, rough sets, and hybrid algebraic structures, with a particular emphasis on their theoretical development and practical applications in complex and uncertain environments. His WhatsApp number and e-mail address are +92 300 3759495 and abdul.wahab@iub.edu.pk, respectively.

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Dr. Muhammad Ameer is a Lecturer in the Department of Mathematics at the Bahawalnagar Campus, The Islamia University of Bahawalpur (IUB), where he has been serving since 21st October 2020. He completed his M.Sc. in 2017 and earned his M.Phil. in Pure Mathematics in 2019, both from The Islamia University of Bahawalpur. A dedicated and committed educator, he continues to contribute to teaching and research in mathematics with passion and professionalism. His WhatsApp number and e-mail address are +92 305 8811132 and m.ameer@iub.edu.pk, respectively.

Ms. Ayesha Munir

Ms. Ayesha Munir is a Lecturer in the Department of Mathematics at the Bahawalnagar Campus, The Islamia University of Bahawalpur (IUB), where she has been serving since 19th October 2020. She completed her Matriculation in Bahawalpur (2008–2010) and her F.Sc. Pre-Engineering in Bahawalpur (2010–2012). She earned her BS in Mathematics from SE College, Bahawalpur (2012–2016), followed by her M.Phil. in Applied Mathematics from the University of Engineering and Technology, Lahore (2017–2019). A dedicated and committed educator, she continues to inspire students through her teaching and research with passion and professionalism. Her WhatsApp number and e-mail address are +92 314 4236382 and ayesha.munir@iub.edu.pk, respectively.

Mr. Muhammad Samar Javed

Mr. Muhammad Samar Javed is a Associate Lecturer in the Department of Mathematics at the Bahawalnagar Campus, The Islamia University of Bahawalpur (IUB). His current research interests include fixed point theory, functional analysis, and fuzzy algebraic structures. He is a dedicated, resourceful, and goal-driven professional researcher and educator with a solid commitment to social and academic growth. His WhatsApp number and email address are +92 300 8759382 and samar.javed@iub.edu.pk, respectively.

Chapter 6

Department of Mathematics: Rahim Yar Khan Campus

This section provides an overview of the history of the Department of Mathematics at the Rahim Yar Khan Campus, along with profiles of the Head of the Department and the faculty members. Details of publications, and MPhil and PhD theses supervised are presented in subsequent chapters.

6.1 Overview

The Department of Mathematics at the Rahim Yar Khan Campus commenced its BS programme in 2019 and subsequently introduced the MSc and MPhil programmes in 2021. Mr. Muhammad Riaz (Lecturer in Statistics) has been serving as the Head of the Departmnet of the Department of Mathematics, Rahim Yar Khan Campus, The Islamia University of Bahawalpur, since September 2019.

6.2 Head of the Department

Dr. Naeem Shafqat

Dr. Naeem Shafqat is currently an Assistant Professor and serves as the Head of the Department of Mathematics at The Islamia University of Bahawalpur (IUB), Rahim Yar Khan Campus. He earned his Ph.D. in Mathematics from Bahauddin Zakariya University, Multan, in 2017 and possesses over 15 years of teaching experience across various higher education institutions. Dr. Shafqat's primary research expertise lies in Fixed Point Theory and its applications. A dedicated academic, he has successfully supervised more than 22 M.Phil. students in their research programs. He continues to contribute significantly to the mathematical sciences through his commitment to teaching, mentorship, and scholarly activity. His WhatsApp number and e-mail address are +92 336 8518566, naeem.shafqat@iub.edu.pk respectively

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6.3 Profiles of Faculty Members

Dr. Ittrat Abbas Mirza

Dr. Ittrat Abbas Mirza is serving as an Assistant Professor in the Department of Mathematics at The Islamia University of Bahawalpur (IUB). He completed his Ph.D. between 2014 and 2017 from the University of the Punjab, Lahore, Pakistan, with his dissertation titled "New Classes of Integers and Their Applications in Graphs." He began his teaching career on November 8, 2018, and has taught a wide range of mathematics subjects including Real Analysis, Number Theory, Group Theory, Linear Algebra, Advanced Algebra, Advanced Graph Theory, Discrete Mathematics, Calculus, and Complex Analysis. He has published more than 45 research articles in HEC-recognized journals. His research interests include Number Theory, Graph Theory, Fuzzy Algebra, and Fuzzy Sets, with a particular specialization in the intersection of Number Theory and Graph Theory. His WhatsApp number is +92-336-6757846 and his e-mail address is itrat.abbas@iub.edu.pk.

Dr. Sheraz Akhtar

Dr. Sheraz Akhtar is an Assistant Professor in the Department of Mathematics at the Rahim Yar Khan Campus, The Islamia University of Bahawalpur (IUB). He possesses a strong academic and research background, with his primary research interests focusing on fractional differential equations, fluid mechanics, and discrete mathematics. Dr. Sheraz Akhtar has published 20 research papers in reputed national and international journals, contributing significantly to the advancement of scientific knowledge in his field. His WhatsApp number and e-mail address are +92 321 6811770 and shehraz.akhtar@iub.edu.pk, respectively.

Dr. Shahbaz Ali

Dr. Shahbaz Ali is a Lecturer in the Department of Mathematics at The Islamia University of Bahawalpur, Rahim Yar Khan Campus, Pakistan. He earned his Ph.D. in Mathematics from the University of the Punjab, Lahore, where his research focused on analytical number theory and its applications in graph theory. His research interests include fuzzy decision-making, optimization, computational mathematics, graph theory, topological indices, chemical graph theory, and numerical algorithms. Dr. Ali has published more than 53 research articles in leading international journals, with a cumulative impact factor exceeding 100, over 660 citations, an h-index of 16, and an i10-index of 25. An active researcher and dedicated educator, Dr. Ali has successfully supervised 22 M.Phil. and 2 Ph.D. students and teaches a wide range of undergraduate and postgraduate mathematics courses. He is committed to advancing mathematical research through interdisciplinary collaboration while mentoring the next generation of researchers. His WhatsApp number and e-mail address are +92 345 4552278 and shahbazali@iub.edu.pk, respectively.

Dr. Sabeeh Khaliq

Dr. Sabeeh Khaliq is currently serving as a Lecturer in the Department of Mathematics at The Islamia University of Bahawalpur, Rahim Yar Khan Campus. He earned his Ph.D. in Applied Mathematics from the same university in 2021. His academic work focuses on applied mathematics and engineering, with particular emphasis on fluid dynamics in industrial applications. His research interests include coating processes, calendering flows, nanofluids, and heat transfer mechanisms. He has authored several peer-reviewed articles published in internationally recognized SCI-indexed journals, contributing to the advancement of mathematical modeling in complex fluid systems. His WhatsApp number and e-mail address are +92 308 7446138 and sabeeh.khaliq@iub.edu.pk, respectively.

Mr. Asad Ullah

Mr. Asad Ullah is currently serving as a Lecturer in the Department of Mathematics at The Islamia University of Bahawalpur, Rahim Yar Khan Campus. His academic work focuses on applied mathematics and engineering, with particular emphasis on fluid dynamics in industrial applications. His research interests include coating processes, calendering flows, nanofluids, and heat transfer mechanisms. He has authored several peer-reviewed articles published in internationally recognized SCI-indexed journals, contributing to the advancement of mathematical modeling in complex fluid systems. His WhatsApp number and e-mail address are +92 308 7274758 and asadullah@iub.edu.pk, respectively.

Ms. Aeman Aftab

Ms. Aeman Aftab is a Lecturer in the Department of Mathematics at the Rahim Yar Khan Campus, The Islamia University of Bahawalpur (IUB). She earned her Master's degree in Mathematics with distinction and her M.Phil. in Pure Mathematics from The Khwaja Fareed University of Engineering and Information Technology (KFUEIT), Rahim Yar Khan, completing the latter in 2020. She began her teaching career as an Associate Lecturer at KFUEIT from 2019 to 2020, followed by the same role at IUB, Rahim Yar Khan Campus, from October 2020 to April 2022. Since 2022, she has been serving as Lecturer at IUB, Rahim Yar Khan Campus. With a strong academic background and a passion for teaching, she is recognized as a dedicated, resourceful, and goal-driven educator committed to academic excellence and student growth. Her WhatsApp number and e-mail address are +92 333 0642999 and aeman.aftab@iub.edu.pk, respectively.

Mr. Muhammad Azhar

Mr. Muhammad Azhar is a Lecturer in the Department of Mathematics at the Rahim Yar Khan Campus, The Islamia University of Bahawalpur (IUB). He is a motivated mathematician with a strong interest in graph theory and its applications in cryptography and computer science, and his current research focuses on fuzzy graph theory, particularly complex vague graphs and their applications in decision-making, as well as the structure and properties of graphs to enhance security and efficiency in computation. He is a dedicated, resourceful, and goal-driven professional researcher and educator with a strong commitment to social and academic growth. His WhatsApp number and e-mail address are +92 303 5220699 and m.azhar@iub.edu.pk, respectively.

Mr. Haq Nawaz Khan

Mr. Haq Nawaz Khan is a Lecturer in the Department of Mathematics at the Rahim Yar Khan Campus, The Islamia University of Bahawalpur (IUB). His current research focuses on fuzzy graph theory, with particular contributions in complex vague graphs and their applications in decision-making. He is a dedicated, resourceful, and goal-driven professional researcher and educator with a strong commitment to both social and academic growth. His WhatsApp number and e-mail address are +92 333 7478582, +92 301 7588347 and haq.nawaz@iub.edu.pk, respectively.

Chapter 7

Department of Physics: Bahawalnagar Campus

This section presents the history of the Department of Physics at the Bahawalnagar Campus, along with profiles of the Head of the Department and faculty members. Details of research grants and projects, publications, and MPhil and PhD theses supervised are presented in subsequent chapters.

7.1 Overview

The Department of Physics at Bahawalnagar Campus commenced its BS programme in Fall 2020 and subsequently introduced the MSc and MPhil programmes in Fall 2022.
https://www.iub.edu.pk/physics

7.2 Head of the Department

Dr. Muhammad Nasir Rasul

Dr. Muhammad Nasir Rasul is serving as an Assistant Professor in the Department of Physics at the Bahawalnagar Campus, The Islamia University of Bahawalpur (IUB), Pakistan. He has been Head of the Department since January 1, 2026. He actively engages in teaching and research, contributing to academic excellence by developing impactful research strategies and simplifying complex scientific concepts in an accessible manner. He thrives in environments that encourage innovation, interdisciplinary collaboration, and academic growth, while maintaining strong professional relationships with colleagues to enhance teamwork and productivity. His ongoing efforts reflect a deep commitment to advancing education and research within his institution. His WhatsApp number is +92 305 6836505 and his e-mail address is nasir.rasool@iub.edu.pk.

7.3 Profiles of Faculty Members

Dr. Ejaz Ahmad Khera

Dr. Ejaz Ahmad Khera was relieved of his duties on 31-12-2025. He served as an Assistant Professor and Head of the Department of Physics at The Islamia University of Bahawalpur (IUB). He earned his Ph.D. with specialization in the characterization of materials for memory storage and neuromorphic applications using Density Functional Theory (DFT). He is an HEC-approved Ph.D. supervisor and has supervised numerous M.Phil. scholars, with one Ph.D. student currently conducting research under his supervision in the Materials Modeling and Simulation Laboratory. Dr. Khera has published more than 50 research articles in high-impact international journals. His current research focuses on the discovery and design of efficient

donor polymers (DPs) for solar cell applications. His WhatsApp number is +92 306 7484054, and his email address is ejaz.khera@iub.edu.pk.

Dr. Abdul Majeed

Dr. Abdul Majeed is serving as an Assistant Professor in the Department of Physics at the Bahawalnagar Campus, The Islamia University of Bahawalpur (IUB), Pakistan. He is a dedicated, resourceful, and goal-driven professional educator, researcher, and science communicator with 7 years of teaching experience and excellent counseling, listening, and communication skills. An accommodating and versatile individual, he has the talent to design inspiring hands-on lessons that capture students' imagination and foster success. With about 11 years of research experience in Materials Science, he possesses both experimental and theoretical expertise in synthesis, characterization, modeling, and simulation of complex oxides, nanomaterials, ferrites, nanocomposites, magnetic materials, binary alloys, graphene-ferrite composites, dielectric materials, thermoelectric materials, multiferroics, perovskites, and soft & hard materials. He has extensive knowledge of assessing scientific needs and implementing impactful research, along with the ability to communicate complex information in an understandable form. His professional vision is to enhance knowledge, skills, and abilities while contributing productively to research organizations, society, and meeting future challenges. His WhatsApp number is +92 307 8044279 and his e-mail address is abdulmajeed@iub.edu.pk.

Ms. Sidra Shafiq

Ms. Sidra Shafiq is currently serving as a Lecturer in the Institute of Physics at The Islamia University of Bahawalpur (IUB). Alongside her teaching responsibilities, she is pursuing a Ph.D. in Physics, with her research focused on Materials Simulation and Solid State Physics. She is a dedicated and resourceful academic, contributing to both teaching and research with professionalism and commitment. Her WhatsApp number is +92 332 4041364 and her e-mail address is sidra.shafiq@iub.edu.pk.

Ms. Rahat-ul-Ain

Ms. Rahat-ul-Ain is serving as a Lecturer in Physics at the Bahawalnagar Campus, The Islamia University of Bahawalpur (IUB). She is affiliated with the Department of Physics at IUB and is actively engaged in teaching and academic development. Her research interests include studying the properties of exact solutions of the chiral field, reflecting her dedication to advancing knowledge in theoretical physics. She continues to contribute to the academic community with professionalism and commitment. Her WhatsApp number is +92 300 4305995 and her e-mail address is rahatulain@iub.edu.pk.

Chapter 8

Department of Physics: Rahim Yar Khan Campus

This section provides an overview of the history of the Department of Physics at the Rahim Yar Khan, along with profiles of the Head of the Department and the faculty members. Details of research grants and projects, publications, and MPhil and PhD theses supervised are presented in subsequent chapters.

8.1 Overview

The Department of Physics was established in 2020 with a vision to impart quality education and foster research excellence in the field of Physics. The department launched its BS Physics program in Fall 2020, followed by the MS/MPhil Physics program in Fall 2022. The BS program is a four-year undergraduate degree spread over eight semesters, comprising 130–136 credit hours, designed to provide students with a solid foundation in core and applied areas of Physics. The MS/MPhil Physics program is a two-year graduate degree spanning four semesters, offering 30 credit hours of advanced coursework and research. Designed to cultivate critical thinking and research competence, both programs aim to prepare students for careers in academia, industry, and scientific research. The Department of Physics has a highly qualified faculty, comprising four PhD holders and one MPhil degree holder, trained both nationally and internationally.
Mission & Vision
The Department of Physics is committed to providing high-quality education through interactive teaching, innovative curriculum design, and impactful research. Our mission is to produce well-rounded graduates who are scientifically skilled, socially responsible, and capable of addressing real-world challenges. Our vision is to make Physics an engaging and inspiring discipline that inspires curiosity and innovation. Our graduates will not only take pride in their academic achievements but also in being part of a department that values integrity, excellence, and service.
https://ryk.iub.edu.pk/department-of-physics

8.2 Head of the Department

Dr. Muhammad Gul

Dr. Muhammad Gul is serving as an Assistant Professor at The Islamia University of Bahawalpur, Rahim Yar Khan Campus. He has also been serving as Head of the Department of Physics since 25.09.2025. He holds an M.Phil. and a Ph.D. in Experimental High Energy Physics and has further strengthened his research profile through postdoctoral experience at INFN Bari, Italy. His research interests are mainly focused on Experimental High Energy Physics, New Physics searches, dark matter studies, CMS data analysis, Beyond the Standard Model physics, machine-learning-based data analysis, and gaseous detector R&D. He has also served as a Hosted/Visiting Researcher at the National Centre for Physics, Islamabad, where he has been involved in dark matter simulation using BSM models and the analysis of CMS data through machine learning techniques. Dr. Gul has contributed to several international research activities

and collaborations, including CERN, INFN, and NCP, and has published research work in internationally recognized journals in the field of High Energy Physics. His academic and research profile reflects his commitment to teaching, advanced scientific research, and the promotion of modern computational and experimental methods in physics. His contact number is +92 308 9424026, and his e-mail address is muhammadgul@iub.edu.pk.

8.3 Profiles of Faculty Members

Dr. Muhammad Isa Khan

Dr. Muhammad Isa Khan is serving as an Associate Professor in the Department of Physics at The Islamia University of Bahawalpur (IUB), Pakistan. He served as Head of the Department until 25.09.2025. He completed his Ph.D. in Medical Physics in January 2016 under the supervision of Prof. Dr. Muhammad Afzal Khan at IUB. He was awarded an Indigenous Scholarship by the Higher Education Commission (HEC) for his M.Phil. and Ph.D. studies, and later received the International Research Support Initiative Program (IRSIP) scholarship from HEC, which enabled him to conduct research at the Princess Margaret Cancer Centre, Toronto, Canada. His teaching portfolio includes courses at the BS, MSc, M.Phil., and Ph.D. levels, such as Mathematical Methods of Physics, Electromagnetic Theory, Materials Science, Electronics, Magnetism, and Optical Properties of Materials. His primary research area is the modeling and simulation of 2D materials, focusing on their structural, electronic, and magnetic properties, with applications in gas sensing, spintronics, lithium/sodium/potassium-ion batteries, hydrogen storage, and nanotubes for drug delivery. Dr. Isa Khan has supervised BS, M.Phil., and Ph.D. scholars and continues to mentor students in advanced research. He has published numerous quality research papers in peer-reviewed journals and contributed book chapters with Elsevier Publishers. His contact number is +92 333 4540942 and his e-mail address is muhammad.isa@iub.edu.pk.

Dr. Muhammad Umair Farooq

Dr. Muhammad Umair Farooq is serving as an Assistant Professor in the Department of Physics at The Islamia University of Bahawalpur (IUB), Rahim Yar Khan Campus. He earned his Ph.D. in Semiconductors and Nanotechnology from Beijing Institute of Technology (BIT), China, in 2018 on a fully funded Chinese Government Scholarship (CSC). His research focuses on exciton-spin, carrier-spin, and spin-spin interactions related to the optical and magnetic behavior of transition-metal-doped low-dimensional (1D, 2D) semiconductor nanostructures, with applications in spintronics and solid-state optoelectronic devices. Prior to joining IUB, Dr. Umair was awarded a Post-Doctoral Fellowship by the China Post-doc Association at the Institute of Semiconductors (IOS), Chinese Academy of Sciences, Beijing, China. He has worked in several national and international institutions, including Beijing Institute of Technology, IOS, and the University of Education, contributing to both teaching and research productivity. He has published about 16 high-quality international research articles.5 His contact number is +92 335 7004404 and his e-mail address is umair.farooq@iub.edu.pk.

Dr. Muhammad Junaid

Dr. Muhammad Junaid is serving as an Assistant Professor at The Islamia University of Bahawalpur, Rahim Yar Khan Campus. He holds both an M.Phil. and a Ph.D. in his field of specialization and has further enhanced his expertise through a Post-Doctoral Fellowship, strengthening his skills in advanced research methodologies and innovation. His research interests lie in Experimental Condensed Matter Physics, with a focus on nano-magnetism and nanomaterials, metal oxides, and soft and hard ferrites. He has contributed to numerous national and international research projects and has been actively involved in Higher Education

Commission (HEC) funded initiatives, reflecting his commitment to academic excellence and impactful scholarship. His contact number is +92 301 7556972 and his e-mail address is m.junaid@iub.edu.pk.

Mr. Ashir Saeed

Mr. Ashir Saeed is serving as a Lecturer in the Department of Physics at The Islamia University of Bahawalpur (IUB), Rahim Yar Khan Campus. His current research interests lie in energy storage systems, particularly batteries and supercapacitors, as well as quantum mechanics and advanced materials. He is especially focused on exploring the fundamental properties of materials at the quantum level to develop high-performance and sustainable energy storage devices. He is a dedicated, resourceful, and goal-driven professional researcher and educator with a strong commitment to social and academic growth. His contact number is +92 311 1625969 and his e-mail address is ashir.saeed@iub.edu.pk.

Chapter 9

Research Grants and Projects of the FPMS

9.1 Research Grants and Projects: Department of Geography and Geoinformatics

9.1.1 Dr. Sana Arshad

1) National Research Program for Universities (NRPU), Research and Innovation Division (R&ID), Higher Education Commission, Pakistan. Proposal submitted, 2025.

2) CHARLESTON MSCA Co-Fund Fellowship, Project No. 028 (2025).

3) MSCA-Charleston Project GEO-AIYLRF, Charles University.

4) COST Action CA24163: Modelling Cross-Sectoral Cascading Climate Impacts on Europe to Design Coherent Policy Responses (CROSS-CASCADE) – Working Groups 1 and 2.

9.1.2 Dr. Zahir Ahmad

5) Researcher in National Park Project (2018–2019): Wildlife Department Khyber Pakhtunkhwa, Pakistan.

6) Data Collection and Monitoring Assistant (DCMA) (2014–2015): Independent Monitoring Unit (IMU), Elementary and Secondary Education, Khyber Pakhtunkhwa, Pakistan.

7) Master Trainer in DCTE Project (2014–2015): DCTE & AFAQ (Association for Academic Quality Enhancement).

9.2 Research Grants and Projects: Department of Mathematics: Baghdad-ul-Jadeed Campus

9.2.1 Prof. Dr. Ghulam Mustafa

8) Principal Investigator, "Generation of Mask, Analysis, Model Selection and Assessment for $(n+1)$-Point m-ary Univariate and Bivariate Subdivision Schemes," Rs. 2,702,692, National Research Program for Universities (NRPU), Project No. 3183, Higher Education Commission, Pakistan, 21-04-2014 to 20-04-2017 (3 Years).

9) Co-Principal Investigator, "Generation of Mask of Univariate and Bivariate Non-Stationary Subdivision Schemes and Their Analysis," Rs. 483,000, National Research Program for Universities (NRPU), Project No. 1476, Higher Education Commission, Pakistan, starting 29-05-2017 (1 Year).

10) **Science Talent Farming Scheme (STFS)**

Rs. 1.00 million was paid to The Islamia University of Bahawalpur (Cheque No. A619509, dated 17-06-2019) for laboratory consumables and boarding/lodging facilities in support of this scheme. Role: Supervisor/Mentor for

research projects under the Science Talent Farming Scheme (STFS), Phase-I (Component-I), for young students, sponsored by the Pakistan Science Foundation (PSF). Following projects were completed under this project.

- Danial Hussain Shah, 6th Batch (PSF/STFS/238/2022-23, dated 19-01-2024).
  Research report: Applications of Pascal's Triangle in CAGD and Graph Theory.
- Hira Sardar, 5th Batch (PSF/STFS/135/2019-20, dated 22-11-2021).
  Research report: Investigation of Cubic B-Spline for Modeling of Curves.
- Kashaf Aslam, 4th Batch (PSF/STFS/135/2017-18, dated 15-06-2020).
  Research report: Investigation of Chaikin's Corner-Cutting Scheme for Modeling of Curves.

9.2.2 Prof. Dr. Hafiz Fukhar-ud-Din

Research Projects Completed at King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, Kingdom of Saudi Arabia:

11) Coincidences and Approximation of Multi-Valued Mappings with Applications, KFUPM Internal Research Project No. IN121023.

12) Solution Methods for Split-Feasibility Problems and Fixed Point Problems with Applications, KFUPM Internal Research Project No. IN121037.

13) Fixed Point Problems and Iterations in Uniformly Convex Metric Spaces, KFUPM Internal Research Project No. IN121055.

14) Fixed Point and Iterations for Nonlinear Mappings in Hyperbolic Spaces, KFUPM Internal Research Project No. IN141047.

15) Fixed Point Iterative Methods for Presic-Type Contractions and Applications, KFUPM Internal Research Project No. IN151014.

9.2.3 Prof. Dr. Zaheer Abbas

16) Principal Investigator, "Two-Phase Flows of Non-Newtonian Fluids," Rs. 406,287, NRPU, Higher Education Commission of Pakistan, 2015–2016 (Completed, 1 Year).

17) Principal Investigator, "CFD Solutions Based on Meshless Finite Elements for Two-Dimensional Non-Newtonian Peristaltic Flows," Rs. 1,621,155, NRPU, Higher Education Commission of Pakistan, 2016–2017 (Completed, 3 Years).

18) Principal Investigator, "Multi-Phase Flow of Chemical Reactive Fluids," Rs. 449,000, ORIC Research Grant, The Islamia University of Bahawalpur, 2020 (2 Years).

9.2.4 Prof. Dr. Muhammad Faheem Khan

19) Award for National Research Project for Universities of Rs. 2,702,694 as Co-Investigator funded by HEC, Pakistan. Title: Generation of mask, analysis, model selection and assessment for $(n+1)$-point m-ary univariate and bivariate subdivision schemes.

9.2.5 Dr. Ghulam Abbas

20) Principal Investigator, "Scalar Field Thin Shell Collapse in General Relativity," Rs. 958,689, National Research Program for Universities (NRPU), Higher Education Commission of Pakistan, 2020.

9.3 Research Grants and Projects: Institute of Physics: Baghdad-ul-Jadeed Campus

9.3.1 Prof. Dr. Saeed Ahmad

21) Fabrication of Tissue Equivalent Material for Diagnostic Radiology and Radiotherapy. Funded by Higher Education Commission of Pakistan under National Research Program for Universities (NRPU), 2014–2017. Worth Rs. 6.2 million. (Completed). IUB.

22) PAK–UK Education Gateway Mobility Partnership for Faculty. Research Project in collaboration with Queen Mary University of London, UK, 2023–2024. (Completed). IUB.

9.3.2 Dr. Muhammad Azhar Khan

23) Hexagonal Nanoferrites for High Frequency Devices and Applications in GHz Regime. PI: Dr. Muhammad Azhar Khan. Approved Grant: Rs. 6.67 million, NRPU, HEC.

24) Metal Sulfide-Graphene Nano-Heterostructures for Advanced Electrochemical Energy Storage Devices Fabrication. Co-PI: Dr. Muhammad Azhar Khan. Approved Grant: Rs. 4.96869 million, NRPU, HEC.

25) Synthesis and Characterization of Nano-Ferrites for Thermoelectric Power Generation. PI: Dr. Muhammad Azhar Khan. Grant: Rs. 1.373940 million, Pakistan Science Foundation.

26) Synthesis of Single/Multilayer Films for Optical Properties and Potential Applications as Heat Mirrors. Co-PI: Dr. Muhammad Azhar Khan. Approved Grant: Rs. 0.5 million, HEC.

27) Synthesis and Characterization of Zinc Ferrites by Wet Chemical Method and Study of the Impact of Terbium on Various Properties. PI: Dr. Muhammad Azhar Khan. Approved Grant: Rs. 0.491155 million, HEC.

9.3.3 Dr. Hafeez Ullah

28) Rs. 0.5 million research grant, Project No. 1500008623/454773 by Higher Education Commission (HEC), Pakistan under Start-up Research Grant (IPFP/TTS). Title: Upgradation of Laser and Optronics Laboratory towards Bio-photonics. 2014. Role: PI.

29) Rs. 0.5 million research grant, Project No. 21-1798/SRGP/R&D/HEC/2017 by Higher Education Commission (HEC), Pakistan under Start-up Research Grant (IPFP/TTS). Title: Synthesis and Application of Cu_2O Nanostructures for Visible Photocatalytic Degradation of Organic Pollutants in Contaminated Water. June 2020. Role: Co-PI.

30) Rs. 10 million research grant, Project No. PSF/CRP/Mat/Indv-395 by Pakistan Science Foundation under Competitive Research Programme (CRP), 7th Call on Materials. Title: Development of Nanofiltration Membranes Decorated with Bismuth Selenide Based Nanomaterials for Efficient Water Filters. First stage approved, 2024.

9.3.4 Dr. Aalia Nazir

31) Awarded £4000 Grant for PAK-UK Gateway Mobility Partnership for Faculty, sponsored by the British Council (2024).

32) Awarded $4.6 million for the research project ”Volumetric Assessment of Breast Density Using MRI: A Feasibility Study” with Prof. David Sutton at the University of Dundee, Scotland, UK (2014–2015), funded by the Schlumberger Foundation.

9.3.5 Dr. Zahida Batool

33) Principal Investigator, HEC NRPU Research Grant. Amount: Rs. 10 million. 2019.

34) Principal Investigator, ORIC IUB Research Grant. Amount: Rs. 0.9 million. 2021.

35) Co-Principal Investigator, HEC Start-up Research Grant. Amount: Rs. 0.5 million. 2017.

36) Vice Chancellor's Award for Postgraduate Student of the Year, University of Surrey, UK. Prize: £3,000. 2013.

9.3.6 Dr. Muhammad Arshad Javid

37) Synthesis and Characterization of Superparamagnetic Nanoparticles for Biomedical Application. Grant received by UET, Taxila. Amount: Rs. 0.5 million.

38) Toxicity Evaluation of Magnetic Nanoparticles for Biomedical Applications. Grant received by UET, Taxila. Amount: Rs. 1.2 million.

9.3.7 Dr. Muhammad Hashim

39) Development of Metallic and Magnetic Nanowire. SRGP project, awarded by HEC on 28th Feb 2016. Amount: Rs. 0.48 million. Role: Co-PI.

40) Theoretical Study of Quantum Optomechanical System. SRGP project, awarded by HEC on 28th July 2016. Amount: Rs. 0.278 million. Role: Co-PI.

41) Multicomponent Nano-Structured Metal Oxide Thin Films for Transparent Electronics. SRGP project, awarded by HEC on 21st July 2016. Amount: Rs. 0.435 million. Role: Co-PI.

42) Fabrication and Thermal Stability of Refractory Metal Based Solar Selective Absorbers for Solar Thermal Applications. SRGP project, awarded by HEC on 13th Feb 2019. Amount: Rs. 0.470 million. Role: Co-PI.

9.3.8 Dr. Majid Niaz Akhtar

43) Hexagonal Nanoferrites for High-Frequency Devices and Applications in the GHz Regime. PI: Dr. Muhammad Azhar Khan, Co-PI: Dr. Majid Niaz Akhtar. Approved Grant: Rs. 6.67 million, NRPU, HEC.

44) Synthesis and Characterization of Magnetic Materials for Antenna Applications. PI: Dr. Majid Niaz Akhtar, Co-PI: Dr. Salman Naeem Khan. Approved Grant: Rs. 0.5 million, HEC.

45) Magnetic Nanoparticles for Antenna Applications: An Innovative Approach. PI: Dr. Majid Niaz Akhtar, Co-PI: Dr. Salman Naeem Khan. Approved Grant: Rs. 0.2 million, SRGP.

9.3.9 Dr. Muhammad Irfan

46) Establishment of China-Pakistan Belt and Road Joint (BRI) Lab on Electromagnetic Compatibility Materials for Highly Integrated Chips between Hangzhou Dianzi University (HDU), China and The Islamia University of Bahawalpur, Pakistan.

9.3.10 Dr. Saba Saeed

47) ORIC Research Grant (Rs. 0.7 million), 2023. The Islamia University of Bahawalpur.

9.3.11 Dr. Gul Naz

48) Higher Education Commission (HEC) Pakistan, SRGP Project (21-1798/SRGP/R&D/HEC/2017) worth Rs. 0.5 million, Jan. 2018. Title: Synthesis and Application of Cu_2O Nanostructures for Visible Photocatalytic Degradation of Organic Pollutants in Contaminated Water.

9.3.12 Dr. Muhammad Usman Mustafa

49) Working as Neuroscience Researcher under China's Young Talent Program (Talented Young Scientist Program, TYSP). TYSP is an international mobility scheme funded by the Chinese government aimed at cultivating future leading scientists together with other countries.

50) Won British Council project "Mobility Partnership for Faculty and Students under PAK-UK Education Gateway". Research and Faculty exchange project between The Islamia University of Bahawalpur and Queen Mary University of London.

9.3.13 Dr. Muhammad Shakil

51) SRGP, HEC an award of Rs. 0.369 million as PI.

52) SRGP, HEC an award of Rs. 0.41 million as Co-PI.

53) NRPU, HEC an award of Rs. 3.6 million as PI.

9.3.14 Dr. Ayesha Ikhlaq

54) Won British Council project "Mobility Partnership for Faculty and Students under PAK-UK Education Gateway". Research and Faculty exchange project between The Islamia University of Bahawalpur and Queen Mary University of London, 2024.

9.3.15 Dr. Muhammad Ramzan Khawar

55) Synthesis of single/multilayer films for optical properties and potential applications as heat mirrors. Research project under Start-up Research Program, HEC, 2018. Grant: Rs. 0.5 million.

56) A novel study of Transparent Conductive Oxide (TCO) based Nano-Materials for Solar Energy Applications. Research project under ORIC-Research Grant IUB_2021-22. Grant: Rs. 1.3 million.

9.3.16 Dr. Hasan Mehmood Khan

57) International Grant. Project Title: Application of Green Organic Compound. Grant Reference Number: RCAMS / KKU / G015-21. Project Amount: 350000 SAR.

58) HEC Local Grant. Study of Hexaferrite Polymer Composites for High Frequency Applications. Grant: Rs. 0.5 million. Role: PI.

9.3.17 Dr. Hafiz Naeem-ur-Rehman Khan

59) Metal Oxides nanostructures based devices for photovoltaic, optoelectronic and catalytic applications. Funding Agency: HEC Pakistan. Amount: Rs. 4.9 million. June 2016.

9.3.18 Dr. Muhammad Saleem

60) PI for "Metal Oxide nanostructures; Synthesis Characterizations and Applications in Dye-sensitized Solar Cells." HEC approved. Amount: Rs. 0.5 million. Status: Completed.

61) PI for "Development of Solution-derived ZnO Nano-flowers based Photoelectrodes for Dye-Sensitized Solar Cells." CIIT approved. Amount: Rs. 0.2 million. Status: Completed.

62) Co-PI for "Preparation of insulating capillaries to develop a tool for structured ion-implantation and fundamental studies of ion-nanostructure interaction." HEC approved. Amount: Rs. 0.5 million. Status: Completed.

63) Co-PI for ”Semiconducting Graphene Light-Emitting Field-Effect Transistor.” Pak-China approved. Amount: Rs. 11 million. Status: Completed.

Grants approved to organize International Conference at CIIT as a Member. Amount: Rs. 4.45 million.

64) HEC approved for NanoSET-2017. Amount: Rs. 1.2 million.

65) CIIT approved for NanoSET-2017. Amount: Rs. 0.5 million.

66) HEC approved for NanoSET-2014. Amount: Rs. 1.2 million.

67) PSF approved for NanoSET-2014. Amount: Rs. 0.05 million.

68) CIIT approved for NanoSET-2014. Amount: Rs. 0.5 million.

69) HEC approved for Particle Physics-2016. Amount: Rs. 0.5 million.

70) CIIT approved for Particle Physics-2016. Amount: Rs. 0.5 million.

9.3.19 Dr. Faisal Iqbal

71) PAK-UK Education Gateway Mobility Partnership for Faculty (F144), 2023–2024.

72) Research project as Co-PI. Title: Novel Bismide based mid infra-red sensors for their applications in environmental protection and medical diagnostics. Approved in 2018 by HEC. Total cost: Rs. 10,026,722.

73) Research project as PI. Title: Multifunctional Materials for Energy Storage, Photocatalysis, and Antibacterial Applications. Approved in 2021 by ORIC, IUB. Total cost: Rs. 0.45 million.

9.3.20 Dr. Noor Ul Ain

74) Graphene Quantum Dots Based Optical Devices. Agency: HEC. Amount: Rs. 425,000. Date: 12 December 2017.

75) Synthesis of Metal Oxide and Metal Decorated Reduced Metal Oxide Thin Films for Water Splitting to Generate Green Energy. Agency: ORIC-IUB. Amount: Rs. 1,200,000.

9.3.21 Dr. Mamoona Aslam

76) Winner of British Council Project: Mobility Partnership for Faculty and Students under PAK-UK Education Gateway (Collaboration with Queen Mary University of London), 2024.

9.3.22 Dr. Maria Atiq

77) ORIC-IUB Project No. 113/ORIC/IUB/2023; dated 21-02-2023. Title: Fabrication of Colloidal Metal-Peptide Composite Nanomaterials for Antibacterial Applications.

9.3.23 Dr. Muhammad Shahzad Shifa

78) Automated Identification of Weeds and Cotton Crop Diseases. Awarded as PI. HEC NRPU-21-15611. Amount: Rs. 3.857 million. Date: December 2022.

9.4 Research Grants and Projects: Department of Physics: Rahim Yar Khan Campus

9.4.1 Dr. Muhammad Umair Farooq

79) High-temperature growth of transition metal-doped semiconductor nanostructures. Project Number: 219387. The 66th batch of general funding, China Postdoctoral Science Foundation.

9.5 Research Grants and Projects: Department of Physics: Bahawalnagar Campus

9.5.1 Dr. Muhammad Nasir Rasul

80) Higher Education Commission (HEC) of Pakistan granted Rs. 1.1 million to carry out research work in Australia under the International Research Support Initiative Program (IRSIP).

Chapter 10

Publications of Department of Geography and Geoinformatics

10.1 Prof. Dr. Sher Muhammad Malik

1) Ahmad, Z., Altaf, F., Kamp, U., Rahman, F., and Malik, S. M., "Glacier Recession and Climate Change in Chitral, Eastern Hindu Kush Mountains of Pakistan, Between 1992 and 2022," *Geosciences*, 15(5) (2025), 167. ISSN: 2076-3263. https://doi.org/10.3390/geosciences1505016

2) Qurat ul Ain, Basit Nadeem, Sher Muhammad Malik, and Abdul Sattar Ghaffari, "Spatio Temporal Analysis of Urban Growth and Expansion of Multan City During 1998–2020," *Journal of Urban Studies*, 12(2) (2024), 1917–1928.

3) Bibi, H., Shaheen, A., Bibi, M., Malik, S. M., Mohsin, M., Nadeem, B., and Shah, M. Z., "Distribution Patterns of Medicinal Plants in Cholistan Desert, Pakistan: A Phytogeographical Study," *Pakistan Journal of Science*, 76(1) (2024), 84–94.

4) Shamsheer Haider and Malik, S. M., "Spatio Temporal Analysis of Temperature Trends in Cholistan Desert, Pakistan," *Al-Qantara*, 10(3) (2024), 128–149.

5) Malik, S. M., Shamsheer Haider, Basit Nadeem, Muhammad Hussain, and Raheem Buksh, "Archeological Sites and Tourism Potential in Southern Punjab: A Study of Cholistan Desert, Bahawalpur," *International Review of Basic and Applied Sciences*, 11(2) (2023).

6) Shamsheer Haider, Sher Muhammad Malik, Basit Nadeem, and Nimra Sadiq, "Impact of Population Growth on the Natural Resources of Cholistan Desert," *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(10) (2021), 1778–1790.

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8) Malik, S. M., Adnan, M., and Ali, A., "The Nexus of Climate Change and Development: The Role of Media in Pakistan," *International Journal of Management Research and Emerging Sciences*, 10(1) (2020), 148–155. E-ISSN: 2313-7738, ISSN: 2223-5604. Published March 2020. http://ijmres.pk/

9) Zeb, B., Alam, K., Nasir, J., Mansha, M., Ahmad, I., Bibi, S., Malik, S. M., and Ali, M., "Black Carbon Aerosol Characteristics and Radiative Forcing Over the High Altitude Glacier Region of Northern Pakistan," *Atmospheric Environment*, (2020). ISSN: 1352-2310. http://www.elsevier.com/locate/atmosenv

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11) Miandad, M., Gondal, S., Aamir, A., Malik, S. M., Rahman, G., Ashraf, H., and Zafar, U., "Spatio-Temporal Residential Land-use Changes in District Abbottabad from 1990 to 2018," *Journal of Biodiversity and Environmental Sciences (JBES)*, 16(2) (2020), 25–38. ISSN: 2220-6663 (Print), 2222-3045 (Online).

12) Adnan, M., Youas, M., and Malik, S. M., "Communication Strategies for Polio Eradication in Pakistan: The Case Study of Polio Vaccination Campaign in South Punjab," *Global Regional Review (GRR)*, 1(1) (Spring 2020).

13) Adnan, M., Youas, Z. M., Zaman, M. Q., and Malik, S. M., "Social Media Marketing and Emergence of Aspirational Brand Luxury: Female Consumers' Buying Behavior in Pakistan," *Pakistan Journal of Commerce and Social Sciences*, 14(1) (2020), 409–423.

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10.2 Ms. Sana Arshad

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Study in Eastern Hungary (Debrecen)," *Journal of Agriculture and Food Research*, 15 (2024), 100967. DOI: 10.1016/j.jafr.2024.100967.

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12.8 Dr. Muhammad Shoaib

12.8.1 CMS Collaboration Member

Dr. Muhammad Shoaib is a member of the CMS Collaboration and has 100+ joint publications with the group. Some of them are listed below. The complete list of his publications can be found at `https://inspirehep.net/authors/1067896`.

12.8.2 Selected Publications

2536) M. Shoaib et al., "Probing heavy charged Higgs bosons at $\gamma\gamma$ colliders using a multivariate technique," (Year not specified). Impact Factor: NA.

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Chapter 13

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Chapter 14

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Chapter 15

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Chapter 16

Publications of Department of Physics: Rahim Yar Khan Campus

16.1 Dr. Muhammad Gul

16.1.1 CMS Collaboration Member

Dr. Muhammad Gul is a member of the CMS Collaboration and has 700+ joint publications with the group. Some of them are listed below. The complete list of his publications can be found at https://inspirehep.net/authors/1298344.

16.1.2 Selected Publications

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16.3 Dr. Muhammad Umair Farooq

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16.5 Mr. Ashir Saeed

4265) S. Khalid, F. Akhtar, A. Saeed, S. S. Alarfaji, M. I. Khan, "Exploring hydrogen storage capacity of Sc and Y metal-decorated molybdenum tetraboride (MoB_4) monolayer through DFT calculations," *Physics Letters A*, 2025, 130679.

4266) I. Ahmed, U. Iqrar, A. Saeed, R. Alotaibi, S. M. Ali, M. Anwar, M. I. Khan, "A DFT study of hydrogen storage application on pristine magnesium dicarbide (MgC_2) monolayer," *RSC Advances*, 15 (2025), 11409–11416.

4267) M. Z. Asghar, A. Saeed, N. ul Ain, S. S. Alarfaji, M. I. Khan, "Tungsten tetraboride nanosheet as a potential gas adsorption material: A density functional theory (DFT) study," *Chemical Physics Letters*, 2025, 142090.

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Chapter 17

PhD Theses Supervised in the FPMS

17.1 PhD Theses: Department of Geography and Geoinformatics

17.1.1 Dr. Zahir Ahmad

1) Faryal Asghar (2024–2027): Impact of Climate Change on the Water Scarcity in Bahawalpur, Pakistan. (In Progress)

2) Muhammad Umar (2024–2027): Geospatial Assessment of Heatwave and Its Impact on Socio-Economic Condition of Mirpurkhas Division, Pakistan. (In Progress)

3) Atif Nazir (2024–2027): Implication of Climate Change on Flood Hazard in the Eastern Hindu Kush, Chitral, Pakistan. (In Progress)

17.2 PhD Theses: Department of Mathematics: Baghdad-ul-Jadeed Campus

17.2.1 Prof. Dr. Ghulam Mustafa

4) Muhammad Tahseen Iqbal, Thesis: Applications of Subdivision Schemes and B-Splines in Geometric Modeling, 20-02-2026.

5) Sidra Razaq, Thesis: The Generalized Families of Non-Uniform and Stationary Subdivision Schemes for Curve and Surface Design, 21-07-2025.

6) Co-supervision: Zainab Iqbal, Thesis: The Subdivision Schemes-Based Computational Approach to Solve Integral and Integro-Differential Equations, 16-10-2025. (Supervisor: Syeda Tehmina Ejaz, Government Girls Sadiq College Women University Bahawalpur)

7) Ayesha Mahmood, Thesis: The Parametric Families of Stationary and Non-Stationary Subdivision Schemes for Curve and Surface Design, 13-12-2024.

8) Humaira Mustanira Tariq, Thesis: The Generalized Parametric Families of Subdivision Schemes for Curve and Surface Modeling, 06-10-2023.

9) Shafqat Ali, Thesis: The Flow Between Porous and Semi-Porous Channels, 11-10-2019.

10) Muhammad Asghar, Thesis: Regression-Based Subdivision Schemes for Noisy Data, 11-06-2019.

11) Rabia Hameed, Thesis: Classical and Statistical Techniques-Based Subdivision Schemes, 30-07-2018.

12) Robina Bashir, Thesis: Study of Subdivision Schemes and Their Impact on Geometric Modeling and Computer Graphics, Sponsored by Higher Education Commission (HEC), Pakistan, 18-09-2017.

13) Syeda Tehmina Ejaz, Thesis: Subdivision Schemes and Their Applications to Solve Differential Equations, Sponsored by Higher Education Commission (HEC), Pakistan, 22-02-2017.

14) Mehwish Bari, Thesis: Stationary and Non-Stationary Subdivision Schemes and Their Applications, Sponsored by Higher Education Commission (HEC), Pakistan, 26-09-2016.

15) Pakeeza Ashraf, Thesis: Subdivision Schemes and Their Applications in Geometric Modeling, Sponsored by Higher Education Commission (HEC), Pakistan, 23-02-2015.

16) Abdul Ghaffar, Thesis: Lower and Higher Arity Subdivision Schemes and Their Applications, Sponsored by Higher Education Commission (HEC), Pakistan, 26-05-2014.

17) Muhammad Sadiq Hashmi, Thesis: Subdivision Curves / Surfaces and Their Error Bounds, Sponsored by Higher Education Commission (HEC), Pakistan, 28-03-2011.

18) Muhammad Faheem Khan, Thesis: Analysis and Application of Subdivision Surfaces, Sponsored by Higher Education Commission (HEC), Pakistan, 28-03-2011.

17.2.2 Prof. Dr. Hafiz Fukhar-ud-Din

19) M. Aqeel Ahmed Khan, 2014: Convergence Analysis of Nonlinear Mappings and Equilibrium Problems.

20) Amna Kalsoom, 2016: Existence and Approximation of Fixed Points for Single and Multivalued Maps in Metric Spaces.

21) Zahid Akhter, 2016: Estimation of Fixed Points of Certain Non-Linear Maps in Convex Metric Spaces.

17.2.3 Prof. Dr. Zaheer Ahmad

22) Muhammad Naveed, M.Phil. (2016, The Islamia University of Bahawalpur, Pakistan): Boundary Layer Flows Over a Curved Moving Surface.

23) Mariam Sheikh, M.Phil. (2016, The Islamia University of Bahawalpur, Pakistan): Series and Numerical Solutions for Flows of Chemically Reactive Fluids.

24) Sami Ullah Khan, M.Phil. (2016, International Islamic University Islamabad, Pakistan): Flows of Some Non-Newtonian Fluids Due to Oscillatory Stretching Boundaries.

25) Jafar Hasnain, M.Phil. (2016, The Islamia University of Bahawalpur, Pakistan): Two-Phase Flows of Some Linear and Non-Linear Fluids.

26) Ziafat Mehmood, M.Phil. (2018, International Islamic University Islamabad, Pakistan): Numerical Simulations of Heat Transfer in Cavity Flows.

27) Muhammad Shahzad Shabbir, M.Phil. (2019, The Islamia University of Bahawalpur, Pakistan): Mathematical Models of Blood Flow in Stenosed Arteries Involving Non-Newtonian Fluids.

28) Shahid Rafiq, M.Phil. (2020, The Islamia University of Bahawalpur, Pakistan): Some Flows of Non-Newtonian Fluids with Temperature Dependent Viscosity.

29) Sifat Hussain, M.Phil. (2020, The Islamia University of Bahawalpur, Pakistan): Study of Some Problems in Channel Flows.

30) Amar Rauf, M.Phil. (2020, The Islamia University of Bahawalpur, Pakistan): Numerical Investigations of Fluid Motion Due to Oscillatory Rotating Disk.

31) Muhammad Asif Jafar, M.Phil. (2021, The Islamia University of Bahawalpur, Pakistan): Mathematical Analysis of Fluid Motion Between Two Parallel Disks.

32) Sabeeh Khaliq, M.Phil. (2021, The Islamia University of Bahawalpur, Pakistan): Analysis of Calendering and Coating Processes of Viscous Fluids Using Lubrication Approximation Theory.

33) Muhammad Imran, M.Phil. (2021, The Islamia University of Bahawalpur, Pakistan): Analysis of Fluid Motion Due to Curved Oscillatory Geometries.

34) Muhammad Yousuf Rafiq, M.Phil. (2022, The Islamia University of Bahawalpur, Pakistan): Peristaltic Motion of Viscous Fluid Models Involving Long Wavelength Approximation.

35) Intizar Mehdi, M.Phil. (2022, The Islamia University of Bahawalpur, Pakistan): Mathematical Models of Linear and Non-Linear Fluids in Microchannel.

36) Aqeel-u-Rehman, M.Phil. (2022, The Islamia University of Bahawalpur, Pakistan): Comparative Study of Heat Transfer Characteristics in Fluid Motion Through Different Geometries.

37) Tahira Rahim, M.Phil. (2023, The Islamia University of Bahawalpur, Pakistan): Dynamics of Two-Three Segregating Layers of Viscous Fluids.

38) Alia Hanif, M.Phil. (2024, The Islamia University of Bahawalpur, Pakistan): Rheological Properties in Coating Process of Non-Newtonian Polymers.

39) Muhammad Shakib Arslan, M.Phil. (2025, The Islamia University of Bahawalpur, Pakistan): Metachronal Wave Analysis of Fluid Models Through a Curved Channel.

40) Sana Goher, M.Phil. (2026, The Islamia University of Bahawalpur, Pakistan): Study of Boundary Layer Between Two Uniform Shear Flows.

41) Ayesha Naeem, M.Phil. (2026, The Islamia University of Bahawalpur, Pakistan): Accelerating and Decelerating Flows Between Two Narrowly Flat Disks.

42) Hafiz Shahzad, M.Phil. (2026, The Islamia University of Bahawalpur, Pakistan): Rheological Investigation of Immiscible Fluids in a Curved Pipe.

43) Maham Mujahid, M.Phil. (2026, The Islamia University of Bahawalpur, Pakistan): Newtonian and Non-Newtonian Flows Through a Corrugated Curved Channel.

44) Aqsa Fayyaz, M.Phil. (2026, The Islamia University of Bahawalpur, Pakistan): Peristaltic Pumping Through Eccentric Tubes of Viscous Fluids.

17.2.4 Prof. Dr. Muhammad Ramzan

45) Nazar Muhammad Khan, Defense-2026: Synopsis Successfully Defended (2022–2025), The Islamia University of Bahawalpur.

46) Muhammad Qasim, Defense-2026: Synopsis Successfully Defended (2022–2025), The Islamia University of Bahawalpur.

47) Shahid Iqbal, Defense-2025: Symmetries of Some Static Spacetimes in f(Q) Gravity, (2021–2024), The Islamia University of Bahawalpur.

48) Muhammad Jawad Ayyoub, Defense-2025: Spacetimes Symmetries of Certain Cosmological Models in f(Q) Gravity, The Islamia University of Bahawalpur.

49) Mushtaq Ahmad, Defense-2024: Lie and Noether Symmetries of Some Spacetimes in Modified Theories of Gravitation, (2018–2021), The Islamia University of Bahawalpur.

50) Murtaza Ali, Defense-2022: On Spacetime Symmetries in Some Theories of Gravity, (2016–2019), The Islamia University of Bahawalpur.

51) Abubakr Mehmood, Defense-2022: A Study of Non-Static Planar and Cylindrical Spacetimes in f(R,T) Gravity, (2014–2017), LUMS.

52) Aasma Nazir, Defense-2022: Proper Curvature Collineations of Some Spacetimes in f(R) Gravity, (2015–2018), The Islamia University of Bahawalpur.

53) Muhammad Jamil Khan, Defense-2021: Some Spacetime Symmetries in f(R,T) Theory of Gravity, (2016–2019), The Islamia University of Bahawalpur.

54) Fiaz Hussain, Defense-2020: Conformal Symmetries of Some Spacetimes in f(R) Theories of Gravity, (2015–2018), The Islamia University of Bahawalpur.

17.2.5 Prof. Dr. Muhammad Faheem Khan

55) Muhammad Omar, Ph.D. (2019, University of Sargodha, Pakistan): Some Numerical Techniques for Scientific and Engineering Computation.

56) Aamir Shahzad, Ph.D. (2021, University of Sargodha, Pakistan): Analysis of Subdivision Depths for Subdivision Curves and Surfaces.

57) Mohammad Basit, Ph.D. (2022, University of Sargodha, Pakistan): Application of Bernstein Basis Functions in Numerical Methods.

17.2.6 Prof. Dr. Nargis Aslam Khan

58) Mazmul Hussain, Ph.D. (59/IU.PhD/2017): The Effect of Variable Thermal Conductivity on Buongiorno Model in Nanofluid Between Stretching Disks. Completion Date: 25-05-2022.

59) Aftab Ahmad Faridi, Ph.D. (25/IU.PhD/2018): Numerical Simulation of Interaction of External Magnetic Field with Some Non-Newtonian Flows. Completion Date: 05-08-2024.

60) Muhammad Riaz, Ph.D. (PhD/IUB(DM)/2021(04)260): Analysis of Some Flows of Magnetized Nanofluids Over Different Geometries. Completion Date: 05-08-2024.

61) Munawwar Abbas, Ph.D. (PhD/IUB(DM)/2021(04)249): Simulation of Marangoni Convective Flows of Some Fluids Over Different Geometries. Completion Date: 05-08-2024.

62) Muhammad Azhar Iqbal, Ph.D. (PhD/IUB(DM)/2021(01)/889): Swimming of Motile Microorganisms in Some Flows of Nanofluids Over Various Geometries. Completion Date: 19-09-2025.

17.2.7 Dr. Ghulam Abbas

63) Syed Munawar Shah, Ph.D. (Defended on 18-06-2019): Isotropic and Anisotropic Charged Fluids Gravitational Collapse.

64) Muhammad Riaz, Ph.D. (Defended on 21-09-2020): Dynamical Aspects of Collapsing Gravitational Sources in $f(R,T)$ Gravity.

65) Muhammad Tahir, Ph.D. (Defended on 21-09-2020): Gravitational Collapse in Einstein-Gauss-Bonnet Theory.

66) Hamad Nazar, Ph.D. (Defended on 23-10-2020): Some Aspects of Gravitating Systems in $f(R)$ Theories of Gravity.

67) Rizwan Shahzad, Ph.D. (Defended on 23-10-2020): Some Models of Compact Stars in Rastall Theory of Gravity.

68) Allah Ditta, Ph.D. (Defended on 10-04-2021): Relativistic Matter Accretion onto a Class of Black Holes.

69) Kanwal Majeed, Ph.D. (Defended on 28-10-2022): Gravastar Configuration in Non-Conservative Theories of Gravity.

70) Hamza Rehman, Ph.D. (Defended on 21-05-2024): Accretion Flow and Accretion Disk Around the Black Holes.

71) Rana Husnain Ali, Ph.D. (Defended on 21-05-2024): Thermodynamical Analysis and Phase Transitions of Black Holes.

72) Muhammad Asgher, Ph.D. (Defended on 09-09-2024): Tidal Effects of Black Holes on Surrounding Objects.

73) Abdul Majeed, Ph.D. (Defended on 19-07-2025): Study of Some Stellar Objects in Modified Theories of Gravity.

74) Syeda Amina Bukhari, Ph.D. (Defended on 17-07-2026): Relativistic Accretion Dynamics Near Quantum-Corrected Black Holes.

17.2.8 Dr. Awais Yousaf

75) Kashif Maqbool (Ph.D. awarded 2017–2020, Sole Supervisor): On Relationship of Certain Topological Spaces with Various Algebraic Structures.

76) Rao Nadeem (Ph.D. awarded 2017–2020, Sole Supervisor): On Generalization of Molecular Descriptors Based on Certain Techniques for 2D Structures.

77) Muhammad Aamir (Ph.D. awarded 2017–2021, Supervisor: Dr. Muhammad Awais Youaf): Combinatorial Descriptions of Closed Paths in PSL(2,Z)-Space.

17.2.9 Dr. Muhammad Salman

78) Imran Khalid (Graduated on 05-08-2022): Study of Some Topological Indices in Graphs.

79) Salman Mukhtar (Graduated on 05-01-2024): Metric Identification in Graphs.

80) Asim Khursheed (Graduated on 05-01-2024): Study of Some Spectral Parameters in Graphs.

81) Javaria Iqbal (Graduated on 05-01-2024): Generalizations of Some Existing and New Topological Invariants for Graphs.

82) Abid Hussain (Graduated on 25-09-2025): Identification of Dominators in Graphs Using Domination Parameters.

83) Tahira Noreen (Graduated on 21-04-2026): Distance and Degree-Based Parametric Study in Graphs.

84) Syed Shahzaib (Waiting for defense): Fuzzy and Crisp Topological Analysis of Certain Graphs via Machine Learning Techniques.

17.2.10 Dr. Muhammad Mustahsan

85) Madiha Sana (Defended on 07-07-2020): Applications of WEB-Splines as Finite Element Basis Functions.

86) Muhammad Younas (Defended on 11-10-2021): The Concept and Application of Optimal Homotopy Asymptotic Method for Solving Differential Equations of Fractional Order.

87) Muhammad Asim (Defended, Year Not Provided): Numerical Solutions of Non-Linear Physical Models with Complex Geometries.

17.2.11 Dr. Muhammad Shahzad Shabbir

88) Meriyem Hussain (Defended, Year Not Provided): Mathematical Models of Blood Flow Through Curved Arteries.

89) Tayyaba Nazar (Defended, Year Not Provided): Simulation of Blood Flow Problems Involving Total and Fractional Time Derivatives.

17.3 PhD Theses: Institute of Physics: Baghdad-ul-Jadeed Campus

17.3.1 Prof. Dr. Saeed Ahmad

90) Khalid Iqbal: "Authentication of Absorbed Dose Measurements for Optimization of Radiotherapy Treatment Planning." 2009–2013. Successfully completed. IUB.

91) Muhammad Asghar Gadhi: "Absorbed Dose Verification in Clinical Radiation Oncology Practice." 2012–2016. Successfully completed. IUB.

92) Maria Atiq: "Quality Assurance of Three-Dimensional Dosimetry for Radiation Applications in Medicine." 2014–2018. Successfully completed. IUB.

93) Atia Atiq: "Evaluation of Dosimetric Properties in External Beam Radiation Therapy." 2014–2018. Successfully completed. IUB.

94) Qurat-ul-ain Shamsi: "Accuracy Enhancement in Dose Distribution for Modern Radiotherapy Techniques." 2014–2018. Successfully completed. IUB.

95) Muhammad Akram: "Validation of Dose Distribution in Three-Dimensional Radiation Therapy (3DCRT)." 2012–2016. Successfully completed. IUB.

96) Mehr-un-Nisa: "Liver Tissue Characterization Using Statistical Texture Analysis." 2017–2021. Successfully completed. IUB.

97) Muhammad Shahid Khan: "Fabrication and Characterization of Magnetic Nanoparticles for Biomedical Applications as MRI Contrast Agents." Successfully completed. IUB.

98) Ayesha Ikhlaq: "Computational Analysis of Physiological Signals for Heart–Brain Interaction." Successfully completed. IUB.

99) Saima Altaf: "Accuracy Enhancement of Radiation Dosimetry for Quality Assurance in Multi-Dimensional Radiotherapy." 2017–2021. Successfully completed. IUB.

100) Malik Younas Imran: "Dosimetric Verification for Different Radiotherapy Modalities: Qualitative and Quantitative Measures." 2017–2021. Successfully completed. IUB.

101) Muhammad Usman Mustafa: "Novel Approach for Stress Recognition Using EEG Signal Processing." Successfully completed. IUB.

102) Sana Salahuddin: "Isocentric Stability of Hyperarc and Stereotactic Body Radiation Therapy Using Ruby Phantom and IsoCal Verification Utilizing True Beam." Successfully completed. IUB.

103) Memona Aslam: "Investigation of Geometrical Uncertainties in Therapeutic and Dosimetric Developments in Total Body Irradiation." Successfully completed. IUB.

104) Sibtain Raza Khan: "Effectiveness of Dosimetry for Accuracy Enhancement in Modern Radiation Therapy." Successfully completed. IUB.

105) Ahmad Atta Qureshi: "Optimization of Radiation Therapy Outcome Using Modulation of Intensity for Electron and Photon Beams." Thesis under evaluation. IUB.

106) Nusara Khan: "Analysis of Dosimetric Properties and Their Impact on Radiotherapy Treatment Planning for High Energy Radiation Beams." Thesis submitted. IUB.

107) Sana Ullah: "Clinical Dosimetry for High Energy Photon and Electron Beams for Optimum Dose Distribution." Thesis submitted. IUB.

17.3.2 Prof. Dr. Altaf Hussain

108) M. Nasir Rasul (Spring 2014–2017): Spin-Projected Study on Half-Metallic Properties of Heusler Compounds: An Ab-Initio Approach. IUB.

109) Salman Mehmood (Fall 2013–2016): First-principles Study of Novel Ceramic Materials. IUB.

110) Muhammad Amir Rafiq (2016–2019): First-principles Electronic, Magnetic and Optical Properties of Spinel Ferrites. IUB.

111) Muhammad Nadeem (Spring 2018–2021): Density Functional Theory based Electronic, Mechanical, Thermal, Optical and Magnetic Properties of Ternary Carbides. IUB.

112) Aslam Hameed (Fall 2018–2021): Study of Natural Radioactivity Concentration in Soil, Water, Food and Building Materials of Multan. IUB.

113) Muhammad Sohail Akbar (Spring 2020–2023): Computational Insights of Physical Properties of ARh_2O_4 (A = Co, Ni, Cu, Zn) Spinels. IUB.

114) Ghulam Murtaza (Spring 2020–2023): Density Functional Insights of Advanced Metal Based 112-Type Ternary Nitrides. IUB.

115) Rohail Ali Shah (Spring 2021–2024): First-principles Calculations of Multifunctional Carbides for Advance Applications. IUB.

116) Ahmad Waqar Aslam (Spring 2021–2024): Density Functional Elastomechanical and Thermophysical Aspects of Transition Metals Based Silicides. IUB.

117) Muhammad Haseeb (Fall 2022–2025): Density Functional Insights of Oxychalcogenide Materials for Energy Harvesting Applications. IUB.

17.3.3 Dr. Muhammad Azhar Khan

118) Faseeh ur Raheem (Degree awarded December 19, 2024): Structural Elucidation and Dielectric Investigation of Rare Earth Substituted X-type Nanostructured Hexaferrites for Absorption Application. IUB.

119) Rukhsana Kausar (Degree awarded November 22, 2024): The Effects of Divalent and Trivalent Metal Cations Substitution on U-Type Nano-Hexaferrites Synthesized via Sol-Gel Auto-Combustion Technique. IUB.

120) Sikanadar Hayat (Degree awarded May 6, 2024): Fabrication and Characterization of Transition Metal Ions Substituted U-type Hexaferrites for High Frequency Applications. IUB.

121) Qurat ul Ain Shahid (Degree awarded August 30, 2023): Structural Elucidation and Characterization of Rare Earth Metal ions Substituted Z-type Hexagonal Ferrites. IUB.

122) Nighat Zahoor (Degree awarded August 30, 2023): Fabrication and Characterization of Thulium and Terbium Substituted W-Type Hexagonal Ferrites. IUB.

123) Muhammad Arshad (Degree awarded June 16, 2023): Structural and Electrical Transport Properties of Transition Metals Substituted Y-type Hexaferrites. IUB.

124) Shagufta Gulbadan (Degree awarded February 22, 2023): Synthesis, Characterization, and Effect of Metal Cations Substitution on Ba-Sr M-type Hexaferrite Nanoparticles Using Citrate Sol-Gel Combustion Route. IUB.

125) Wasim Tahir (Degree awarded December 12, 2022): Structural, Electrical and Magnetic Properties of Transition

Metals Substituted W-Type Hexaferrites. IUB.

126) Muhammad Javed Akhter (Degree awarded April 09, 2021): Synthesis and Characterization of Holmium Doped Transition Metals Based Soft Ferrites. IUB.

127) Muhammad Asif (Degree awarded April 07, 2021): Study of Rare Earth Metals Substituted $YFeO_3$ Ceramics. IUB.

128) Abdul Majeed (Degree awarded August 17, 2020): Impact of Divalent and Trivalent Cations on the Properties of Sr Based X-type Hexagonal Nanoferrites. University of Malakand Pakistan.

129) Muhammad Junaid (Degree awarded February 07, 2020): Fabrication and Characterization of Indium Doped Nanocrystalline Soft Ferrites. IUB.

130) Muhammad Kashif Sharif (Degree awarded January 24, 2020): Fabrication and Characterization of Hafnium and Gallium Doped $BiFeO_3$ Multiferroic Nanomaterials. IUB.

131) Syeda Rabia Ejaz (Degree awarded July 15, 2019): Study of Divalent and Trivalent Cations Substitution on X-type Hexagonal Ferrites. IUB.

132) Huma Malik (Degree awarded February 16, 2019): Study of Rare Earth and Transition Metals Co-substituted Y-type Hexaferrites for High Frequency Applications. IUB.

133) Maria Yousuf Lodhi (Degree awarded January 25, 2019): Investigation of Rare Earth and Transition Metals Substituted X-type Hexagonal Ferrites for Microwave Applications. IUB.

134) Alina Manzoor (Degree awarded October 12, 2018): Study of Holmium Doped Lithium Nano-Structured Ferrites: Synthesis, Characterization and Application. IUB.

135) Sajjad Ahmad (Degree awarded October 16, 2017): Fabrication and Characterization of Ytterbium and Transition Metals Cations Doped $BiFeO_3$ Multiferroics. IUB.

136) Rajjab Ali (Degree awarded March 24, 2017): The Impacts of Various Metal Cations on Structural, Dielectric and Magnetic Properties of Nanocrystalline Nickel and Magnesium Ferrites. IUB.

17.3.4 Dr. Hafeez Ullah

137) Farah Andleeb (December 2019): Three Dimensional Surveillance Imaging of Vulnerable Blood Microvasculature in Diabetes and Neoplasm Using Optical Diagnostics Techniques. IUB.

138) Sadia Malik (November 2020): Imaging of Molecular Biomarkers with High Resolution Microscope for Early Tumor Detection. IUB.

139) Ejaz Ahmad Khera (April 2021): Characterization of Metals Doped Resistive Switching Memory Devices Using Density Functional Theory. IUB.

140) Muhammad Amjad (January 2022): Detection of Early Cancer of Different Types by Optical Techniques and Contrast Agent as Bio-marker. IUB.

141) Abdul Rauf (August 2022): Role of Graphene Based Nanocomposites for Photodynamic Therapy and Its Biomedical Applications. IUB.

142) Muhammad Abdul Majid (2024): Synthesis, Characterization and Biomedical Applications of Red Blood Cell Phantoms. IUB.

143) Munir Akhtar (April 2025): Early Detection, Feasible Panacea and Consequences of Different Drugs on Diseased Blood Tissue Using Optical Techniques. IUB.

144) Muhammad Abu Bakar (May 2025): Investigation of Angiogenesis Due to Sarcoma and Carcinoma with Optical Techniques. IUB.

145) Abdul Aleem (2024, Thesis Submitted): Diagnostic Study of Lungs Disorder from CT Scans Using Deep Convolutional Neural Network. IUB.

146) Tehseen Sana (Thesis Submitted): Synthesis and Characterization of Gd Doped C-Al_2O_3 Nanoparticles and Its Biomedical Applications. IUB.

17.3.5 Dr. Aalia Nazir

147) Qaiser Abbad: Effect of Transition and Rare Earth Metals Doping on the Structural, Electronic, Optical, and Elastic Constant Properties of BiO_2. IUB.

148) Shumaila Saleem (2024): Synthesis and Characterization of ZnS Based Multifunctional Nanomaterials. IUB.

149) Aman Rafique (9th January 2024): Investigation of Physical Properties of Perovskites: A DFT Study. IUB.

150) Saira Kiran (March 2024): Reliability of Resistive Switching Material for RS Mechanism in RRAM Devices: DFT Study. IUB.

151) Iftikhar Alam (August 2021): Natural Radioactivity Concentrations and their Health Risk Assessment in Soil and Water Using Gamma Rays Spectroscopy in Bahawalpur, Pakistan. Institute of Physics, IUB.

152) Waqas Akhtar (August 2021): Diagnosing the Effects of Diabetes Mellitus on the Efficiency of Brain and Knee Using Doppler Ultrasound. Institute of Physics, IUB.

153) Farooq Aziz (February 2017): Role of Nanoparticles as Contrast Agent in Imaging and Treatment Techniques. Institute of Physics, IUB.

17.3.6 Dr Hasan Mehmood Khan

154) Muhammad Zahid: "Synthesis and Characterization of Transition Metal Ions Substituted M-Type Hexagonal Ferrites and Their Polymer Composites." IUB.

155) Muhammad Nadeem: "Effect of Divalent and Trivalent Cations on the Structural, Electrical and Magnetic Properties of Y-Type Hexaferrites." IUB.

156) Tahira Akhtar: "Synthesis and Characterization of Rare Earth Substituted W-Type Hexagonal Ferrites." IUB.

157) Muhammad Innam-ur-Rehman: "Carbon Quantum Dots and Spinel Ferrites Composites for Photocatalytic Applications." IUB.

158) Rashida Anjum: "Effect of Divalent and Trivalent Cations on W-Type Hexagonal Ferrites." IUB.

159) Misbah Malik: "Fabrication of g-C_3N_4 Mixed Metal Oxide Nanocomposites as an Efficient Photocatalyst." IUB.

160) Ambreen Aleem: "Effects of Transition Metal Ions Substitution on Sr-Based R-Type Hexaferrites Synthesized via Sol-Gel Technique." IUB.

161) Ashfaq Ahmed: "Synthesis and Characterization of Rare Earth Substituted Copper–Zinc Spinel Ferrites." IUB.

162) Muhammad Nadeem Waheed: "Synthesis and Characterization of Trivalent and Divalent Substituted M-Type Calcium Hexaferrites with Sol-Gel Method." IUB.

163) Fawad-ul-Hasan: "Effect of Trivalent Ions on Calcium Substituted M-Type Hexaferrites." IUB.

17.3.7 Dr. Faisal Iqbal

164) Faisal Mukhtar (Ph.D Completed): IOP, IUB.

165) Muhammad Naveed ur Rehman (Ph.D Completed): IOP, IUB.

166) Tauseef Munawar (Ph.D Completed): IOP, IUB.

167) Muhammad Shahid Nadeem (Ph.D Completed): IOP, IUB.

168) Muhammad Riaz (Ph.D Completed): IOP, IUB.

169) Inam Karim (Ph.D Completed): IOP, IUB.

170) Abdul Waheed Rabbani (Ph.D Completed): IOP, IUB.

171) Ambreen Bashir (Ph.D Completed): IOP, IUB.

172) Saman Fatima (Ph.D Completed): IOP, IUB.

173) Muhammad Sufyan Naeem (Thesis Submitted): IOP, IUB.

17.3.8 Dr. Muhammad Hashim

174) Syed Muti Ul Manan Shah (2021–2025): Synthesis of Metal Sulphide/MXene Nano-hybrid Electrode Materials for Electrochemical and High Performance Supercapacitor Applications. Institute of Physics, IUB.

175) Muzamil Ahmed Warsi (2021–2025): Effect of La^{3+} Ion Substitution on Structural, Optical, Electrical, Dielectric and Magnetic Properties of Soft Ferrites. Institute of Physics, IUB.

176) Wazir Ali (2021–2025, Thesis Submitted): Diagnosis and Differentiation of Brain Abnormal Masses from Magnetic Resonance Images Using Machine Vision Approach. Institute of Physics, IUB.

17.3.9 Dr. Muhammad Irfan

177) Sarfraz Ahmad (2021–2025): Engineering in Layered Electrode Materials to Enhance the Performance of Energy Storage Devices Using the DFT Approach. Institute of Physics, IUB.

17.3.10 Dr. Muhammad Arshad Javid

178) Co-supervision: Muhammad Shahad Khan (Ph.D): Fabrication and Characterization of Magnetic Nanoparticles for Biomedical Applications as MRI Contrast Agents. UET Taxila. Supervisor: Dr. Arshad Rahi.

179) Co-supervision: Usman Mustafa (Ph.D, 2024): Novel Approach for Stress Recognition Using EEG Signal Processing. Co-supervised. UET Taxila. Supervisor: Dr. Arshad Rahi.

17.3.11 Dr. Hafiz Naeem-ur-Rehman Khan

180) Allah Dittah Khalid (2022, Ph.D.): Study of Reactive Oxygen Species Using Multicoated Nanoparticles, UoL Lahore.

181) Jameel Ahmad (2025, Ph.D.): Transition Metals Based Nanostructured Compounds for Their Energy Applications, IUB Bahawalpur.

17.3.12 Dr. Saba Saeed

182) Muhammad Junaid Khan (Completed, 2024): Chitosan-Based Nanoparticles for Multifaceted Applications. IUB.

183) Arooj Ali (Completed, 2023): Biological Evaluation of Silicon-Based Nanoparticles. IUB.

17.3.13 Dr. Gul Naz

184) (Completed): Synthesis and Characterization of Metal/Vanadium Oxide Nanocomposites for Enhanced Electrocatalytic Activities. IUB.

185) (Thesis Submitted): Synthesis of Transition Metals-doped Vanadium Oxide and Graphene Nanocomposites for Efficient Energy Applications. IUB.

186) (Thesis Submitted): Synthesis and Characterization of Coinage Metals Incorporated Tin Oxide Nanomaterials. IUB.

187) (Thesis Submitted): Green Synthesis of Carbon-integrated Transition Metal-based Nanocomposites for Environmental Remediation. IUB.

17.3.14 Dr. Muhammad Saleem

188) Amir Shahzad (F21BPHYS4M0101): Synthesis of Two-Dimensional (2D) Nanomaterials and Their Electrochemical Energy Storage Properties for Supercapacitors. Completed. IUB.

189) Omer Munir (F21BPHYS4M01014): Metal Organic Framework (MOF) Derived Nanomaterials for Energy Applications. Completed. IUB.

190) Syed Mohsin bin Arif (F21BPHYS4M01012): Synthesis and Electrochemical Characterization of Transition Metal Dichalcogenides (TMDCs) for Energy Devices. Thesis Submitted. IUB.

17.3.15 Dr. Noor Ul Ain

191) Muhammad Junaid: Bandgap Tailoring of Multilayer Metal Oxides Thin Films for Water Splitting Application and Green Energy Production. Defense: 01 July 2024. IUB.

192) Sadaf Fatima (2022–2025): Tailoring the Physicochemical and Magnetic Properties of Spinel Ferrites Composites for Environmental Applications. Defense: 22 December 2025. IUB.

17.3.16 Dr. Maria Atiq

193) Nyla Saeed (Session 2021–2024, Ph.D Student, Supervised). IOP, IUB.

17.4 PhD Theses: Department of Physics: Rahim Yar Khan Campus

17.4.1 Dr. Muhammad Isa Khan

194) Aliza Zahoor (18026110-005): Structural, Electronic and Optical Properties of Alkaline Earth Metal Doped $LaAlO_3$ Perovskite. Defense: 02-08-2024. IUB.

17.5 PhD Theses: Department of Mathematics: Rahim Yar Khan Campus

17.5.1 Dr. Shahbaz Ali

195) Co-supervisor: Muhammad Shazib Hameed (Fall 2020–2023, Ph.D): Numerous Characterizations on (α, β, γ)-Single Valued Neutrosophic Algebraic Structures. KFUEIT.

196) Co-supervisor: Muhammad Usman Ghani (Fall 2021–2024, Ph.D): Characterization of Chemical Networks Entropies by Topological Indices. KFUEIT.

17.5.2 Dr. Shehraz Akhtar

197) Co-supervisor: Shafqat Ali, The Flow Between Porous and Semi-Porous Channels. IUB.

Chapter 18

MPhil/MS Theses Supervised in the FPMS

18.1 MPhil/MS Theses: Department of Geography and Geoinformatics

18.1.1 Prof. Dr. Sher Muhammad Malik

1) Abdul Ghafar: Causes and Consequences of Orchard's Deterioration: A Case Study of Tehsil Fort Abbas, District Bahawal Nagar.

2) Rahim Bakhash: Safety Measures in Sugar Industry: A Case Study of Dera Ghazi Division.

3) Muhammad Usman Khan: Spatial Pattern of Residential Land Values in Bahawalpur City.

4) Malik Abuhala: Archaeological Sites and Tourism Potential in Southern Punjab: A Study of Cholistan Desert, Bahawalpur.

5) Shamsher Haider: Impact of Population Growth, Technology, and Hazards on Natural Resources of Cholistan Desert, Bahawalpur.

6) Tazahar Ali: Impact of Population Growth, Technology, and Disaster on Transformation of Livelihood Pattern in Cholistan Desert.

7) Nadia Shabbir: Role of Women in Household Economy: A Case Study of Basti Nazir Abad, Bahawalpur.

8) Tasleem Akbar: Sustainability of Natural Resources: A Case Study of Ahmadpur East.

9) Shumaila Anjum: Day-to-Day Life of Cholistani Women: A Case Study of Selected Villages in Cholistan Desert, Bahawalpur.

10) Salman Mahmood: Problems and Prospects of Livestock in Cholistan Desert.

11) Muhammad Ajmair: Impacts of Floods on Socio-Economic Conditions in Riverine Areas of District Bahawalpur.

12) Ghulam Mustafa: Wheat Crop Mapping and Yield Estimation by Using Remote Sensing and GIS Techniques.

13) Syeda Nuzhat Gillani: Problem of Working Women: A Case Study of Residential Area, Chashma Colony, Mianwali.

14) Amama Masud: Climate Change and Drought Risk Assessment in Southern Punjab: A Case Study of Cholistan Desert.

15) Summan Rehman: Beggary and Its Impact on Society: A Case Study of Muzaffargarh City.

16) Shoaib Akhtar: Water Quality and Its Impacts on Human Health: A Case Study of Lodhran City.

17) Muhammad Salahuddin: Sustainable Irrigation Water Management: A Case Study of 1-R Mithra Minor, Tehsil

Yazman.

18) Muhammad Mujahid Abbas: Underground Water Quality and Its Impact on Human Health in Hasilpur City.

19) Muhammad Atif Nazeer: Spatial Pattern of Road Accidents in Bahawalpur City.

20) Khalid Mehmood: Traditions and Culture of Cholistan: A Case Study of Cholistan.

21) Naseer Ahmad: Analysis of Enrolment and Dropout in Schools: A Case Study of District Bahawalpur.

22) Muhammad Hamza Kamal: Trends Analysis of Major Crops Productivity: A Case Study of District Bahawalpur.

23) Qurat ul Ain: Spatio-Temporal Analysis of Urban Growth and Expansion of Multan City During 1998–2020.

24) Shahab Ahmad: Trend Analysis of Crime Pattern: A Case Study of Hasilpur.

25) Sohaib Ahmad: Contribution of Young Children in the Household Economy: A Case Study of Auto Workshop, Burewala.

26) Abida Kouser: Transport Problems of Female Teachers and Suggesting Some Viable Solutions: A Case Study of Chowk Azam City.

27) Muhammad Zeeshan: Drinking Water Scarcity Challenges and Sustainable Management: A Case Study of Cholistan Desert, Pakistan.

28) Amna Riaz: Geospatial Assessment and Monitoring of Urban Expansion: A Case Study of Multan, Pakistan.

29) Muhammad Shahzad Pervaiz: Flood Damage Assessment of 2022 and Its Impact on Socio-Economic Conditions of the Inhabitants of Tehsil Alipur, Pakistan.

30) Nida Zafar: Demographic and Socio-Economic Profile of Child Labour: A Case Study of Tehsil Lodhran.

31) Muhammad Irshad: Drinking Water Quality in Public Sector Schools: A Case Study of Tehsil Jalalpur Pirwala, Multan.

32) Rabbia Sami: Demographic and Socio-Economic Profile of Street Hawkers: A Case Study of Walayat Abad, Multan, Punjab, Pakistan.

33) Nouman Majeed: Impact of Climate Change on Agriculture: A Micro-Level Study of Cash Crops, Bahawalpur, Pakistan.

34) Naveed Anjum: Impact of Technology on Socio-Economic Conditions of Agro-Pastoralists: A Case Study of Cholistan, Pakistan.

35) Laiba Sagheer: Relationship Between Poverty and Crime: Geospatial Analysis of Bahawalnagar City.

36) Amna Imtiaz: Socio-Economic Issues of Beggary: A Case Study of Bahawalpur District, Pakistan.

37) Farrukh Ahmad: Geospatial Assessment of Flood Destruction 2022: A Case Study of District Muzaffargarh.

18.1.2 Dr. Zahir Ahmad

38) Farhana Altaf (2021–2023). MPhil Student: Impact of Climate Change on the Cryosphere: A Geospatial Assessment of Glaciers of the Eastern Hindu Kush, Chitral, Pakistan.

39) Andaleeb Mushtaq (2021–2023). MPhil Student: Geospatial Assessment and Monitoring of Deforestation in the Hindu Kush: A Study of District Swat, Pakistan (1980–2022).

40) Irshad Bibi (2022–2024). MPhil Student: Geospatial Assessment and Monitoring of Flood Hazard: The Case of

Tehsil Jatoi, District Muzaffargarh, Pakistan.

41) Mehwish Ghafar (2022–2024). MPhil Student: Implication of Climate Change on Agriculture in District Muzaffargarh, Pakistan.

42) Ghulam Rabbani (2022–2025). MPhil Student: Impact of Population Growth on Poverty: A Geostatistical Analysis of Poverty in District Multan, Pakistan.

43) Mohsin Abbas (2022–2025). MPhil Student: Implication of Climate Change on Agriculture in District Bahawalpur, Pakistan.

44) Muhammad Bilal (2023–2025). MPhil Student: Geospatial Mapping and Analysis of Waterlogging and Salinity: Pathways and Implications for Sustainable Agriculture in District Kot Addu, Pakistan.

45) Saima Khanum (2023–2025). MPhil Student: A Geospatial Perspective of Urban Expansion and Its Impact on Natural Environment of Bahawalpur City, Pakistan.

18.2 MPhil/MS Theses: Department of Mathematics: Baghdad-ul-Jadeed Campus

18.2.1 Prof. Dr. Ghulam Mustafa

46) Hina Iqbal Muhammad Iqbal, Title: A CODAS-Based Decision-Making Approach Using Decomposed Pythagorean Fuzzy Sets for Healthcare Applications, Session: Fall 2024, 19-05-2026.

47) Ifra Fatima, Title: Optimizing Urban Waste Management in Lagos, Nigeria: A Novel Multi-Attribute Decision-Making Approach Using Complex Interval-Valued Linear Diophantine Fuzzy Aczel-Alsina Aggregation Operators, Session: Fall 2023–2025, 08-12-2025.

48) Umme Habiba, Title: Evaluating the Rowlatt Act's Impact on Colonial India: A Multi-Attribute Decision-Making Approach Using Aczel-Alsina t-Norm Based Complex Linear Diophantine Fuzzy Aggregation Operators, Session: Fall 2023–2025, 08-12-2025.

49) Memona Habib, Title: A Novel Interval-Valued q-Rung Orthopair Fuzzy Schweizer-Sklar Power Aggregation Approach for Media Strategy Selection in the Context of the Israel-Palestine Conflict, Session: Fall 2023–2025, 08-12-2025.

50) Rehana Jabeen, Title: Assessing the Sectoral Vulnerability of the Israel-Palestine Conflict Using a Bipolar Complex Fuzzy-Based Hybrid Multi-Attribute Decision-Making Framework, Session: Fall 2023–2025, 08-12-2025.

51) Insa Basharat, Title: Complex Linear Diophantine Fuzzy Sets and Their Applications in Project Selection for a Business Venture, Session: 2023–2025, 25-04-2025.

52) Sadia Javed, Title: The Complex Linear Diophantine Fuzzy Averaging and Ordered Operators and Their Applications in Real-Life Scenarios, Session: 2023–2025, 25-04-2025.

53) Muhammad Raziq, Title: Edge F-Index for Both Fermatean and T-Spherical Fuzzy Graphs, Session: 2023–2025, 25-04-2025.

54) Nadia Kainat, Title: The Complex Linear Diophantine Fuzzy Hybrid Aggregation Operators and Their Applications in Multi-Attribute Decision-Making Problems, Session: 2023–2025, 25-04-2025.

55) Amna Aziz, Title: The Complex Linear Diophantine Fuzzy Geometric and Ordered Operators and Their Applications in Decision-Making Problems, Session: 2023–2025, 25-04-2025.

56) Muhammad Usman Ibraheem, Title: Mathematical Modeling and Control of Ebola Virus by Combined Measures

of Early Identification and Vaccination, Session: 2023–2025, 25-04-2025.

57) Husnain Raza, Title: Properties and Applications of Emad-Sara Transform via Dualities Relations, Session: Fall 2022–2024, 13-12-2024.

58) Adnan Rustam, Title: A Collocation Technique for Fourth Order Boundary Value Problems Using Quintic B-Spline, Session: Fall 2022–2024, 13-12-2024.

59) Muhammad Shoaib, Title: Construction and Geometric Properties of 4-Point Quaternary Approximating Subdivision Scheme, Session: Fall 2022–2024, 13-12-2024.

60) Ayesha Kanwal, Title: Shape Preservation with 9th Degree Fractional Order Splines, Session: Fall 2022–2024, 13-12-2024.

61) Qurat ul Ain, Title: Solution of Fractional Burger's Equations by Jafari Transform, Session: Fall 2022–2024, 13-12-2024.

62) Muhammad Shahzad, Title: Unification of Uniform and Non-Uniform Approximating Subdivision Schemes and Their Applications, Session: Spring 2022–2024, 04-05-2024.

63) Aqsa Ayub, Title: A 3-Point Non-Uniform Subdivision Scheme for Enhanced Smoothness, Session: Spring 2022–2024, 04-05-2024.

64) Umaima Akmal, Title: A 5-Point Non-Uniform Subdivision Scheme for Enhanced Smoothness, Session: Spring 2022–2024, 04-05-2024.

65) Mehwish Atiq, Title: The Shape-Preserving Technique for Fractional Order Splines, Session: Spring 2022–2024, 04-05-2024.

66) Sana Iqbal, Title: A New Parametric Polynomial for the Generation of a Family of Ternary Subdivision Schemes, Session: Spring 2022–2024, 04-05-2024.

67) Adnan Majeed, Title: A New Generalized Bessel-Maitland Function and Its Properties, Session: Spring 2022–2024, 04-05-2024.

68) Tayba Jabbar, Title: Generalized Burgers-Huxley Equation and Its Numerical Solution, Session: Spring 2022–2024, 04-05-2024.

69) Saira Mustafa, Title: Cubic B-Spline Method for the Solution of Burgers-Fisher Equations, Session: Spring 2022–2024, 04-05-2024.

70) Mehwish Asif, Title: A Numerical Solution of Fokker-Planck Equation Using Cubic B-Spline Basis Functions, Session: Spring 2022–2024, 04-05-2024.

71) Muhammad Saadat, Title: Utilizing the Cubic B-Spline to Estimate the Solutions of Second-Order Boundary Value Problems, Session: Spring 2022–2024, 04-05-2024.

72) Shaista Perveen, Title: Numerical Solution of Nonlinear Volterra Integral Equations Using Operational Matrices, Session: 2020–2022, 03-06-2023.

73) Robina Khaleeq ur Rehman, Title: Numerical Solution of Nonlinear Volterra Integro-Differential Equations Using Operational Matrices, Session: 2020–2022, 03-06-2023.

74) Muhammad Saqib Ali, Title: Error Analysis of Doo-Sabin Subdivision Scheme, Session: 2020–2022, 03-06-2023.

75) Muhammad Adeel Shahzad, Title: A Family of Non-Stationary Parametric Subdivision Schemes and Its Applications, Session: 2020–2022, 03-06-2023.

76) Rimsha Saleem, Title: Subdivision Depth Computation of Li's Subdivision Surface, Session: 2020–2022, 03-06-2023.

77) Hamid Wasim, Title: Geometric Properties of a New Family of Ternary Subdivision Schemes, Session: 2020–2022, 03-06-2023.

78) Muhammad Javed Hassan, Title: Operational Matrices-Based Solution for the System of Fifth Order Differential Equations, Session: 2020–2022, 03-06-2023.

79) Muhammad Imran, Title: Convexity Preservation of a Family of Ternary Subdivision Schemes, Session: 2020–2022, 03-06-2023.

80) Muhammad Fiaz Ahmad, Title: A New Family of Quaternary Parametric Subdivision Schemes and Its Analysis, Session: 2020–2022, 03-06-2023.

81) Kokab Khan, Thesis: A New 4-Point Binary Parametric Approximating Subdivision Scheme and Its Analysis, 06-06-2022.

82) Memoona Saman, Thesis: Construction and Analysis of 7-Point Quaternary Scheme for Curve Modeling, 06-06-2022.

83) Alveena Maryam, Thesis: A 7-Point Binary Scheme and Its Control on Limit Shape, 06-06-2022.

84) Hina Rashid, Thesis: Curve Modeling Using 4-Point Ternary Subdivision Scheme, 06-06-2022.

85) Kanwal Naz, Thesis: A 6-Point Ternary Scheme and Its Complete Analysis, 06-06-2022.

86) Hina Sahar, Thesis: A Laurent Polynomial-Based 4-Point Quaternary Parametric Scheme, 06-06-2022.

87) Asia Mushtaq, Thesis: Designing of Curves Using 8-Point Ternary Scheme, 06-06-2022.

88) Hira Fatima, Thesis: A New 3-Point Parametric B-Spline Subdivision Scheme and Its Analysis, 05-05-2021.

89) Saleha Zahoor, Thesis: A 4-Point Parametric B-Spline Subdivision Scheme Originated from Pascal Triangle, 05-05-2021.

90) Shafaq Chouhan, Thesis: A Parametric Family of Quaternary and Quinary Refinement Schemes Originated from Pascal Triangle, 06-11-2020.

91) Irum Tayyaba, Thesis: A Parametric Family of Binary and Ternary Refinement Schemes Originated from Pascal Triangle, 06-11-2020.

92) Muhammad Wakeel, Thesis: A Family of Refinement Schemes Originated from Legendre Polynomials of Odd Degrees, 06-11-2020.

93) Hafiz Muhammad Farooq, Thesis: A Family of Refinement Schemes Originated from Legendre Polynomials of Even Degrees, 06-11-2020.

94) Sadaf Younas, Thesis: Characteristics of Few Schemes of a Quadratic B-Spline Family, 17-06-2020.

95) Sheeza Arif, Thesis: Exploration of Features of N-ary Cubic B-Spline Schemes, 17-06-2020.

96) Muhammad Shoaib, Thesis: Analysis of Some Members of N-ary Quadratic B-Spline Schemes, 17-06-2020.

97) Anum Mustafa, Thesis: The N-ary Quadratic B-Spline Subdivision Schemes, 03-12-2019.

98) Noreen Fatima, Thesis: The N-ary Cubic B-Spline Subdivision Schemes, 03-12-2019.

99) Alia Jabben, Thesis: The N-ary Quartic B-Spline Subdivision Schemes, 03-12-2019.

100) Mariam Nisar, Thesis: The N-ary Tensor Product Quadratic and Cubic B-Spline Subdivision Schemes, 03-12-2019.

101) M. Waqas Farooq, Thesis: A Family of Ternary B-Spline Subdivision Schemes, 02-04-2019.

102) Huma Ikhlaq, Thesis: A Family of Quaternary B-Spline Subdivision Schemes, 02-04-2019.

103) Komal Afroz, Thesis: A Family of Quinary B-Spline Subdivision Schemes, 02-04-2019.

104) Nadia Kanwal, Thesis: A Family of Senary B-Spline Subdivision Schemes, 02-04-2019.

105) Rohma Waqar, Thesis: A Family of Septenary B-Spline Subdivision Schemes, 02-04-2019.

106) Humaira Mustanira Tariq, Thesis: A Matrix Representation of Bézier, Uniform B-Spline and Subdivision Curves Technology, 19-03-2018.

107) Ayesha Mahmood, Thesis: Analysis of 3-Point Combined Subdivision Scheme with Two Shape Control Parameters, 19-03-2018.

108) Ayesha Aleen Raja, Thesis: A 6-Point Approximating Subdivision Scheme with Shape Control Parameter, 19-03-2018.

109) Beenish Jamil, Thesis: A 5-Point Shape Control Combined Subdivision Scheme with Two Parameters, 19-03-2018.

110) Ghulam Ishaq, Thesis: A Relaxed 4-Point Combined Subdivision Scheme with Shape Control Parameter, 19-03-2018.

111) Syeda Seenam Fatima, Thesis: Analysis of 5-Point Approximating Subdivision Scheme with Shape Control Parameter, 19-03-2018.

112) Mishal Fatima, Thesis: A Shape-Controlled 4-Point Approximating Subdivision Scheme and Its Properties, 19-03-2018.

113) Zubair Ahmad, Thesis: A New Method for Solving Class of Singularly Perturbed Boundary Value Problems of Fourth Order, 13-10-2017.

114) Kaweeta Anjum, Thesis: An Algorithm Based on Binary Subdivision Scheme for Nonlinear Second Order Singularly Perturbed Boundary Value Problems, 08-05-2017.

115) Lubna Khan, Thesis: A Subdivision-Based Collocation Algorithm for Third Order Singularly Perturbed Boundary Value Problems, 08-05-2017.

116) Abid Hussain, Thesis: A Collocation Algorithm Based on Binary Subdivision Scheme for Linear Second Order Singularly Perturbed Boundary Value Problems, 08-05-2017.

117) Rehana Kousar, Thesis: The –Point Scheme Based on Bivariate Quartic Polynomial, 29-08-2016.

118) Amna Sadiq, Thesis: The –Point Scheme Based on Bivariate Cubic Polynomial, 29-08-2016.

119) Sidra Nosheen, Thesis: The –Point Scheme Based on Bivariate Cubic Polynomial, 15-04-2016.

120) Touseef-ur-Rehman, Thesis: The –Point Scheme Based on Bivariate Quartic Polynomial, 15-04-2016.

121) Muhammad Iqbal, Thesis: The –Point Scheme Based on Bivariate Quintic Polynomial, 15-04-2016.

122) Javaria Iqbal, Thesis: Analysis and Characteristics of H-Schemes, 18-05-2015.

123) Noreen Saba, Thesis: A Family of Binary Primal and Dual Subdivision Schemes, 18-05-2015.

124) Rida Zahra, Thesis: Generation and Analysis of a Family of Approximating Subdivision Schemes, 18-05-2015.

125) Muhammad Waqas, Thesis: A New Class of Univariate Binary Subdivision Schemes, 18-05-2015.

126) Husna Aslam Khan, Thesis: A Five-Point Variant on Lane-Riesenfeld Algorithm, 18-05-2015.

127) Afshan Hazoor Randhawa, Thesis: Complete Analysis of 3-Point Binary Subdivision Scheme, 26-05-2014.

128) Maryam Akbar, Thesis: Analysis of 4-Point Binary Subdivision Scheme and Its Properties, 04-08-2014.

129) Memoona Qureshi, Thesis: Complete Analysis of 4-Point Binary Subdivision Scheme, 04-08-2014.

130) Tamsela Irum, Thesis: Complete Analysis of 3-Point Ternary Subdivision Scheme, 04-08-2014.

131) Asim Khurshid, Thesis: Family of Odd-Point Ternary Approximating Subdivision Schemes, 10-07-2012.

132) Muhammad Kashif Rasool, Thesis: Family of Odd-Point Quinary Approximating Subdivision Schemes, 10-07-2012.

133) Muhammad Zahid, Thesis: Analysis of Binary Subdivision Schemes for Curve Design, Sponsored by Higher Education Commission (HEC), Pakistan, 02-05-2011.

134) Syeda Tehmina Ejaz, Thesis: Analysis of Ternary Subdivision Schemes for Curve Design, Sponsored by Higher Education Commission (HEC), Pakistan, 02-05-2011.

135) Azra Bano, Thesis: Analysis of Quaternary Subdivision Schemes for Curve Design, 02-05-2011.

136) Rabia Hameed, Thesis: Analysis of Tensor Product Binary Subdivision Schemes for Surface Design, 29-03-2011.

137) Tayyaba Saleem, Thesis: Analysis of Tensor Product Ternary Subdivision Schemes for Surface Design, 29-03-2011.

138) Madiha Sana, Thesis: Tensor Product Subdivision Surface, 29-06-2010.

139) Jayyada Irum, Thesis: A New 5-Point Ternary Interpolating Subdivision Scheme and Its Differentiability, Sponsored by Higher Education Commission (HEC), Pakistan, 08-02-2010.

140) Mehwish Bari, Thesis: Non-Stationary Subdivision Schemes Reproducing Conics, Sponsored by Higher Education Commission (HEC), Pakistan, 19-10-2009.

141) Abdul Ghaffar, Thesis: Some New Subdivision Schemes and Their Analysis, Sponsored by Higher Education Commission (HEC), Pakistan, 16-09-2009.

142) Pakeeza Ashraf, Thesis: A New 6-Point Ternary Interpolating Subdivision Scheme and Its Differentiability, Sponsored by Higher Education Commission (HEC), Pakistan, 16-09-2009.

143) Najma Abdul Rehman, Thesis: General Formulas for the Mask of (2b+4)-Point N-ary Subdivision Schemes, Sponsored by Higher Education Commission (HEC), Pakistan, 06-08-2009.

18.2.2 Prof. Dr. Hafiz Fukhar-ud-Din

144) M. Aqeel Ahmed Khan, M.Phil. 2009: Some Iterative Procedures for the Approximation of Fixed Points of Asymptotically Nonexpansive Maps.

145) Amna Kalsoom, M.Phil. 2009: Approximating Fixed Points of Certain Nonlinear Operators in Convex Metric Spaces.

146) Robina Bashir, M.Phil. 2009: Iterative Construction of Fixed Points of Certain Contractive Type Maps.

147) Muhammad Aftab Hussain, M.Phil. 2010: Iterative Constructions of Fixed Point of Generalized Asymptotically Nonexpansive Maps in Banach Spaces.

148) Muhammad Hammadullaha, M.Phil. 2011: Convergence of Iterates of Asymptotically Nonexpansive Maps in CAT(0) Spaces.

149) Fiaz Hussain, M.Phil. 2011: Convergence Analysis of Suzuki Generalized Nonexpansive Maps in CAT(0) Spaces.

150) Muhammad Ubaid-ul-Rehmman, M.Phil. 2011: Approximation of Common Fixed Points of Nonlinear Maps in Hyperbolic Spaces.

151) Muhammad Umer Hayat, M.Phil. 2012: Fixed Point Results for Nonlinear Maps in Cone-Type Metric Spaces.

18.2.3 Prof. Dr. Zaheer Ahmad

152) Abid Majeed, M.Phil. (2011, IIUI): Flow and Heat Transfer Due to a Stretching Cylinder in a Porous Medium.

153) Noor Muhammad, M.Phil. (2011, IIUI): MHD Stagnation Point Flow Over an Unsteady Stretching Surface.

154) Sami Ullah Khan, M.Phil. (2011, IIUI): MHD Flow and Heat Transfer Over a Porous Oscillating Stretching Surface in a Viscoelastic Fluid.

155) Jafar Hasnain, M.Phil. (2011, Riphah International University Islamabad): Effects of Slip on MHD Flow of a Dusty Fluid Over a Stretching Sheet Through Porous Space.

156) Hafeez ur Rahman, M.Phil. (2011, Riphah International University Islamabad): Heat Transfer Analysis on the MHD Falkner-Skan Flow with Uniform Suction/Injection.

157) Muhammad Naveed, M.Phil. (2011, Riphah International University Islamabad): Heat Transfer Analysis of a Stretching Flow Over a Curved Surface with Magnetic Field.

158) Mariam Sheikh, M.Phil. (2011, Riphah International University Islamabad): Mass Transfer in MHD Flow for Two Viscoelastic Fluids Over a Shrinking Sheet in Porous Medium.

159) Sajid Shah, M.Phil. (2011, Riphah International University Islamabad): Series Solution of MHD Flow Over an Unsteady Stretching Permeable Sheet with Thermal Radiation.

160) Abdul Haleem Hamid, M.Phil. (2012, Riphah International University Islamabad): Applications of Spectral Homotopy Analysis Method (SHAM) for Nonlinear BVPs.

161) Bilal Ahmad, M.Phil. (2012, Riphah International University Islamabad): Mass Transfer on MHD Flow of a Second Grade Fluid in a Porous Channel.

162) Ismat Zahra, M.Phil. (2012, Riphah International University Islamabad): MHD Falkner-Skan Flow Due to a Porous Stretching Surface with Partial Slip.

163) Zohra Yousaf, M.Phil. (2012, Riphah International University Islamabad): Effect of Radiation and Slip on the Micropolar Fluid Through a Porous Medium.

164) Aamina Bint-ul-Huda, M.Phil. (2012, Riphah International University Islamabad): Flow of a Maxwell Fluid with Variable Suction Through Porous Space.

165) Nosheen Hameed, M.Phil. (2012, Riphah International University Islamabad): MHD Falkner-Skan Flow Over a Porous Stretching Surface with Convective Boundary Conditions.

166) Alia Hanif, M.Phil. (2012, Riphah International University Islamabad): Unsteady Oscillatory Flow with Heat and Mass Transfer in the Presence of Radiation.

167) Naqib Ullah, M.Phil. (2013, Riphah International University Islamabad): MHD Flow of a Maxwell Fluid Over a Porous Stretching Sheet with Variable Surface Heat Flux.

168) Muhammad Ismail, M.Phil. (2013, Riphah International University Islamabad): MHD Stagnation Point Flow Over a Porous Vertical Stretching Sheet with Chemically Reactive Species.

169) Muhammad Zaheer, M.Phil. (2013, IIUI): MHD Oscillatory Flow in a Composite Porous Medium Channel.

170) Nouman Ejaz, M.Phil. (2013, IIUI): Fluctuating Flow of a MHD Maxwell Fluid with Time-Dependent Suction.

171) Rubina Anwar, M.Phil. (2014, IUB): Chemically Reactive Thin Film Flow Over an Unsteady Stretching Sheet with Thermal Radiation.

172) Tahmina Masood, M.Phil. (2014, IUB): Dual Solutions of MHD Flow Over a Stretching/Shrinking Sheet with Generalized Slip Condition.

173) Fatima Taiba Gull, M.Phil. (2014, IUB): Slip Stagnation Point Flow of an Oldroyd-B Fluid.

174) Sadia Rasool, M.Phil. (2014, IUB): Slip Flow Due to an Unsteady Stretching/Shrinking Cylinder with Heat Transfer.

175) Nimra Sahibzadi, M.Phil. (2014, IUB): Hydromagnetic Fluctuating Flow of a Maxwell Fluid with Variable Suction in a Porous Medium.

176) Sobia Saleem, M.Phil. (2014, IUB): Series Solution for MHD Flow in a Semi-Porous Channel Through Porous Space.

177) Noshaba Shakir, M.Phil. (2015, IUB): Effects of Thermal Radiation and Slip on Stagnation Point Flow of Micropolar Fluid with Heat Source/Sink.

178) Raheela Zahid, M.Phil. (2015, IUB): Heat Transfer Analysis Due to a Stretching/Shrinking Sheet: Exact Analytical Solution.

179) Zainab Arshad, M.Phil. (2015, IUB): Numerical Study of Dual Solutions for Diffusion of Chemically Reactive Species with Generalized Slip Condition.

180) Arshad Ali, M.Phil. (2015, IUB): Numerical Study for Flow Over a Curved Stretching Surface.

181) Ayaz Mahmood, M.Phil. (2015, IUB): Two-Phase Flow Over a Stretching Sheet with Heat Transfer.

182) Muhammad Naeem, M.Phil. (2015, IUB): Applications of Parameterized Perturbation Method in Fluid Mechanics.

183) Ruqia Perveen, M.Phil. (2015, NCBA&E Bahawalpur Campus): Effects of Thermal Radiation and Slip on Flow Due to a Contracting Cylinder in a Nanofluid Using Buongiorno's Model.

184) Qaisar Abbas, M.Phil. (2015, Riphah International University Islamabad): Steady Flow Across an Exponentially Stretching Surface: An Analytical Study.

185) Meriyem Hussain, M.Phil. (2016, IUB): Study of Natural Convection Flow in a Vertical Microchannel.

186) Naila Naeem, M.Phil. (2016, IUB): Thermodynamic Optimization of Nanofluid with Thermal Radiation and Slip Condition.

187) Muhammad Imran, M.Phil. (2016, IUB): Applications of Semi-Numerical Techniques to Solve Non-Linear Flow Equations.

188) Tahira Rahim, M.Phil. (2017, IUB): Two-Phase Flows in an Inclined Channel with Heat Transfer.

189) Muhammad Imran, M.Phil. (2017, IUB): Flow of Carreau Fluid in a Curved Channel with Convective Heat Transfer.

190) Tayyaba Nazar, M.Phil. (2017, IUB): Analysis of Entropy Generation in a Nanofluid with Slip Condition.

191) Intizar Mehdi, M.Phil. (2017, IUB): Exact Solution of Natural Convection Flow in a Microchannel.

192) Babar Iftikhar, M.Phil. (2018, IUB): Blood Flow of Herschel-Bulkley Fluid in an Inclined Catheterized Artery: Steady Slip Flow.

193) Samra Baig, M.Phil. (2018, IUB): MHD Blood Flow Through a Porous Medium Under Atherosclerosis Conditions.

194) Hafiza Iqra Altaf, M.Phil. (2018, IUB): Rotating Flow of Two-Immiscible Fluids in an Inclined Channel.

195) Muhammad Yousaf Rafiq, M.Phil. (2018, IUB): Flow of an Eyring-Powell Fluid with Cattaneo-Christov Heat Conduction Model.

196) Hamna Ayaz, M.Phil. (2018, IUB): Generalized Slip Flow of Tiwari-Das Nanofluid Model.

197) Rizwan Tabassam, M.Phil. (2018, IUB): Heat Transfer Phenomena Past a Rotating Disc with Generalized Slip Condition.

198) Aqeel-u-Rehman, M.Phil. (2018, IUB): Numerical Investigation of Nanofluid Containing Various Shapes of Nanoparticles.

199) Syed Ali Raza, M.Phil. (2018, IUB): Flow of Non-Newtonian Fluid in an Axisymmetric Porous Channel.

200) Kiran Shahzad, M.Phil. (2019, IUB): Closed-Form Solution of MHD Nanofluid Over a Stretching/Shrinking Sheet with Transpiration.

201) Faheem Majeed, M.Phil. (2019, IUB): Heat and Mass Transfer Phenomena Over a Vertical Plate with Variable Suction.

202) Yasir Abbas, M.Phil. (2019, IUB): Mass and Energy Transfer in Channel Flow of Nanofluid with Different Nanoparticles.

203) Sami Ullah, M.Phil. (2019, IUB): Oscillatory Flow of Viscous Fluid in a Channel with Porous Walls: Exact Solution.

204) Takveer Kousar, M.Phil. (2019, AIOU Islamabad): Effects of Thermal Radiation and Induced Magnetic Field on Flow Past a Stretching/Shrinking Sheet.

205) Iram Riaz, M.Phil. (2019, AIOU Islamabad): Influence of Single and Multi-Walled Carbon Nanotubes Over a Stretching Rotating Disk.

206) Ayesha Arif, M.Phil. (2019, AIOU Islamabad): Stability of Dual Solutions in MHD Stagnation-Point Flow Over a Shrinking Sheet.

207) Sehrish Ali, M.Phil. (2019, AIOU Islamabad): MHD Flow and Heat Transfer of Ferro-Fluid Between Contracting and Rotating Disks.

208) Iqra Javed, M.Phil. (2019, IUB): Study of Eyring-Powell Fluid Model in a Pipe with Variable Viscosity.

209) Nimra Naeem, M.Phil. (2019, IUB): Mechanism of Heat Transfer in Study of Generalized Vortex Flow of Nanofluid.

210) Sana Goher, M.Phil. (2019, IUB): Biomechanical Analysis of Body Acceleration Under Atherosclerosis Condi-

tions.

211) Firdous Kousar, M.Phil. (2019, IUB): Analytical Study of Viscous Fluid in a Deformable Channel with Porous Walls.

212) Mariam Shahzad, M.Phil. (2019, IUB): Comparative Study of Blood Flow in a Bifurcated Stenosed Artery: Non-Newtonian Fluid.

213) Hubba Umer, M.Phil. (2020, IUB): Chemically Reactive Flow in a Porous Channel with Variable Width.

214) Alia Amna, M.Phil. (2020, IUB): Non-Uniform Distribution of Nanoparticles in MHD Flow Between Micro-Annular Tubes with Constant Wall Temperature.

215) Ayesha Shakeel, M.Phil. (2020, IUB): Analysis of Endoscope in Peristaltic Transport of a Couple Stress Fluid with Slip Condition: Application to Biomedicine.

216) Attia Waheed, M.Phil. (2020, IUB): Comparative Analysis of Nanoparticles in a Channel Partially Filled with a Porous Material: Using Two Different Interface Models.

217) Maham Mujahid, M.Phil. (2020, IUB): Study of Peristaltic Transport Phenomena in Viscous-Nanofluid Through Porous Channel with Thermal Radiation.

218) Umer Farooq, M.Phil. (2020, IUB): Time-Dependent Slip Flow of Casson Fluid with Heat and Mass Transfer Properties.

219) Khadija Iqbal, M.Phil. (2020, IUB): Oscillatory Convective Flow in a Channel Through Porous Medium with Velocity Slip and Temperature Jump.

220) Muahmmad Farhan Talib, M.Phil. (2022, IUB): Flow of Hyperbolic Tangent Fluid in a Tapered Channel with Sinusoidal Walls.

221) Muahmmad Saad, M.Phil. (2022, IUB): Oscillatory Convective Flow of Casson Fluid in a Vertical Channel with Slip Conditions.

222) Sania Irshad, M.Phil. (2022, IUB): Peristaltic Transport of Non-Linear Blood Analysis Using Williamson Fluid Model.

223) Hina Asghar, M.Phil. (2022, IUB): Slip Flow of Viscous Fluid in a Vertical Channel with Variable Liquid Properties.

224) Ayesha Naeem, M.Phil. (2022, IUB): Isothermal Calendering Process of Non-Newtonian Fluid Using Lubrication Theory.

225) Farwa Murtaza, M.Phil. (2022, IUB): Perturbative Analysis of Blade Coating Process of Non-Newtonian Fluid.

226) Saba Siddique, M.Phil. (2022, IUB): Flow of Thermally Radiative Sisko Fluid Using Lubrication Approximation Theory.

227) Sana Usman, M.Phil. (2023, IUB): Non-Isothermal Reverse Roll Coating Process of Non-Newtonian Fluid.

228) Allah Bakhsh, M.Phil. (2023, IUB): Oscillatory Flow of Non-Newtonian Dusty Fluid in a Vertical Channel.

229) Shahana Siddique, M.Phil. (2023, IUB): Impact of Nanoparticles in Revolving Bödewadt Flow Over a Planar Surface.

230) Rabia Mehboob, M.Phil. (2023, IUB): Flow of Trihybrid Nanofluid in a Curved Tube with Flexible Peristaltic Endoscope.

231) Sibgha Ihsan, M.Phil. (2023, IUB): Study of Existing Sheet Thickness of Non-Newtonian Fluid During Calendaring Process.

232) Samaria Ahsan, M.Phil. (2023, IUB): Biological Analysis of Viscous Fluid in a Tapered Microfluidic Vessel with Variable Viscosity.

233) Muhammad Ajmal, M.Phil. (2023, IUB): Periodic Motion of a Casson Fluid in an Irregular Channel.

234) Muhmmad Farhan Yaseen, M.Phil. (2023, IUB): Unsteady Flow of Viscous Fluid Past Silver Metallic Plates with Constant Suction.

235) Nargis Zawar, M.Phil. (2023, IUB): Two-Phase Dusty Flow of Viscous Fluid Between Deforming Isothermal Surfaces.

236) Muhammad Usman Qureshi, M.Phil. (2023, IUB): Convective Slip Flow of Casson Fluid with Time-Dependent Suction.

237) Sajjad Ahmad, M.Phil. (2024, IUB): Unsteady Flow of Electrically Conducting Nanoparticles Due to Variable Pressure Gradient.

238) Usama Rafi, M.Phil. (2024, IUB): Stability of Multiple Solutions for Trihybrid Nanofluid Over an Exponentially Shrinking Sheet.

239) Sibgha Iqbal, M.Phil. (2024, IUB): Thin Coating Layer of Hybrid Nanofluid During Forward Roll Coating Process.

240) Sonam Saeed, M.Phil. (2024, IUB): Thermally Radiative and Convective Flow of Nanoparticles Over a Vertical Flat Plate: A Stability Analysis.

241) Qaria Izhar, M.Phil. (2024, IUB): Oscillatory Flow of Second Grade Fluid in an Irregular Channel Using Modified Porous Medium.

242) Maria Javed, M.Phil. (2024, IUB): Numerical Computation of Blade Coating Process of Hydromagnetic Non-Newtonian Fluid.

243) Muhammad Rajjab, M.Phil. (2024, IUB): Comparative Study of Heat Transfer Properties in Nanofluid Through a Horizontal Channel.

244) Tamia Afzal, M.Phil. (2024, IUB): Peristaltic Flow of Casson Fluid Between Two Deforming Curved Tubes.

245) Arshia Tariq, M.Phil. (2024, IUB): Study of Ciliated Walls for Non-Newtonian Fluid Inside a Heated Channel.

246) Zainab Shameem, M.Phil. (2024, IUB): Analytical Solution of Transient Electro-Osmotic Flow of a Casson Fluid in a Rotating Micro-Channel.

247) Ghazala Zulfiqar, M.Phil. (2024, IUB): Analysis of Entropy Generation for Flow of Non-Newtonian Fluid Due to Cilia Motion.

248) Amna Gul, M.Phil. (2024, IUB): Time-Periodic Flow of Viscoelastic Fluid Using Modified Darcy's Law.

249) Muhammad Ramzan, M.Phil. (2024, IUB): Stagnation Point Flow of Pseudoplastic Fluid Along a Vertical Cylinder with Viscous Dissipation Effects.

250) Khadija Madni, M.Phil. (2024, IUB): Heat Transfer Characteristics in Wave Motion of Phan-Thien–Tanner Fluid Through Uniform Circular Tube.

251) Humaira Noor, M.Phil. (2024, IUB): Cilia Motion of Biorheological Couple Stress Fluid Through a Heated Channel.

252) Iqra Saman, M.Phil. (2024, IUB): Dynamics of Ethylene Glycol Conveying Different Nanoparticles Through a Converging and Diverging Channel.

253) Muhammad Saleem, M.Phil. (2024, IUB): Flow of Jeffrey Fluid in an Inclined Heated Channel with Variable Permeability.

254) M. Usman Haider, M.Phil. (2025, IUB): Flow of Non-Newtonian Fluid Over a Heated Cylinder with a Stretchable Boundary.

255) Muhammad Rizwan, M.Phil. (2025, IUB): Unsteady Flow of Buongiorno Nanofluid Through a Plane Surface with Variable Pressure Gradient.

256) Mamoona Ashfaq, M.Phil. (2025, IUB): Chemically Reactive Flow of Nanoparticles Through a Stenosed Artery.

257) Muhamamd Arslan Saeed, M.Phil. (2025, IUB): Analysis of Oblique Stagnation Point Flow with Modified Thermal Conductivity Models.

258) Saira Zafar, M.Phil. (2025, IUB): Convective Flow of Hybrid Nanofluid Over an Isothermal Rotating Plate.

259) Yasir Khalid, M.Phil. (2025, IUB): Thermodynamical Study of Oscillatory Flow in a Channel with Modified Darcy Law.

18.2.4 Prof. Dr. Muhammad Ramzan

260) Muhammad Shahzad Shabbir, Proper Curvature Collineations in Generalized Non-Static Axially Symmetric Spacetimes, Session: 2010–2012, IUB.

261) Nusrat Perveen, Proper Curvature Collineations in Generalized Static Axially Symmetric Spacetimes, Session: 2010–2012, IUB.

262) Shamila Manzoor, Proper Curvature Collineations in Non-Static Spatially Homogeneous Spacetimes, Session: 2010–2012, IUB.

263) Ayesha Kanwal, Proper Curvature Collineations in Static Spatially Homogeneous Spacetimes, Session: 2010–2012, IUB.

264) Murtaza Ali, Proper Curvature Collineations in Non-Static Lemaitre-Tolman-Bondi Spherically Symmetric Spacetimes, Session: 2013–2015, IUB.

265) Mushtaq Ahmad, Proper Curvature Collineations in Static Lemaitre-Tolman-Bondi Spherically Symmetric Space Times, Session: 2013–2015, IUB.

266) Muhammad Jamil Khan, Proper Curvature Collineations in Reboucas Static Spacetime, Session: 2013–2015, NCBA&E.

267) Yaqoob Ahmad, Proper Curvature Collineations in Som-Ray Choudhury Static Spacetimes, Session: 2013–2015, NCBA&E.

268) Hammad Nazar, Proper Homothetic Vector Fields in Gödel Friedmann Static Spacetime, Session: 2013–2015, NCBA&E.

269) Riaz Hussain, Proper Homothetic Vector Fields in Hoenselaer Vishveshwara Static Spacetime, Session: 2013–2015, NCBA&E.

270) Hafiz Muhammad Younus, Proper Homothetic Vector Fields in Reboucas Static Spacetime, Session: 2013–2015, NCBA&E.

271) Muhammad Zafar Iqbal, Curvature Collineations of Three-Dimensional Non-Static Circularly Symmetric Space-

times, Session: 2014–2016, IUB.

272) Arslan Waheed, Curvature Collineations of Three-Dimensional Static Circularly Symmetric Spacetimes, Session: 2014–2016, IUB.

273) Nabeela Noor, Matter Collineations of Three-Dimensional Static Circularly Symmetric Spacetimes, Session: 2014–2016, IUB.

274) Atiqa Sarwar, Matter Collineations of Som-Roy Chaudhary Spacetime, Session: 2014–2016, IUB.

275) Salman Mukhtar, Projective Collineations of Som-Roy Chaudhary Spacetime, Session: 2014–2016, IUB.

276) Muhammad Bilal, Matter Collineations of Gödel-Friedmann Spacetime, Session: 2014–2016, University of Lahore.

277) Muhammad Tofique, Classification of Non-Static Plane Symmetric Spacetimes by Their Curvature Collineations, Session: 2015–2017, IUB.

278) Iqra Nazir, Ricci Collineations of Three-Dimensional Static Circularly Symmetric Metric, Session: 2015–2017, IUB.

279) Kanwal Majeed, Classification of Spatially Homogeneous Rotating Spacetimes by Their Ricci Collineations, Session: 2015–2017, IUB.

280) Muhammad Rizwan, Classification of Non-Static Spatially Homogeneous Rotating Spacetimes by Their Curvature Collineations, Session: 2015–2017, IUB.

281) Sajida Fatima, Classification of Spatially Homogeneous Rotating Spacetimes by Their Curvature Collineations, Session: 2015–2017, IUB.

282) Hafiz Muhammad Shehzad, Proper Projective Vector Fields of Static Plane Symmetric Spacetimes, Session: [Year not specified], IUB.

283) Syeda Amana Bokhari, Classification of Bianchi Type-I Spacetimes According to Its Proper Homothetic Vector Fields in Lyra Geometry, Session: 2016–2018, IUB.

284) Adnan Sadiq, Classification of Bianchi Type-I Spacetime According to Its Isometries in Lyra Geometry, Session: 2016–2018, IUB.

285) Muhammad Kashif, Circularly Symmetric Metric in Three Dimensions and Its Conformal Symmetry, Session: 2016–2018, IUB.

286) Arshad Ali, Higher Dimensional Bianchi Type-I Cosmological Models with Perfect Fluid in f(R,T) Theory of Gravity, Session: 2016–2018, IUB.

287) Imran Jamil, Classification of Bianchi Type-III String Cosmological Models and Graphical Representation of Some Physical Parameters in General Relativity, Session: 2016–2018, IUB.

288) Muhammad Khalid, Three-Dimensional Circularly Symmetric Solutions of Ricci Soliton Equations, Session: 2016–2018, IUB.

289) Shabbana Kausar, Proper Curvature Collineations of Special Non-Static Axially Symmetric Spacetimes, Session: 2016–2018, IUB.

290) Muhammad Irfan, Higher Dimensional Bianchi Type-V Cosmological Models with Bulk Viscous Fluid in a Modified Theory of Gravity, Session: 2017–2019, IUB.

291) Muhammad Ayyaz, Lie Algebra of Homothetic Vector Fields of Plane Symmetric Static Spacetimes in f(R)

Theory of Gravity, Session: 2017–2019, IUB.

292) Muhammad Kamran, Proper Homothetic Vector Fields of Gödel Metric in Lyra Geometry, Session: 2017–2019, IUB.

293) Nazar Muhammad, Spherical Symmetric Static Solutions of Ricci Soliton Equations, Session: 2017–2019, IUB.

294) Adeel Iqbal, Yamabe Soliton Vector Fields for Spherically Symmetric Lorentzian Manifold in f(R) Theory of Gravity, Session: 2017–2019, IUB.

295) Muhammad Asgher, Quantum Gravity Effect of Hawking Radiations in 5-D Charged Black Hole, Session: 2017–2019, IUB.

296) Muhammad Zubair, Curvature Collineations in Cylindrically Symmetric Spacetime in Lyra Geometry, Session: 2017–2019, IUB.

297) Aamir Ali Bajwa, Classification of Non-Static LTB-Metric Via Proper Homothetic Vector Fields, Session: 2017–2019, Allama Iqbal Open University, Islamabad.

298) Sidra Sumreen, Conformal Vector Fields of Static Plane Symmetric Spacetimes in f(R,T) Theory of Gravity, Session: 2018–2020, IUB.

299) Zahra Asghar, Proper Homothetic Vector Fields of Static Plane Symmetric Spacetimes in f(G) Theory of Gravity, Session: 2018–2020, IUB.

300) Shahid Iqbal, Proper Homothetic Vector Fields of Static Cylindrically Symmetric Spacetimes in f(R) Theory of Gravity, Session: 2018–2020, IUB.

301) Muhammad Salman, Proper Curvature Collineations of Bianchi Type-I Spacetimes in f(R,T) Theory of Gravity, Session: 2018–2020, IUB.

302) Hafiza Mariam Khan, Construction of Proper Homothetic Vector Fields of Bianchi Type-I Spacetimes in f(R) Theory of Gravity, Session: 2018–2020, IUB.

303) Bushra Ahmad, Killing Motion of Static Cylindrically Symmetric Spacetimes in f(R) Theory of Gravity, Session: 2018–2020, IUB.

304) Muhammad Niaz, Classification of Static Plane Spacetimes by Their Isometries in f(G) Gravity, Session: 2018–2020, IUB.

305) Shagufta Yousuf, Proper Curvature Collineations of Bianchi Type-I Spacetimes in f(R) Theory of Gravity, Session: 2019–2021, IUB.

306) Maira Pervaiz, Study of Proper Curvature Collineations in Kantowski-Sachs and Bianchi Type-III Spacetimes in f(R) Theory of Gravity, Session: 2019–2021, IUB.

307) Ayiza Farzand, Existence of Proper Curvature Collineations in Spatially Homogeneous and Rotating Spacetimes in f(R) Theory of Gravity, Session: 2019–2021, IUB.

308) Shamsheer Hussain, Construction of Proper Curvature Vector Fields in Plane Static Perfect Fluid Symmetric Spacetimes in f(R,T) Theory of Gravity, Session: 2020–2022, IUB.

309) Shahzad Rasoul, Proper Homothetic Vector Fields of Bianchi Type-I Perfect Fluids Spacetimes in f(R,T) Gravity, Session: 2021–2023, IUB.

310) Ayesha Saleem, Lie Algebra of Homothetic Vector Fields of Minkowski Spacetimes in Different Coordinate Systems, Session: 2021–2023, IUB.

311) Aiman Jalil, Proper Homothetic Vector Fields of Some Non-Conformally Flat Static Plane Symmetric Perfect Fluid Spacetimes in f(T) Gravity, Session: 2021–2023, IUB.

312) Muhammad Shahbaz Nawab, Classification of Bianchi Type-I Perfect Fluid Spacetimes in f(R,T) Gravity Via Isometries, Session: 2021–2023, IUB.

313) Irum Tahir, Classification of Proper Non-Static Plane Symmetric Spacetime in f(R) Gravity Via Killing Vector Fields, Session: 2021–2023, IUB.

314) Aneesa Aamir, Homothetic Vector Fields in Proper Non-Static Plane Symmetric Spacetimes in f(R) Gravity, Session: 2021–2023, IUB.

315) Farzia Khalid, Killing Vector Fields in Plane Symmetric Perfect Fluid Static Spacetime in f(R,T) Theory of Gravity, Session: 2021–2023, IUB.

316) Duaa Asghar Gilani, Lie Algebra of Conformal Vector Fields of Minkowski Spacetime in Different Coordinate Systems, Session: 2021–2023, IUB.

317) Sana Aslam, Lie Algebra of Killing Vector Fields of Bianchi Type-I Perfect Fluid Solution in f(T) Theory of Gravity, Session: 2021–2023, IUB.

318) Rao Muhammad Zeshan Touheed, Conformal Vector Fields of Some Vacuum Classes of Static Spherically Symmetric Spacetimes in f(T,B) Gravity, Session: 2021–2023, IUB.

319) Sumaiya Ahmad, Homothetic Motion of Static Spherically Symmetric Anisotropic Spacetimes in Symmetric Teleparallel Gravity, Session: 2022–2024, IUB.

320) Sajid Akhtar Qamar, Killing Vector Fields and Conservation Laws of Static Spherically Symmetric Anisotropic Spacetimes in Symmetric Teleparallel Gravity, Session: 2022–2024, IUB.

321) Farruk Bashir, Proper Curvature Collineations of Static Spherically Symmetric Anisotropic Spacetimes in Symmetric Teleparallel Gravity, Session: 2022–2024, IUB.

322) Sidra Kanwal, Classification of Static Spherically Symmetric Perfect Fluid Spacetimes via Proper Curvature Collineations in f(T) Gravity, Session: 2022–2024, IUB.

323) Shahzaib Hassan, Noether Symmetries of Static Spherically Symmetric Spacetimes in Symmetric Teleparallel Gravity, Session: 2022–2024, IUB.

324) Sajid Ghaffar, Noether Symmetries of Static Spherically Symmetric Spacetimes in f(T) Gravity, Session: 2022–2024, IUB.

325) Wajeeha Iqbal, Classification of Static Spherically Symmetric Perfect Fluid Spacetimes via Homothetic Vector Fields in f(T) Gravity, Session: 2022–2024, IUB.

326) Saira Mehmood, Proper Projective Vector Fields of Static Spherically Symmetric Spacetimes in f(R) Gravity, Session: 2022–2024, IUB.

327) Sidra Ahmad, Proper Projective Vector Fields of Static Plane Symmetric Spacetimes in f(R) Gravity, Session: 2022–2024, IUB.

328) Muhammad Adnan, A Study of Exact Solutions of Static Plane and Static Cylindrically Symmetric Spacetimes in Symmetric Teleparallel Gravity, Session: 2022–2024, IUB.

329) Abid Hussain, Killing Vector Fields for a Class of Static Cylindrically Symmetric Solutions in f(T,B) Gravity, Session: 2022–2024, IUB.

330) Usama Nawaz, Noether Symmetries of LRS Bianchi Type-I Spacetime in f(Q) Gravity, Session: 2022–2024,

IUB.

331) Shifa Sundas, Noether Symmetries of Bianchi Type-V Spacetime in f(Q) Gravity, Session: 2022–2024, IUB.

332) Fakhar Alam, Isometries and Lie Algebra of LRS Bianchi Type-I Spacetime in f(Q) Gravity, Session: 2022–2024, IUB.

333) Zulqarnain, Killing Vector Fields and Their Lie Algebra of Static Plane Symmetric Spacetime in f(Q) Gravity, Session: 2022–2024, IUB.

334) Sarfraz Ahmad, Homothetic Vector Fields of Static Plane Symmetric Spacetime in f(Q) Gravity, Session: 2022–2024, IUB.

335) Amir Haneef, Killing Vector Fields and Conservation Laws Admitted by Bianchi Type-I Spacetime in f(Q) Gravity, Session: 2022–2024, IUB.

336) Ayesha Hafeez, Noether Symmetries and Conservation Laws of Cylindrically Symmetric Spacetime in f(T,B) Gravity, Session: 2023–2025, IUB.

337) Irum Fatima, Classification of Static Plane Symmetric Spacetimes in f(R,Lm) Gravity Via Conformal Vector Fields, Session: 2023–2025, IUB.

338) Eman Tarique, Conformal Vector Fields of Five-Dimensional Kaluza-Klein Metric, Session: 2023–2025, IUB.

339) Muhammad Hassan, Killing Vector Fields of Static Spherically Symmetric Anisotropic Spacetime in f(T,B,τ) Gravity, Session: 2023–2025, IUB.

18.2.5 Prof. Dr. Muhammad Faheem Khan

340) Noreen Batool, M.Phil. (2012, UOS): Subdivision Schemes for Curves/Surfaces Using Lagrange Interpolating Polynomial.

341) Irem Mukhtar, M.Phil. (2012, UOS): Deriving Subdivision Schemes Using Newton Interpolating Polynomial.

342) Aamir Shehzad, M.Phil. (2014, UOS): A New Approach for Estimating Error Bounds of Binary Subdivision Schemes.

343) Muhammad Omar, M.Phil. (2014, UOS): Estimating Error Bounds for Ternary Subdivision Schemes Using Second Forward Difference.

344) Lubna Shahid, M.Phil. (2015, UOS): A New Numerical Approach to Estimate Error Bounds.

345) Aymen Qayum, M.Phil. (2015, UOS): Numerical Solution of Third Order Singular Boundary Value Problems Using Subdivision Scheme.

346) Madiha Shafiq, M.Phil. (2016, UOS): A Computational Approach to Estimate Sharp Error Bounds of Binary Subdivision Scheme.

347) Iqra Asif, M.Phil. (2016, UOS): Optimal Solution of Singular Boundary Value Problems Based on Subdivision Approximating Collocation Algorithm.

348) Mati ur Rehman, M.Phil. (2016, UOL Sargodha Campus): Approximating Error Bounds for Ternary Subdivision Surfaces by Adopting Second Forward Differences.

349) Tahira Fatima, M.Phil. (2016, UOL Sargodha Campus): An Advanced Approach to Estimate Subdivision Depth for N-ary Subdivision Scheme.

350) Ishfaq Hussain, M.Phil. (2016, UOL Sargodha Campus): Formulating Error Bounds for Quaternary Subdivision

Curves by Using First Forward Differences.

351) Safdar Ali Johar, M.Phil. (2016, UOL Sargodha Campus): Estimation of Error Bounds of Quaternary Subdivision Schemes with the Help of Second Forward Differences.

352) Tooba Amjad, M.Phil. (2016, UOL Sargodha Campus): Computing Error Bounds for Binary Subdivision Surface Using First Forward Differences.

353) Haziqa Komal, M.Phil. (2017, UOS): Numerical Solution of Volterra-Integral Equation Using the Bernstein Polynomial.

354) Sadaf Saeed, M.Phil. (2017, UOS): An Approach for Finding the Numerical Solution of Some Integral Equations by Using Discretization Method.

355) Hafiz M. Najaf, M.Phil. (2017, Riphah International Faisalabad Campus): Computation of Error in Subdivision Process.

356) Misbah Noreen, M.Phil. (2017, Riphah International Faisalabad Campus): Estimating Error Bounds for Binary Subdivision Curves/Surfaces.

357) Muhammad Awais, M.Phil. (2017, Riphah International Faisalabad Campus): Estimating Error Bounds in Subdivision Scheme for Univariate Case.

358) Zanib Kousar, M.Phil. (2017, Riphah International Faisalabad Campus): Error Bounds of Ternary Subdivision Scheme Using Forward Differences.

359) Iffat Hayat, M.Phil. (2017, Riphah International Faisalabad Campus): Univariate Subdivision Scheme and Its Error Bound.

360) Rabia Iqbal, M.Phil. (2018, UOS): Comparison of Method of Nonlinear Solutions by C and Java Computer Language.

361) Ammarah Waheed, M.Phil. (2018, UOS): Numerical Solution of Some Fractional Order Differential Equations.

362) Hafiz Muhammad Waqas, M.Phil. (2018, UOS): A New Numerical Technique for the Solution of Volterra Integral Equation.

363) Marryam Shafique, M.Phil. (2018, UOS): Numerical Technique for the Solution of Fredholm Integral Equations Based on the Bernstein Polynomial.

364) Summiya Yasmin, M.Phil. (2019, UOS): Application of Bernstein Basis Functions for Solving Two-Dimensional Volterra-Fredholm Integral Equations.

365) Tayyaba Arshad, M.Phil. (2019, UOS): Solution of Two-Dimensional Fredholm Integral Equations Using Bernstein Basis Functions.

366) Rida Malik, M.Phil. (2020, UOS): Numerical Solution for the System of Ordinary Differential Equations Using Operational Matrices.

367) Komal Shahnaz, M.Phil. (2020, UOS): An Approach for the Numerical Solution of System of Fredholm Integral Equations.

368) Bushra Shakoor, M.Phil. (2021, UOS): Subdivision Depth of the Doo-Sabin Surfaces.

369) Saqlain Abbas, M.Phil. (2022, UOS): Subdivision Depth Computation of the Quadrilateral Subdivision Scheme.

370) Sayyada Areesha Munir, M.Phil. (2022, UOS): Numerical Solution for the System of Ordinary Differential Equations Using Operational Matrices.

371) Ayesha Ahsan, M.Phil. (2022, UOS): An Approach for Numerical Solution of Nonlinear Volterra Integral Differential Equations and Its Convergence Analysis.

372) Arooba Aslam, M.Phil. (2023, IUB): Subdivision Depth Computation of Non-Stationary Quaternary Subdivision Curves.

373) Zunaira Ikram, M.Phil. (2023, IUB): Numerical Solution of Nonlinear Fredholm Integro-Differential Equations by Using Operational Matrices.

374) Syed Zain ul Hassan, M.Phil. (2023, IUB): Operational Matrices-Based Solution for the System of Sixth Order Differential Equations.

375) Muhammad Waqas, M.Phil. (2023, IUB): Subdivision Depth Computation for Volumetric Model.

376) Tanzila Khaliq, M.Phil. (2023, IUB): An Efficient Approach for Subdivision Depth Computation of Triangular Surfaces.

377) Muhammad Zeeshan, M.Phil. (2024, IUB): A Bernstein Technique for Solving Integro-Differential Equations.

378) Warda Mehmood, M.Phil. (2024, IUB): A Collocation Method of Generalized Non-Linear Klein-Gordon Equation Using Cubic B-Spline Basis Functions.

379) Ayesha Akram, M.Phil. (2024, IUB): The Numerical Solution of Second Order Hyperbolic Telegraph Equation by Cubic B-Spline Method.

380) Hajra Azam, M.Phil. (2024, IUB): The Solution of Fisher's Equations Using B-Spline Technique.

381) Muhammad Naveed, M.Phil. (2024, IUB): Geometric Modeling Using Parametric Family of Ternary Subdivision Schemes.

382) Amara Shabir, M.Phil. (2024, IUB): The Applications of Some Well-Known Partial Fractional Integrals.

383) Muhammad Tahir, M.Phil. (2024, IUB): Utilizing Trigonometric Cubic B-Spline to Estimate Solution of Second-Order Boundary Value Problems.

384) Muhammad Zahid, M.Phil. (2024, IUB): Utilizing the Quartic Trigonometric B-Spline Technique to Approximate Third-Order Boundary Value Problems.

385) Aasma Sharif, M.Phil. (2024, IUB): Estimating Solutions for Third Order Boundary Value Problems Using Quartic B-Spline.

386) Ayesha Shahid, M.Phil. (2024, IUB): Hybrid Cubic B-Spline Technique for Solving Generalized Convection-Diffusion Equations.

387) Asra Khalil, M.Phil. (2024, IUB): Numerical Solution of Burgers-Fisher Equations Using Hybrid Cubic B-Spline Technique.

388) Arooj Fatima, M.Phil. (2024, IUB): Numerical Solution of Hyperbolic Telegraph Equation by Hybrid Cubic B-Spline Technique.

389) Fatima Naseer, M.Phil. (2024, IUB): Solution of Differential Equations Using Integral Transforms.

390) Naeem Khaliq, M.Phil. (2024, IUB): Hybrid Cubic B-Spline Technique for the Solution of Generalized Klein-Gordon Equations.

391) Maryam Naeem, M.Phil. (2025, IUB): Soliton Solution for Cubic-Quartic Fokas-Lenells Equation Using Extended Trial Method.

392) Farzana Begum, M.Phil. (2025, IUB): Soliton Solution for Quadratic Fokas-Lenells Equation.

393) Khalil Ahmad, M.Phil. (2025, IUB): Optical Soliton for Sasa-Satsuma Equation by Extended Trial Equation Method.

394) Majid Hussain, M.Phil. (2025, IUB): Soliton Solution for Time Fractional Non-Linear Fokas-Lenells Equation.

395) Aamir Nawaz, M.Phil. (2025, IUB): Optical Soliton for Time Fractional Nonlinear Schrödinger Equation.

396) Ahmad Hassan, M.Phil. (2025, IUB): Soliton Solution for Gross-Pitaevskii Equation.

397) Muhammad Akhtar, M.Phil. (2026, IUB): On Inequalities Involving N-Polynomial Type Convexity Verified Through 2D/3D Graphs with Applications.

398) Muhammad Fahad Riaz, M.Phil. (2026, IUB): Soliton Solution of Non-Linear Schrödinger's Equation for Davydov Solitons with Nonlinearity Laws.

399) Noman Sattar, M.Phil. (2026, IUB): Highly Dispersive Dark Optical Solitons Using Extended Trial Method.

400) Alina Akram, M.Phil. (2026, IUB): Non-Linear Schrödinger's Equation in Combined Optical Solitons with Extended Trial Method.

18.2.6 Prof. Dr. Nargis Aslam Khan

401) Farheen Gul, M.Phil. (11/IU.M.Phil/2016): Homogeneous-Heterogeneous Reactions on MHD Mixed Convection Flow of Oldroyd-B Fluid.

402) Laila Malik, M.Phil. (13/IU.M.Phil/2016): Influence of Variable Viscosity on Magnetohydrodynamic Flow and Heat Transfer.

403) Aqsa Naeem, M.Phil. (14/IU.M.Phil/2016): Magnetohydrodynamics Flow of Casson Nanofluid Between Stretching Disks.

404) Tariq Iqbal, M.Phil. (26/IU.M.Phil/2016): MHD Flow of Viscous Fluid Between Stretching Disks with Temperature and Concentration Jump Conditions.

405) Muhammad Azhar Iqbal, M.Phil. (282/IU.M.Phil/2017): Flow of Nanofluid Containing Gyrotactic Microorganisms Induced by Stretching Disks.

406) Hafiza Asifa Liaquat, M.Phil. (283/IU.M.Phil/2017): Chemical Reactive Flow of MHD Casson Fluid Through a Vertical Deformable Porous Stratum with Stretching Walls.

407) Muhammad Shakib Arsalan, M.Phil. (284/IU.M.Phil/2017): Convective Flow of Nanoparticles About a Rotating Down-Pointing Cone.

408) Irram Riaz, M.Phil. (293/IU.M.Phil/2017): Effect of Chemical Entropy Generation on Flow of Casson Nanofluid Between Radiative Stretching Disks.

409) Anum Wazir, M.Phil. (16/IU.M.Phil/2016): Effects of Internal Heat Generation on Chemically Reactive Flow in an Asymmetric Channel with Deformable Porous Wall.

410) Muhammad Riaz, M.Phil. (799/IU.M.Phil/2017): Heat and Mass Transfer in Peristaltic Motion of Fluid with Convective Conditions.

411) Munawar Abbas, M.Phil. (807/IU.M.Phil/2017): Influence of Thermal Marangoni Convection in Flow of Dusty Fluid with Thermal Radiation and Mixed Convection.

412) Naila Saeed, M.Phil. (815/IU.M.Phil/2017): Soret and Dufour Effects on Flow of Williamson Fluid Between

Radiative Stretching Disks.

413) Nasreen Abbas, M.Phil. (798/IU.M.Phil/2017): Thermophoresis Particle Deposition on Mixed Convective Flow of Magneto Walter-B Nanofluid.

414) Zahida Parveen, M.Phil. (1159/IU.M.Phil/2018): Effect of Chemically Reactive Flow on Casson Fluid Over a Stretching Surface Using Non-Uniform Heat Source/Sink and Viscous Dissipation.

415) Iqra Rafiq, M.Phil. (1169/IU.M.Phil/2018): Chemical Reactive Flow of Viscoelastic Fluid Over a Radiative Stretching Vertical Surface Under Density Variation and Buoyancy Effect.

416) Sumara Saleem, M.Phil. (1178/IU.M.Phil/2018): Double Diffusive Mixed Convective Flow of Cross Fluid in Porous Medium with Soret Effect and Heat Generation.

417) Hafiza Sadia Iqbal, M.Phil. (229/IU.M.Phil/2018): Mixed Convective and Nonlinear Thermally Radiative Flow of Maxwell-Nanoliquid with Newtonian Heat and Mass Conditions.

418) Saba Mushtaq, M.Phil. (233/IU.M.Phil/2018): Influences of Inclined Magnetic Field and Melting Heat Transfer on Flow of Tangent Hyperbolic Nanofluid with Nonlinear Thermal Radiation.

419) Muhammad Mohsin Sajjad, M.Phil. (119/IU.M.Phil/2020): Thermophoresis Particle Deposition on Darcy-Forchheimer Flow of Hybrid Nanofluid with Nonlinear Thermal Radiation.

420) Hafiz Muhammad Hamza, M.Phil. (S21BMATH3E01023): Effect of Variable Thermal Conductivity on Williamson Hybrid Nanofluid Flow Over a Vertical Plate with Mixed Convection.

421) Abdul Hanan, M.Phil. (S21BMATH3E01025): Impact of Activation Energy on Casson Hybrid Nanofluid Flow Over a Spinning Disk.

422) Muqadas Anwar, M.Phil. (S21BMATH3E01034): Combined Effects of Non-Uniform Heat Source and Mixed Convection on Walter's-B Nanofluid Flow Over Power Law Lubricating Surface.

423) Muhammad Kamran, M.Phil. (S21BMATH3E01041): Bioconvection Aspects on Casson Nanofluid Flow Over a Stretching Cylinder.

424) Imran Sattar Qaisrani, M.Phil. (S21BMATH3E01065): Thermal Radiation and Soret-Dufour Effects on Oldroyd-B Hybrid Nanofluid Over Solar Collector Plate in Presence of Gyrotactic Micro-Organisms.

425) Muhammad Irfan, M.Phil. (S21BMATH3E01081): Effect of Heat Source on the Flow of Nanofluid with Thompson and Troian Slip at the Boundary.

426) Naila Iram, M.Phil. (S21BMATH3E01096): Chemical Reactive Flow of Dusty Eyring-Powell Nanofluid Over a Stretched Sheet with Micro-Organisms.

427) Muhammad Zeeshan, M.Phil. (S21BMATH3E01097): Variable Thermal Conductivity and Chemical Reaction Aspects in MHD Tangent Hyperbolic Nanofluid Flow Over an Exponentially Stretching Surface.

428) Shagufta Sajjad, M.Phil. (S21BMATH3E01104): Cattaneo-Christov Heat Flux Model in the Flow of Dusty Carreau-Yasuda Nanofluid Over a Riga Plate.

429) Mobashar Saeed, M.Phil. (S21BMATH3E01116): Darcy-Forchheimer Flow of Second Grade Fluid in a Porous Medium Using Cattaneo-Christov Model.

430) Adil Javed, M.Phil. (S22BMATH3E01001): Mathematical Study of Magnetized Hybrid Mediated Model for Analyzing Blood Flow in Narrow Stenosis Arteries.

431) Ayesha Khadim, M.Phil. (S22BMATH3E01018): Insight into the Thermally Radiative-Convective Flow of Hybrid Nanofluid with Viscous Dissipation.

432) Danish Daniyal, M.Phil. (S22BMATH3E01021): Modeling of Chemical Reactive Flow of Trihybrid Nanofluid Suspended with Multiple Kinds of Nanoparticles Between Two Rotating Disks.

433) Maryam Fatima, M.Phil. (S22BMATH3E01026): Impact of Activation Energy on the Synovial Fluid with Thermophoretic Particle Deposition Using Two Viscosity Models.

434) Muhammad Waqas Amin, M.Phil. (S22BMATH3E01063): Analysis of Darcy-Forchheimer Flow of Hybrid Nanofluid Across a Curved Slippery Surface with Nonlinear Heat Generation.

435) Muhammad Tahir Saleem, M.Phil. (S22BMATH3E01112): Numerical Simulation of Darcy-Forchheimer Flow of Ree-Eyring Fluid with Soret and Dufour Effects.

436) Muhammad Usman Sardar, M.Phil. (S22BMATH3E01116): Effect of Second-Order Slip on Hybrid Nanofluid Flow in the Presence of Thermophoretic Particle Deposition and Heat Source.

437) Iqra Nazir, M.Phil. (S22BMATH3E01117): Effect of Soret-Dufour and Nanoparticle Aggregation on Magnetized Non-Linear Convective Nanofluid Flow Over a Stretched Surface.

438) Ali Raza, M.Phil. (S22BMATH3E01139): Magnetized Hybrid Nanofluid Flow Over Two Different Geometries with Activation Energy and Cattaneo-Christov Heat and Mass Flux Models.

439) Amna Abbas, M.Phil. (F22BMATH3E01008): Numerical Simulation of Hall Current on Flow of Couple Stress Hybrid Nanofluid Suspended by Ferrous Ferric Oxide and Molybdenum Disulfide Nanoparticles in Blood Plasma.

440) Sonia Ishaq, M.Phil. (F22BMATH3E01046): Numerical Analysis of Non-Linear Convective Eliss Hybrid Nanofluid Flow Over a Porous Stretching Cylinder.

441) Sana Mishal, M.Phil. (F22BMATH3E01088): Stefan Suction/Blowing Impact on Chemical Reactive Flow of Hybrid Magnetized Ferro-Fluid with Nanoparticles Shape Effect and Jump Conditions.

442) Muhammad Shahzad Nawaz, M.Phil. (F22BMATH3E01112): Induced Magnetic Field Utilization for Casson Hybrid Nanofluid Flow Over Slippery Surface for Thermal Exploration.

443) Yasir Ali, M.Phil. (S23BMATH3E01002): An Induced Magnetic Field Utilization for Maxwell Nanofluid Flow Subject to Entropy Generation Minimization.

444) Faheemullah Khan, M.Phil. (S23BMATH3E01020): Influence of Homogeneous/Heterogeneous Reaction on Hybrid Nanofluid Flow Over a Biomagnetic Moving Thin Needle.

445) Muhammad Hasnain, M.Phil. (S23BMATH3E01024): Performance of Hall and Ion-Slip Current on Flow of Magneto-Hybrid CNTs Past a Rotating Sphere.

446) Muhammad Awais, M.Phil. (S23BMATH3E01040): Exploration of Arrhenius Activation Energy and Local Thermal Non-Equilibrium Condition on Darcy-Forchheimer Williamson Hybrid Nanofluid Flow.

447) Inayait Ullah, M.Phil. (S23BMATH3E01044): Computational Analysis of Elastic Deformation on Boger Hybrid Nanofluid Flow with Variable Fluid Characteristics.

448) Muhammad Asif Khan, M.Phil. (S23BMATH3E01048): Significance of Thermophoretic Particle Deposition on Magnetohydrodynamic Casson Nanofluid Flow Comprising Non-Uniform Heat Source-Sink Aspects.

449) Syed Ahmad Kameer, M.Phil. (F23BMATH3E01015): Numerical Simulation of Radiative Micropolar Hybrid Nanofluid Flow Over a Wedge with Hall Current. (Thesis Submitted).

450) Abdul Hafeez, M.Phil. (F23BMATH3E01035): Soret and Dufour Effects on Marangoni Convective Flow of Dusty Tri-Hybrid Ellis Rotating Nanofluid Over a Stretchable Riga Plate. (Thesis Submitted).

451) Hijab Ali Bukhari, M.Phil. (F23BMATH3E01047): Heat and Mass Transfer Enhancement in Darcy-Forchheimer

Flow of Ternary Hybrid Nanofluid: An Application of Cattaneo-Christov Model. (Thesis Submitted).

18.2.7 Dr. Ghulam Abbas

452) Farhan Bukhari (Defended on 21-12-2018): Jule Thomson Expansion of Einstein Power Maxwell Black Hole.

453) Muhammad Waqas Ibraheem (Defended on 14-04-2018): Quintessence Compact Stars Satisfying Karmarkar Condition.

454) Shair Gull (Defended on 21-12-2018): Wormhole Inspired by Dirac Distribution in $f(R,T)$ Gravity.

455) Zulfiqar Ali (Defended on 14-04-2018): Expansion and Collapse of Cylindrical Source with Cosmological Constant.

456) Najma Rani (Defended on 21-12-2018): Compact Stars with Karmarkar Conditions in $f(R)$ Gravity.

457) Asif Mahmood (Defended on 21-12-2018): Strong Gravitational Lensing of Photon Sphere Coupled to Weyl Tensor.

458) Aqsa Habib (Defended on 21-12-2018): Quintessence Compact Stars with Karmarkar Conditions in $f(R)$ Gravity.

459) Naeem Yousaf (Defended on 20-03-2019): Dynamical Behavior of Particles Near Brane-World Black Hole.

460) Anayat Ali (Defended on 20-03-2019): Relativistic Wormholes Inspired by Staller Density Models.

461) Rabia Maqsood (Defended on 20-03-2019): Anisotropic Compact Stars in Rastall Theory of Gravity.

462) Fozia Muhammad Hussain (Defended on 20-03-2019): Heat Conducting Star Collapse with Karmarkar Condition.

463) Muhammad Shahid (Defended on 04-12-2020): Shear-Free Radiating Collapse in $f(R)$ Theory.

464) Ali Hassan (Defended on 04-12-2020): Relativistic Compact Object in Rastall Gravity with the Vaidya-Tikekar Metric.

465) Athar Abbas (Defended on 05-2022): Radiating Gravitational Collapse with Karmarkar Condition in $f(R)$ Theory.

466) Zohra Arbab (Defended on 05-2022): Van der Waals Quintessence Wormhole in Modified $f(R,T)$ Theory.

467) Zarmina (Defended on 05-2022): Wormhole Solutions with Chaplygin Gas in $f(R,T)$ Gravity.

468) Ehsan Atiq (Defended on 05-2022): Study of Compact Stars in Einstein-Gauss-Bonnet Theory.

469) Zeenat Suleman (Defended on 05-2022): Compact Stars with Quadratic Equation of State in Rastall Theory.

470) Sabiha Aslam (Defended on 05-2023): Gravitational Lensing of Euler-Heisenberg Black Hole.

471) Muhammad Irfan (Defended on 05-2023): Non-Static Cylindrical Solution of Einstein's Equations with Electric Field.

472) Nimra Sundas (Defended on 05-2024): Analysis of a Class of Compact Stars in Rastall Theory.

473) Muhammad Usama (Defended on 05-2023): Accretion Disc Around Non-Linear Sigma Model Black Hole.

474) Ahsan Maqbool (Defended on 05-2023): Accretion Flow Orbits Around Rastall Gravity Black Hole.

475) Hamza Arshad (Defended on 05-2023): Deflection Angle in Black Hole of Scalar-Tensor Teleparallel Gravity.

476) Muhammad Umair Farooq (Defended on 05-2023): Compact Objects with Modified Van der Waals Equation of State in Rastall Theory.

477) Hafiz Hammad Rasheed (Defended on 05-2023): Tidal Effect of Rindler Modified Schwarzschild Black Hole.

478) Muniba Khalid (Defended on 05-2023): Thermodynamics of Some Black Holes in Modified Gravity.

479) Iqra Aamir (Defended on 05-2023): Thermodynamics of $f(T, B)$ Gravity Black Hole.

480) Saqlain Haider (Defended on 2024): Thermodynamical Aspects of Some Rotating Black Holes.

481) Muhammad Touseef (Defended on 2024): Thermal Fluctuation and Phase Transition of Non-Linear Electrodynamic Black Holes.

482) Muhammad Kamran Awan (Defended on 2024): Thermodynamics of Charged Black Hole via Rényi Entropy.

483) Zia Ur Rehman (Defended on 2024): Tidal Effects of Euler-Heisenberg Black Hole.

484) Muhammad Kashif Shahzad (Defended on 2024): Thin Accretion Disk Around Rotating Bardeen Black Hole.

485) Saqib Naeem (Defended on 2024): Analysis of Compact Stars with Specific Metric Potential.

486) Muhammad Hassan (Defended on 2024): Wormholes Supported by Dark Energy Equation of State.

487) Sana Mumtaz (Defended on 2024): Study of Anisotropic Compact Stars with Variable Cosmological Constant.

488) Ufaq Azhar (Defended on 2024): Minimally Deformed Wormhole with Dark Matter Halo.

489) Nasir Mehmood (Defended on 2024): Viable Anisotropic Strange Star Models with Finch–Skea Geometry.

490) Muhammad Muzammil Khan (Defended on 2024): Effects of Dark Energy on Perfect Fluid Stellar Object.

491) Muhammad Sohail Kaswar (Defended on 2024): Relativistic Stellar Structure with MIT Bag Equation of State.

492) Azhar Hassan (Defended on 2024): Compact Stars with Linear Equation of State in $f(R, T)$ Theory.

493) Misbah Shahzadi (Defended on 2025): Stable Circular Orbits and Chaos Bound Violation Near ModMax Black Hole.

494) Khurram Yaqub (Defended on 2025): Relativistic Stellar Structures via Anisotropic Pressure Profile.

495) Muhammad Shariq (Defended on 2025): Study of Regular Stellar Objects in General Relativity.

496) Muhammad Naveed (Defended on 2025): Models of Anisotropic Compact Stars with Specific Radial Metric Potential.

497) Javeria Islam (Defended on 2025): Bounds on Lyapunov Exponent for Dynamics of Particle Around Charged Quantum-Corrected Black Hole.

498) Altaf Hussain (Defended on 2025): Dynamics of Particles Around Rotating Black Hole.

499) Muhammad Waqas Shahid (Defended on 2025): Chaotic Motion of Particles Near Yang-Mills Black Hole.

500) Muhammad Ayyub Shah (Defended on 2025): Chaotic Dynamics of String Around Euler-Heisenberg Black Hole.

501) Mahtab Hassan (Defended on 2026): Aschenbach Effect for Some Black Holes.

18.2.8 Dr. Awais Yousaf

502) Zeenat Iqbal (Defended on 04-2017): Some Properties of the Finite Quotients of $PSL(2, O_3)$.

503) Muhammad Aamir (Defended on 04-2017): On a Wallpaper Group G_{31}.

504) Muhammad Younis (Defended on 04-2017): Study of the Actions of Γ_3 Over Biquadratic Field.

505) Zuneera Asif (Defended on 10-2017): Algorithmic Aspects of the Homomorphisms of Fully Automorphism Groups.

506) Mehreen Arshad (Defended on 03-2018): Classification of Circuits of Length Four.

507) Allah Ditta Javed (Defended on 03-2018): On Construction of Highly Secure S-Boxes Over $GF(2^4)$.

508) Abdullah Amir (Defended on 07-2018): Anti-Magic Labeling of Certain Classes of Convex Polytope Graph.

509) Ammara Tahir (Defended on 10-2018): Implementation of Certain Techniques in Digital Watermarking.

510) Ayesha Azhar (Defended on 10-2018): Some Remarks on the Spectrum of Commuting and Non-Commuting Graphs for T_{4n}.

511) Rehman Yousaf (Defended on 10-2018): One Relator Quotients of a Subgroup of a Bianchi Group.

512) Muhammad Qamar (Defended on 10-2018): Study of Ring Type Benzenoids.

513) Hira Baig (Defended on 10-2018): Applications of Rubik's Revenge in Cryptography.

514) Muhammad Ameer (Defended on 2019): Behavior of Non-Conjugate Elements of a Group in Graph Theoretic Perspective.

515) Azeem Ahmed (Defended on 2019): On Commuting Graph of Generalized Quaternion Group.

516) Muhammad Qasim (Defended on 2019): On LSB Based Image Steganography Techniques.

517) Habiba Gulzar (Defended on 2019): Study of Word Structures in $H(\lambda_4)$.

518) Muhammad Shahbaz (Defended on 2019): Contraction in Circuits of Coset Diagrams.

519) Muhammad Dilbar (Defended on 2019): Significance of Certain Algebraic Structures in Cryptography.

520) Rao Basharat Ali (Defended on 2020): Study of Commutativity Degree of Certain Finite Groups.

521) Sawaira Bilal (Defended on 2020): Actions of Triangular Group on $PL(F_{3n})$.

522) Khawar Rehan (Defended on 2020): On the Spectrum of Non-Conjugate Graphs.

523) Muhammad Azhar, S/O Malik Muhammad Afzal (Defended on 2020): Construction of highly non-linear modified Rijndael S-box.

524) Rida Sagheer, S/O Sagheer Ahmad (Defended on 2022): Post-Quantum lattice-based Cryptography.

525) Muhammad Aqil, S/O Murid Ahmed (Defended on 2020): On elliptic curve group and its application in cryptography.

526) Shagufta Mufeez, S/O Mufeez Ahmad (Defended on 2020): On computing of the degree based topological indices.

527) Shama Sharif, S/O Javed Iqbal (Defended on 2022): Energy of Certain Graphs for Generalized Quaternion Group.

528) Ayesha Mustafa, S/O Ghulam Mustafa (Defended on 2023): On Sylow 2-Subgroups of some Sporadic Groups.

529) Sanam Khalil, S/O Khalil Ahmad (Defended on 2023): Performance analysis of intransitive actions of Modular Group PSL(2,Z) in Cryptography.

530) Ghazanfar Mushtaq, S/O Malik Mushtaq Ahmad Khan (Defended on 2023): On the actions of a Triangular group.

531) Farhan Haider, S/O Ghulam Haider (Defended on 2023): Diagrammatic study of the finite quotients of an infinite group.

532) Sufyan Nadeem, S/O Mohammad Nadeem (Defended on 2023): On joining of two circuits of different lengths in PSL(2,Z) – Space.

533) Mubeen Munawar, S/O Munawar Hussain (Defended on 2023): On one relator quotients of a Balance group.

534) Ansa Shaheen, S/O Arif Ali (Defended on 2023): Construction of Hash functions based on Galois group $GF(2^9)$.

535) Muhammad Sufian, S/O Shahab Ud Din (Defended on 2023): Joining of circuits of length four in PSL(2,Z) - Space.

536) Nimra Moqaddas, S/O Allah Dita (Defended on 2023): Study of Sylow 2-Subgorups of certain Classical Groups.

537) Aqsa Shafique, S/O Muhammad Shafique (Defended on 2023): On the orbits of coset graphs to generate highly non-linear S-Box.

538) Hira Shahab, S/O Qazi Shahab-u-dien (Defended on 2024): Introducing the Induced Intuitionistic Fuzzy Dombi Aggregation Operator and its Applications in Multiple Attribute Group Decision Making.

539) Abdul Rehman, S/O Lal Din (Defended on 2024): Exploring the Complex Nutrosofic Muirhead Mean Operator and its Applications in Multiple Attribute Group Decision Making.

540) Mudassir Hassan, S/O Akhtar Abbas (Defended on 2024): A Novel Approach to Non-linear Component Construction in Block Ciphers through Group Action on Unique Composition of Two Galois Fields.

541) Khadija Nasir, S/O Nasir Mehmood (Defended on 2024): A Novel MAGDM Approach for Optimizing Supply Chain Management Through Fuzzy Sets and Dombi Aggregation Operators in 2-Tuple Linguistic Environment.

542) Filza Shoaib, S/O Mohammad Shoaib (Defended on 2024): Constructing S-Box Using Lattice Points and Binomial Expansion: A Cryptographic Approach.

543) Syeda Madiha Gilani, S/O Sayed Shabbar Hussain Gilani (Defended on 2024): Some Induced Pythagorean Fuzzy Dombi Aggregation Operator and its Applications in Multiple Attribute Group Decision Making.

544) Muhammad Adeel, S/O Muhammad Latif (Defended on 2024): A Binary Sequence Scheme for Designing Substitution Box with Tent-May Chaotic Map.

545) Haseeb Sultan, S/O Ghulam Qumber Khan (Defended on 2024): Exploring Chaos with 2nd Order Cauchy Euler Equation and 2D Chaotic Maps for Robust S-Box Construction.

546) Muhammad Nafees, S/O Muhammad Hidayat (Defended on 2024): Investigating Taylor Series and Chaotic Maps for the Construction of Robust S-Box.

547) Adeela Anwar, S/O Muhammad Anwar (Defended on 2025): Spectral Properties of Tadpole Graph.

548) Rooma Ishaq, S/O Muhammad Ishaq (Defended on 2025): Spectral Properties of Some Classes of Fuzzy Graphs.

549) Nimra Khalil, S/O Khalil Ahmed (Defended on 2025): Topological Analysis of Circular Ladder Fuzzy Graph.

550) Unaisa Tul Zahar, S/O Muhammad Hassan (Defended on 2025): Valency Based Indices of Tadpole Fuzzy Graph.

551) Mohsina Ilyas, S/O Muhammad Ilyas (Defended on 2025): Total Irregular Prime Labeling.

552) Muhammad Waseem, S/O Wahad Bukhsh (Defended on 2025): Study of Group structures in Hash-based digital signatures.

553) Mukhtar Ahmad, S/O Lal Muhammad (Defended on 2025): Aczel Alsina Circular Intuitionistic fuzzy aggregation operators and their applications in decision-making.

554) Kousar Iqbal, S/O Muhammad Iqbal (Defended on 2025): Study of Einstein aggregation operators in the context of Circular Intuitionistic fuzzy set.

555) Sania Kanwal, S/O Khan Ali (Defended on 2025): Mathematical modeling of Hamacher aggregation operators in Pythagorean probabilistic hesitant fuzzy set.

556) Sidra Akram, S/O Muhammad Akram (Defended on 2025): Study of Pythagorean probabilistic hesitant fuzzy decision making incorporated with Frank norms and conorms.

557) Sabir Ali, S/O Arshad Mehmood (Defended on 2026): Applications of Special Unitary Groups in Modern Cryptographic Signature Protocols.

558) Hussan Anmol, S/O Muhammad Anwar Ul Haq (Defended on 2026): Interval-Valued Fermatean Fuzzy Schweizer–Sklar Power Aggregation Operators and Their Application in Multi-Criteria Group Decision-Making.

18.2.9 Dr. Muhammad Salman

559) Tanzeela Kousar (Defended on 2026): Graph-Theoretic Insights into Octane Isomers Using Zagreb Indices.

560) Iqra Tahir (Defended on 2025): Circular Metric Dimension of Some Families of Regular Graphs.

561) Aqsa Siddique (Defended on 2025): Banhatti Index-Based Characterization of Graphyne and Graphdiyne Nanostructures.

562) Sahar Fatima (Defended on 2025): Characterization of Square–Hepta Kink Chains Using Topological Descriptors.

563) Noman Hussain (Defended on 2025): Dominator Coloring of Graphs Having Dimension and Diameter Equal to Two.

564) Fareha Mukhtar (Defended on 2025): Benzoid Structures Analyzed by Some Connectivity Indices.

565) Mehwish Imtiaz (Defended on 2025): Topological Analysis of Honeycomb Cage Networks Using M-Polynomial.

566) Sana Riasat (Defended on 2025): Computation of VE and EV Degree Indices for Silicate-Based Chemical Structures.

567) Saima Ashraf (Defended on 2025): Zagreb Indices Analysis of Zigzag-Edge Coronoid Fused with Starphene Nanotube.

568) Fiyaz Ahmad (Defended on 2024): Performing the Monophonic Eccentric Domination in Circulant Networks with at Most Two Generators.

569) Muhammad Hashir Lodhi (Defended on 2024): The d-Index of Generalized Petersen Graphs $P(2k, k)$ and $P(3k, k)$.

570) Aqsa Amir (Defended on 2024): The Y-Index of Four Hexa Organic Molecular Structures.

571) Inza Azam (Defended on 2024): Computation of VE and EV Degree-Based Topological Indices for a Pentagonal Chain-Like Molecular Graphs.

572) Mahnoor (Defended on 2024): Hosoya Polynomials of Wheel Related Graphs.

573) Muhammad Adnan (Defended on 2024): Sombor Indices of Convex Polytopes.

574) Umar Aslam (Defended on 2024): Computational Analysis of Two Distance-Based Topological Indices of Uniform Linear Hypergraphs.

575) Nuzhat Arooj (Defended on 2024): The Game Chromatic Number of Graphs Derived from Path, Cycle and Star Graphs.

576) Nimra Mehboob (Defended on 2024): The Wiener Index of Six Rotationally Symmetric Convex Plane Graphs.

577) Iram Saleem (Defended on 2024): Leap Zagreb Topological Properties of Two Boron Nanotubes.

578) Muhammad Hamza (Defended on 2024): Performing the Local Metric Identification in Boron Nanotube Lattices.

579) Muneeb ur Rehman (Defended on 2024): Incidence Energy of Graphs Having the Same Dimension and Diameter Equal to Two.

580) Ayesha Batool (Defended on 2024): Gutman Indices of Wheel Related Graphs.

581) Ajmal (Defended on 2023): The Betweenness Centrality of Wheel Related Graphs.

582) Muhammad Imran (Defended on 2023): Distance Degree Technique to Compute VE Degree Topological Properties of Some Convex Polytopes.

583) Muhammad Wasif-ur-Rehman (Defended on 2023): The Computation of Positive Influence Domination Number of Wheel Related Graphs.

584) Arslan Iqbal (Defended on 2023): Compliment Resolvability in Some Convex Polytopes.

585) Muhammad Faiz Rasool (Defended on 2023): Dominating the Vertices in Graphs Having the Same Metric Dimension and Diameter-Two Using Dom-Coloring.

586) Muhammad Shahzad (Defended on 2023): Polynomial Determination of Wheel Related Graphs Based on the Distance Degree Sequence.

587) Muhammad Saeed (Defended on 2023): A Study of Metric Degree Polynomial of Sun Related Graphs.

588) Nadir Abbas (Defended on 2023): Measurement of the Edge Peripherality in Graphs Having the Same Metric Dimension and Diameter-Two.

589) Atyia Shoukat (Defended on 2023): Some VE and EV Degrees Topological Properties of Starphene Structures.

590) Tahoor (Defended on 2023): Strong Resolvability in Benzenoid Tripod and Crystalline Structures.

591) Sheraz Khan (Defended on 2022): Mostar Index of Graphs Associated to Groups.

592) Adnan Mohsin (Defended on 2022): Distance Eccentric Connectivity Index of Certain Convex Polytopes.

593) Abaidullah (Defended on 2022): Bounds on the Monophonic Number of Cayley Graphs Constructed Over $\mathbb{Z}_n$ with Various Generating Sets.

594) Sidra Ghafoor (Defended on 2022): Strong Metric Identification in the Family of Generalized Petersen Graphs $P(2m+1, m)$.

595) Mawra Masood (Defended on 2022): Calculating Zagreb Indices of Coronoid Structures.

596) Sidra Saleem (Defended on 2022): Neighbor Distinguishing in Fullerene Graphs.

597) Muhammad Haris (Defended on 2022): Computing Vertex and Edge Domination-Based Energy and Nullity of Graphs Having the Same Metric Dimension and Diameter Two.

598) Rashna Tanveer (Defended on 2021): Metric Identification of Vertices in Polygonal Cacti.

599) Tausif Ahmad (Defended on 2020): Local Metric Generators in Some Families of Graphs.

600) Tahira Noreen (Defended on 2020): k-Metric Antidimension of Wheel Related Graphs.

601) Rameeza Shafiq (Defended on 2020): Eccentric Topological Properties of Graphs Associated with Two Groups.

602) Nadia Bibi (Defended on 2020): Identifying the Vertices of Generalized Petersen Graphs $P(n, 5)$ Through Distance.

603) Asia Munir (Defended on 2020): Banhatti Topological Properties of Some Chemical Graphs.

604) Tehmina Fatima (Defended on 2020): Study of Some Domination Parameters in Chordal Rings.

605) Muhammad Usman Ghani (Defended on 2020): Study of Resolving Parameters in Graphs Associated with a Finite Dimensional Vector Space.

606) Asma Mushtaq (Defended on 2020): Metric Degree Polynomial of Some Convex Polytopes.

607) Syed Shahzaib (Defended on 2020): Classes of Planar Graphs with Constant Edge Metric Dimension.

608) Muhammad Naqash Arshad (Defended on 2020): Strongly Identifying the Vertices of Rotationally Symmetric Convex Polytopes.

609) Muhammad Babar (Defended on 2020): Misbalance Indices Computation in Three Convex Plane Graphs.

610) Hafiz Muhammad Shah Zaib Nawaz (Defended on 2020): Eccentric Topological Properties of Some Convex Polytopes.

611) Farhana Anjum (Defended on 2020): Polynomial Determined by Metric Degree Sequence Graphs Associated with Algebraic Structures.

612) Rashida Jalal (Defended on 2019): Distance Properties of Linear Dependence Graph of Finite Dimensional Vector Space.

613) Nimra Rasheed (Defended on 2019): Distance Properties of Non-Zero Component Graph of Finite Dimensional Vector Space.

614) Syed Shafqat Abbas (Defended on 2019): Hosoya Molecular Descriptor of the Commuting Graph of the Dihedral Group.

615) Rao Muhammad Junaid Iqbal (Defended on 2019): Hosoya Molecular Descriptor of the Non-Commuting Graph of the Dihedral Group.

18.2.10 Dr. Abdul Shakoor

616) Haseeba Mubeen (Defended on 2026): Nonlinear Integral Inequalities with Applications.

617) Sajid Karim (Defended on 2025): Nonlinear Generalization of Retarded Integral Inequalities and Its Applications.

618) Maryam (Defended on 2025): The Drazin Inverse for Anti-Triangular Block Matrices.

619) Snobia Sanam (Defended on 2025): New Results on the Drazin Inverse for Block Matrix.

620) Mian Muhammad Abdullah (Defended on 2025): The Drazin Inverse of Anti-Triangular Block Matrices.

621) Gull Yasmeen (Defended on 2025): Generalization of Gronwall-Bellman Type Integral Inequalities.

622) Arslan Nasir (Defended on 2025): Some Additive Results on the Drazin Inverse.

623) Muhammad Arsalan Mushtaq (Defended on 2025): Retarded Integral Inequalities and Applications to Nonlinear Integro-Differential Equations.

624) Zainub Fatima (Defended on 2024): Generalization of the Drazin Inverse for Special Block Matrices.

625) Noor Fatima (Defended on 2024): Weakly Singular Volterra Integral Inequalities with Maxima in Two Variables.

626) Abdul Manan (Defended on 2024): Condition Numbers for Rectangular Structured Matrices and Linear Least Squares Problem Involving Kronecker Products.

627) Ammara Yaseen (Defended on 2024): Weakly Singular Integral Inequalities with Applications to Differential Equations.

628) Mohammad Aashiq (Defended on 2024): Delay Nonlinear Dynamic Inequalities of Gronwall-Bellman-Pachpatte-Type on Time Scale.

629) Ifra Kalsoom (Defended on 2024): Refinements of Gronwall-Bellman-Bihari-Type Integral Inequalities and Applications to Differential Equations.

630) Muhammad Ajmal (Defended on 2024): The C-S Inverse for Rectangular Matrices.

631) Sheeba Hassan (Defended on 2024): The Drazin Inverse of Anti-Triangular Block Matrices Over Skew Fields.

632) Tahir Irshad (Defended on 2024): Weak Drazin Inverse for Rectangular Matrices.

633) Rabeet Hussain (Defended on 2024): Generalizations of Nonlinear Retarded Integral Inequalities and Applications.

634) Asma Bibi (Defended on 2024): Retarded Integral Inequalities of Gronwall-Bellman Type.

635) Sadam Hussain (Defended on 2024): Hölder-Type Integral Inequalities with Application to Differential Games.

636) Samra Riaz (Defended on 2023): Group Inverse and Its Applications.

637) Hira Ahmad (Defended on 2022): New Nonlinear Integral Inequalities of Gronwall-Bellman-Pachpatte Type.

638) Tayyaba Younas (Defended on 2022): Generalizations of Certain Nonlinear Integral Inequalities with Applications.

639) Usman Mustafa (Defended on 2021): Generalizations of Gronwall Inequality and Their Applications.

640) Maria Siddique (Defended on 2021): Generalizations of Gronwall-Bellman Type Inequality and Applications in Delay Differential Equations.

641) Hafza Sabahat Saeed (Defended on 2021): Some Generalizations of Gronwall-Bellman-Pachpatte Type Inequality and Applications for Retarded Nonlinear Integro-Differential Equations.

642) Zubaria Khan (Defended on 2021): Some New Integral Inequalities of Gronwall-Bellman-Pachpatte Type.

643) Saba Urooj (Defended on 2020): The Drazin Inverses for Sum of Two Matrices and Block Matrices Over Skew Field.

644) Hafza Riqquia Talib (Defended on 2020): Some New Generalized Retarded Non-Linear Integral Inequalities.

645) Irfan Zahid (Defended on 2020): Generalization of the Drazin Inverse for Modified Matrices.

646) Sana Abdullah (Defended on 2020): Nonlinear Integral Inequalities of Gronwall-Bellman Type and Its Applications.

647) Zarmeena Fareed (Defended on 2020): Retarded Nonlinear Integral Inequalities and Their Applications.

648) Hafz Waleed Bin Khalid (Defended on 2020): The Drazin Inverse of Block Matrix Having Singular Generalized Schur Complement.

649) Muhammad Zahid (Defended on 2020): The DMP Inverses for Block Matrices.

650) Rehana Majeed (Defended on 2019): Representations of Group Inverses and Drazin Inverses for Lower-Anti-Triangular Block Matrix.

651) Rabia Shafi (Defended on 2019): Group Inverse for Lower-Anti Triangular Block Matrices Over Skew Fields.

652) Muzammal Saleem (Defended on 2019): Generalizations of Nonlinear Integral Inequalities and Their Applications.

653) Iqra Naz (Defended on 2019): Representations for the Group Inverse of Some Lower-Anti-Triangular Block Matrices Over Right Ore Domain.

654) Amama Ghafar (Defended on 2019): Some Generalization on Integral Inequalities for Gronwall-Bellman-Pachpatte Type.

655) Samina Arshad (Defended on 2019): Formulas on the Group Inverses for Lower-Anti-Triangular Block Matrix Over Skew Field.

656) Muhammad Ibrahim (Defended on 2019): Drazin Inverse of the Modified Matrices with Minimum Conditions.

657) Sana Mumtaz (Defended on 2019): Some Generalization of Certain Non-Linear Retarded Integral Inequalities for Volterra-Fredholm Integral Equations and Their Applications in Different Fields.

658) Saba Mumtaz (Defended on 2019): Some Generalization of Non-Linear Retarded Integral Inequalities for Gronwall-Bellman-Pachpatte-Bihari Type and Their Applications.

659) Rida Tariq (Defended on 2018): Group Inverses for Block Matrices with an Idempotent Sub-Block.

660) Iqra Ata (Defended on 2018): Expressions for the Drazin Inverse for Sum of Two Matrices Over Skew Fields.

661) Maryam Farooq (Defended on 2018): Formulas on the Drazin Inverse for Sum of Two Matrices Over Skew Fields.

662) Sobia Rasheed (Defended on 2018): Further Expressions on the Drazin Inverse for Block Matrices.

663) Khaliq Mehmood (Defended on 2018): Some New Retarded Non-Linear Integral Inequalities of Gronwall-Bellman-Pachpatte-Bihari Type and Their Applications.

664) Naila Akbar (Defended on 2018): Some Generalizations for Retarded Non-Linear Integral Inequalities of Gronwall-Bellman Type and Its Applications.

665) Shahzad Noor Abbasi (Defended on 2018): Some Improvement in the Results of the Drazin Inverse for Modified Matrices.

666) Hafza Zainab Aslam (Defended on 2018): Some New Non-Linear Retarded Integral Inequalities of Gronwall-Bellman-Pachpatte Type and Their Applications in Retarded Integro-Differential Equations.

667) Misbah Farooq (Defended on 2018): Some Generalization of Nonlinear Integral Inequalities of Gronwall-Bellman Type and Its Applications in Retarded Differential and Integral Equations.

668) Bilal Azeem (Defended on 2018): Some Generalizations of Retarded Non-Linear Integral Inequalities of Gronwall-Bellman-Pachpatte Type and Its Applications in Retarded Differential Equations.

669) Muhammad Zahid Iqbal (Defended on 2017): Some Non-Linear Retarded Integral Inequalities of Gronwall-Bellman Type and Their Applications.

670) Hina Kanwal (Defended on 2017): Several New Retarded Nonlinear Integral Inequalities for Gronwall-Bellman-Pachpatte Type and Its Applications.

671) Afra Arshad (Defended on 2017): Some New Non-Linear Integral Inequalities of Gronwall Type for Retarded Functions with Its Applications.

672) Khizra Charagh (Defended on 2017): Some New Generalized Retarded Non-Linear Integral Inequalities of Gronwall-Bellman Type and Its Application in Integro-Differential Equations.

673) Ijaz Ahmed (Defended on 2017): Some Formulae for the Drazin Inverse of the Sum of Two Matrices and Block Matrices.

674) Aman Ullah Aamir (Defended on 2017): The Results on the Drazin Inverses of the Sum of Two Matrices and Block Matrices.

675) Farah Saleem (Defended on 2017): Improved Results on the Drazin Inverses for the Sum of Two Matrices and Modified Matrices.

676) Sumra Maryam (Defended on 2017): Some New Results on Drazin Inverse of Modified Matrices.

18.2.11 Dr. Muhammad Aqeel Ahmad Khan

677) Saad Baseer (MS-IUB, 2025): Accelerated Regularized Viscosity Algorithm for Convex Bilevel Optimization and Split Feasibility Problems.

678) Rizwan Afzal (MS-IUB, 2025): Linesearch Algorithm for Convex Bilevel Optimization and Split Fixed Point Problems.

679) Waqas Shaheen (MS-IUB, 2025): Iterative Algorithms for Monotone Variational Inclusion Problems.

680) Muhammad Asif (MS-IUB, 2025): Tseng-Type Iterative Algorithms for Split Variational Inclusion Problem.

681) Ali Hassan (MS-IUB, 2025): Optimization Algorithm for Pseudo Equilibrium and Fixed Point Problems in Hilbert Spaces.

682) Fahim Ahmad (MS-IUB, 2025): Convergence Analysis of an Algorithm for Split Feasibility and Fixed Point Problems in Hilbert Spaces.

683) Arif Nawaz (MS-IUB, 2024): Convex Minimization Problem via Hybrid Steepest Descent Algorithm.

684) Muhammad Shoukat (MS-IUB, 2024): Regularized Algorithm for Split Monotone Variational Inclusion and Fixed Point Problems.

685) Laraib Yasmeen (MS-IUB, 2024): Regularized Algorithm for Split Monotone Variational Inclusion Problems.

686) Rashida Majeed (MS-IUB, 2024): Convergence Analysis for Split Monotone Variational Inclusion Problems.

687) Zara Nasir (MS-CUI, 2022): A Hardy Space Analysis of the Riemann Hypothesis. (IMM-Student jointly supervised with Dr. Sahibzada Waleed Noor, University of Campinas, Brazil).

688) Hafiz Majid (MS-CUI, 2022): Iterative Methods for Solving the Split Monotone Variational Inclusion Problems and Fixed Point Problems.

689) Ibrahim Abdulazeez (MS-CUI, 2021): Non-Uniform Invariant Measure for Some Hyperbolic Maps. (IMM-Student).

690) Muhammad Fiaz (MS-CUI, 2021): Analytical Continuation and Natural Domains of Holomorphic Function of One Variable. (IMM-Student jointly supervised with Dr. Daniele Angella and Dr. Francesco Pediconi).

691) Muhammad Jawad Haider (MS-CUI, 2021): Cesaro Means Method for Fixed Point, Equilibrium and Split Null Point Problems in Hilbert Spaces.

692) Hafiz Muhammad Waseem Farooq (MS-CUI, 2021): Cesaro Means Method for Monotone Inclusion, Split Equilibrium and Fixed Point Problems in Hilbert Spaces.

693) Wakeel Ahmad (MS-CUI, 2019): Convergence Analysis of Proximal Point Algorithm in Spaces of Non-Positive Sectional Curvature.

694) Hammad Sarwar (MS-CUI, 2018): Hybrid Projection Algorithm for Generalized Split Equilibrium Problems in Hilbert Spaces.

695) Faisal Mumtaz (MS-CUI, 2018): Convergence Analysis of Hybrid Projection Method for Split Equilibrium Problems in Hilbert Spaces.

696) Abdul Rasheed (MS-CUI, 2017): Iterative Construction for Common Fixed Point Problems in Geodesic Spaces.

18.2.12 Dr. Shafqat Ali

697) Hira Shafiq D/O Muhammad Shafiq-ur Rehman (Roll No: S21BMATH3E0144, 2023): Heat transfer analysis of Rabinowitsch fluid flow of blood through a stenotic blood vessel.

698) Swaira Nasir D/O Nasir Khan (Roll No: S21BMATH3E01028, 2023): Effects of hybrid nanoparticles on the fractional order flow of blood under the influence of body acceleration.

699) Tooba Islam D/O Muhammad Islam Farooq (Roll No: S21BMATH3E01004, 2023): Effect of gravity on the flow of Rabinowitsch fluid through a multi-stenosed blood vessel.

700) Muhammad Rafique S/O Ghulam Rasool (Roll No: S21BMATH3E01121, 2023): Dispersion of solute during blood flow of Rabinowitsch fluid through a diseased blood vessel.

701) Aqsa Rani D/O Muhammad Anees (Roll No: S21BMATH3E01108, 2023): Effects of gravity and porosity on the steady state flow of Casson fluid through a channel.

702) Maham Abid Khan D/O Abid Khan (Roll No: S21BMATH3E01030, 2023): Effects of heat and mass transfer on the slip flow of Casson fluid in a channel.

703) Samia Afzal D/O Muhammad Afzal (Roll No: S21BMATH3E01060, 2023): Slip flow of blood through a tapered blood vessel with stenosis and aneurysm.

704) Habib-ur Rehman S/O Muhammad Bakhsh (Roll No: S21BMATH3E01127, 2023): Heat and mass transfer flow of motile microorganisms and nanoparticles across a stretching sheet.

705) Nosheen Dildar D/O Dildar Hussain (Roll No: S22BMATH3E01115, 2024): Effect of porosity and body acceleration on the two-phase flow of blood through a stenotic blood vessel.

706) Saifullah S/O Abdul Ghaffar Hussain (Roll No: S22BMATH3E01085, 2024): Pulsatile flow of blood through an uneven curved stenotic artery.

707) Faiqa Iqbal D/O Muhammad Iqbal (Roll No: S22BMATH3E01068, 2024): Magnetohydrodynamic flow of fractional Maxwell viscoelastic fluid through a diseased blood vessel.

708) Zainab Jalal D/O Muhammad Jalal Anjum (Roll No: S22BMATH3E01054, 2024): Analysis of tri-hybrid nanoparticle medicated blood flow in an artery.

709) Janat-ul-Fardoos D/O Rana Nasir-ud-Din (Roll No: S22BMATH3E01064, 2024): Hybrid nano-blood flow of Rabinowitsch fluid through stenotic blood vessel.

710) Wajiha Murtaza D/O Iqbal Murtaza (Roll No: F22BMATH3E01066, 2024): Entropy generation in peristaltic motion of hybrid nanofluid in a curved channel.

711) Uzma Kanwal D/O Muhammad Akram Javeed (Roll No: F22BMATH3E01098, 2024): Heat transfer analysis of EMHD peristaltic flow in a curved endoscope.

712) Aasia Batool D/O Liaqat Ali (Roll No: S22BMATH3E01072, 2024): Slip effects on the EMHD flow of hybrid nanofluid through an inclined blood vessel.

713) Anam Mustafa D/O Ghulam Mustafa (Roll No: F22BMATH3E01100, 2024): Entropy generation analysis of non-Newtonian fluid in a symmetric channel with ciliated walls.

714) Aleeza Batool D/O Tariq Bashir (Roll No: S22BMATH3E01098, 2024): Impact of gravity and geometrical structure of stenosis on arterial flow of blood.

715) Fatima Tariq D/O Tariq Mehmod (Roll No: F22BMATH3E01038, 2025): Effectiveness of heat source/sink in the ternary nanofluid flow through an artery.

716) Farah Munawar D/O Munawar Ali (Roll No: S23BMATH3E01057, 2025): Cilia flow of electrically conducting Carreau fluid in a heated channel.

717) Amna Asghar D/O M. Asghar (Roll No: F22BMATH3E01044, 2025): Gyrotactic microorganism swimming in a viscous fluid through a stenotic artery.

718) Ameer Moavia S/O Raheem Buksh Nomani (Roll No: F22BMATH3E01017, 2025): Irreversibility investigation in peristaltic motion of ternary nanofluid in a curved tube.

719) Saba Iram D/O Muhammad Khalil (Roll No: F23BMATH3E01002, 2025): Biomedical analysis of Cattaneo–Christov heat flux model in a curved diseased artery.

720) Tehmina Azeem D/O Azeem Khan (Roll No: F23BMATH3E01036, 2025): Analysis of electro-osmotically induced hybrid nanofluid flow in a porous arterial vessel with irregular stenosis.

721) Tooba Adan D/O Umar Farooq (Roll No: S24BMATH3E01011, 2026): Hemodynamic analysis of blood flow in a stenosed and aneurysmal artery with balloon catheter under slip flow condition.

18.2.13 Dr. Madiha Sana

722) Aimen Hanif D/O Muhammad Hanif (Roll No: S21BMATH3E01052): Study of 2D Rayleigh–Taylor Instability of Incompressible Navier–Stokes–Cahn–Hilliard Model Using Decoupling Approach.

723) Tasneem Altaf D/O Altaf Hussain (Roll No: S21BMATH3E01042): Numerical Study of Rising and Falling of Bubbles with Two-Dimensional Diffuse Interface Model by Pressure Projection Technique.

724) Fida Batool D/O Munawar Hussain (Roll No: S21BMATH3E01022): A Numerical Method for Simulation of Dendritic Growth of Phase-Field Model.

725) Muhammad Tahir S/O Abdul Ghafoor (Roll No: S21BMATH3E01047): Numerical Study of Deformation of Bubbles Using Phase-Field Model with Decoupling Technique.

726) Hafza Ammara Ashraf D/O Muhammad Ashraf (Roll No: S22BMATH3E01042): A Computational Approach to a 3D Coupled Tumor Growth Angiogenesis Model: Avascular to Vascular Shift.

727) Ali Raza S/O Ghulam Hussain (Roll No: S22BMATH3E01011): A Finite Difference WENO Scheme for Two-Phase Incompressible Fluid Flow Using Splitting Approach.

728) Parveen Bibi D/O Sabir Ali (Roll No: S22BMATH3E01049): Numerical Simulation of Multiscale Tumor Growth Model and Neovascularization: A Three-Dimensional Study.

729) Aleena Shahzadi D/O Peer Muhammad (Roll No: S22BMATH3E01111): A Long Duration Rayleigh–Taylor Phenomenon in Two-Phase Flow for Allen–Cahn–Navier–Stokes Model.

730) Muhammad Aqib S/O Muhammad Khalid (Roll No: S22BMATH3E01007): A WENO-3 Finite Difference Approach to Allen–Cahn–Navier–Stokes Model for Multi-Bubble Rising and Falling Phenomenon.

731) Uzma Bilal D/O Muhammad Bilal Sajid (Roll No: S22BMATH3E01030): Numerical Simulation and Energy Dissipation of Mass-Conserving Two-Phase Flow Model with Contrast Density and Viscosity.

732) Aqsa Jabbar D/O Abdul Jabbar (Roll No: F22BMATH3E01024): Numerical Simulation of Two-Phase Flow Model Using Modified Leap-Frog Time Marching Technique.

733) Ayesha Zafar D/O Zafar Iqbal (Roll No: S23BMATH3E01007): An Accurate Operator Splitting Approach for Two-Dimensional Phase-Field Model.

734) Shafqat Naveed S/O Abdul Majeed (Roll No: S23BMATH3E01018): Numerical Simulation of Cahn – Hilliard – Brinkman System for Two-Phase Flow.

735) Natasha Mubeen D/O Nazar Hussain (Roll No: S23BMATH3E01049): A Study of Surface Tension Effects in Application of Artificial Compressibility to Diffuse Interface Model.

736) Shanza Afzal D/O Muhammad Afzal (Roll No: S23BMATH3E01029): Application of Artificial Compressibility for Simulating Diffuse Interface Model of Two-Phase Flow.

18.2.14 Dr. Muhammad Mustahsan

737) Muhammad Asim (2012–14): Finite Element Approximation for Elliptic PDE with Discontinuous Coefficient and Singular Source.

738) Khalid Rasheed (2012–14): Quasi Interpolant for Hierarchical WEB-Spline Over Strongly Nested Domain.

739) Hafiz Muhammad Jawad Kareem Abbasee (2012–14): Finite Element Approximation of Poisson's Equation on Polygonal Domain.

740) Saima Batool (2012–14): Computing Green's Function for Flow in Heterogeneous Composite Media with WEB-Splines.

741) Aysha Hassan (2013–15): Solution of Poisson's Equation with Neumann Boundary Conditions on Mixed Finite Element Space.

742) Madiha Azhar (2013–15): Solution of Rectangular Plate Problem by Using FEM.

743) Muhammad Ajmal (2013–15): Fractal Geometry and Its Analysis.

744) Muhammad Arslan (2013–15): Solution of Higher Order Boundary Value Problem by Trigonometric B-Splines.

745) Sahib Yaar (2013–15): The Method of Lines on Hyperbolic Differential Equation Subject to an Integral Conservation Condition.

746) Nisha Maqsood (2015–16): Stability Analysis for Extended B-Splines.

747) Asma Asghar (2015–16): Approximation in H^1 Space with Weighted B-Spline Type Boundary Conditions.

748) Hafiza Sumaira Naz (2015–16): Finite Element Solution of Structural Problem with Weighted B-Splines.

749) Aysha Kiran (2015–17): B-Spline Collocation Approach to Approximate Non-Linear Differential Equations.

750) Hafiza Aysha Sadiqua (2015–17): Numerical Solution of the Generalized Burger–Huxley Equation by Using B-Splines.

751) Isra Asim (2015–17): B-Spline Collocation of Sine–Gordon Equation.

752) Samman Jafar (2016–18): Ritz–Galerkin Approximation of Nonlinear Burger–Huxley Equation.

753) Hafsa (2016–18): Ritz–Galerkin Approximation of Nonlinear Kuramoto–Sivashinsky Equation.

754) Shumaila Ashad (2016–18): Ritz–Galerkin Approximation of Nonlinear Solitary Wave Equation.

755) Ghulam Nazik (2016–18): Finite Element Collocation Method for Time-Fractional Fourth Order Boundary Value Problem.

756) Muhammad Javeed Iqbal (2017–19): Finite Element Approximation of Nonlinear Flow.

757) Rashid Mehmood (2017–19): Finite Element Model of Pair of Differential Equations by Newton's Method.

758) Muhammad Nadeem (2017–19): Finite Element Simulation of Nonlinear Differential Equation by Newton's Method.

759) Muhammad Shahzad (2017–19): Finite Element Approximation of Viscoelastic Nano Fluid Flow.

760) Adnan Shahid (2017–19): Finite Element Approximation of Nonlinear Differential Equations Demonstrating Casson Flow.

761) Ammara Bibi (2017–19): Finite Element Approximation of a Nonlinear One-Dimensional Boundary Value Problem with Singular Coefficients.

762) Misbah Abid (2017–19): Finite Element Approximation of a Nonlinear One-Dimensional Boundary Value Problem with Trigonometric Coefficients.

763) Khurram Shahzad (2018–20): Variation Iteration Method on One-Dimensional Nonlinear Equation.

764) Saima Shakoor (2020–22): Numerical Solution of Fractional Volterra Model Using B-Spline Collocation Method.

765) Nadia Shabir (2020–22): Numerical Solution of Higher Order Fractional Differential Equation Using B-Spline Collocation Method.

766) Amber Siddiqui (2020–22): Numerical Solution of Fractional Predator–Prey Model.

767) Tahira Saleem (2020–22): Numerical Solution of Second Order Fractional Differential Equation with R-Weighted B-Splines.

768) Usman Javed (2020–22): The B-Spline Collocation Method for Solving Comfortable Initial Value Problem of Singular Types.

769) Junaid Jabbar (2020–22): The B-Spline Collocation Method for Solving Comfortable Initial Value Problem of

Non-Singular Types.

770) Muhammad Farhan (2020–22): Numerical Solution of Second Order Fractional Differential Equation Using Trigonometric B-Splines.

771) Shahid Kareem (2022–24): A Study on Spline Galerkin Approximation with Penalty Using B-Splines.

772) Muhammad Rafiq (Year Not Provided): On Babushka's Error Estimation for Spline Galerkin Approximation.

773) Muhammad Adrees (Year Not Provided): Blocked Hybrid Method for Generalized Burger–Huxley Equation.

774) Muhammad Arfan Aslam (Year Not Provided): Blocked Hybrid Method for Burger–Huxley Equation.

775) Sidra Razzaq (Year Not Provided): Quartic Spline Collocation Method for Second Order Two-Point Boundary Value Problem.

776) Habiba Ali (Year Not Provided): Construction of User Interface of NURB Surfaces Using MATLAB.

777) Rukhsana (Year Not Provided): Application of the B-Spline Collocation Method to a Geometrically Nonlinear Beam Problem.

18.2.15 Dr. Muhammad Shahzad Shabbir

778) Talha Nawab (Roll No: SP18S5LA008): Influence of Slip Velocity on the Cu-Blood Flow in an Inclined Constricted Artery.

779) Kiran Naz Qamar (Roll No: FA18S5LA008): Biomedical Analysis of Nanoparticles on Pulsatile Flow of Blood in an Atherosclerotic Artery.

780) Hafiza Hina Tasneem (Roll No: FA18S5LA015): Pulsating Flow of Blood with Heat and Mass Transfer Through a Porous Constricted Artery.

781) Aqeel Aslam (Roll No: SP20S5LA016): Analysis of Casson Fluid Through a Curved Artery with Titanium Magneto-Nanoparticles.

782) Muhammad Javed (Roll No: SP20S5LA034): Flow of Magneto-Hemorheological Fluid in a Curved Channel Under Atherosclerotic Conditions.

783) Tahsin Nawaz (Roll No: S21BMATH3E01015): Mathematical Modelling on Fractional Order Arterial Flow of Blood Containing Nanoparticles.

784) Muhammad Asif (Roll No: S21BMATH3E01089): Pulsatile Flow of Non-Newtonian Fluid Through a Stenotic Blood Vessel with Electroosmotic Effects.

785) Mohammad (Roll No: S21BMATH3E01118): Effects of Thermophoresis and Brownian Motion on the [Incomplete Title].

786) Mohammad (Roll No: S21BMATH3E01118): Effects of Thermophoresis and Brownian Motion on the Pulsatile Flow of Blood in a Curved Artery.

787) Usman Khalid (Roll No: S21BMATH3E01131): Analysis of Heat Transfer in Electro-Osmotically Driven Flow in a Divergent Micro Channel.

788) Muhammad Khalid (Roll No: S21BMATH3E01119): Effect of Slip Velocity on the Flow of Casson Fluid in an Artery with Various Shapes of Stenosis.

789) Kanwal Hasnain (Roll No: S21BMATH3E01088): Simulation of Jeffery Fluid in a Diseased Blood Vessel Containing Hybrid Nanoparticles with Entropy Generation.

790) Khush Bakht (Roll No: S21BMATH3E01032): Effects of Heat Transfer and Hybrid Nanoparticles on the Unsteady Flow of Blood Through a Curved Artery.

791) Sadia Farman Ali (Roll No: S21BMATH3E01124): Slip Effects on Non-Newtonian Flow of Blood Through a Concentric Ballooned Catheterized Artery.

792) Hira Tanveer (Roll No: S22BMATH3E01127): Comparative Analysis of Temperature-Dependent Viscosity Models in Pulsatile Flow of Blood.

793) Fasiha Ansar (Roll No: S22BMATH3E01034): Electro-Osmotic Flow of Jeffery Fluid in a Constricted Blood Vessel.

794) Mehar-un-Nisa Zafar (Roll No: S22BMATH3E01096): Effect of Shape of Stenosis on the Pulsatile Flow of Jeffery Fluid with Magnetic Nanoparticles.

795) Mehran Hassan (Roll No: S22BMATH3E01081): Unsteady Flow of Sutterby Fluid Through a Blood Vessel Having Time-Variant Stenosis.

796) Abdul Jabbar (Roll No: S22BMATH3E01051): Entropy Generation in the Fractional Non-Newtonian Fluid Through a Stenotic Blood Vessel.

797) Rafiq Jameel Rao (Roll No: S22BMATH3E01035): Rheological and Permeability Analysis of Blood Flow Through Curved Blood Vessel.

798) Muhammad Shafiq (Roll No: S22BMATH3E01126): Nano-Blood Flow of Herschel–Bulkley Fluid Through a Stenosis of Subclavian Artery.

799) Anjashah Ansari (Roll No: F22BMATH3E01079): Entropy Generation in EMHD Flow of Blood with Tri-Nano Additives in a Charged Blood Vessel.

800) Natasha Rani (Roll No: S22BMATH3E01076): Entropy Generation Analysis in Blood Flow Through an Artery with a Blood Clot.

801) Hafiza Sumbal Anees (Roll No: F22BMATH3E01070): Non-Newtonian Flow of Blood Through a Stenotic Elliptical Artery.

802) Muhammad Inzamam Shabir (Roll No: S23BMATH3E01056): Blood Flow of Tangent Hyperbolic Fluid in an Elliptical Cross-Sectional Artery.

803) Maqaddas Perveen (Roll No: S23BMATH3E01015): Non-Newtonian Pulsating Flow of Blood in an Artery with Time-Dependent Stenosis.

18.2.16 Dr. Muhammad Asghar

804) Noorulhuda Bashir (Defended on 08-12-2025, IUB): A New Class of Fractional Differential Operators with Separable Kernel Formation and Mathematical Analysis.

805) Muneeba Kousar (Defended on 08-12-2025, IUB): A Critical Analysis of Fractional Differential Operator Development and Applications.

806) Umair Majeed (Defended on 25-04-2025, IUB): The Role of Fractional Continuity in Splines Geometry.

807) Abu Bakar Javed (Defended on 25-04-2025, IUB): Analyzing Fractional Continuity in Polynomial Splines.

808) Tayyeba Luqman (Defended on 25-04-2025, IUB): Application of the Yang Adomian Decomposition Method in Solving Fractional Order Biological Differential Equations.

809) Ruheela Sajjad (Defended on 25-04-2025, IUB): Solution of Fractional Partial Differential Equations with Jafari

Adomian Decomposition Technique and New Fractional Derivative.

810) Sajida Batool (Defended on 13-12-2024, IUB): The Family of 4-Point Ternary Parametric Subdivision Scheme and Its Applications in Geometric Modelling.

811) Sidra Rehman (Defended on 13-12-2024, IUB): The 8th Degree Splines with Shape-Preserving Fractional Order Continuity.

812) Bushra Shafiq (Defended on 13-12-2024, IUB): Exact Solution of Fractional Differential Equations via Sumudu Transform.

813) Muhammad Tahir (Defended on 13-12-2024, IUB): Dualities and Applications of Anuj Transform in Medical Field.

814) Sana Maqsood (Defended on 04-05-2024, IUB): A New Mittag–Leffler Function and Integral Transforms in Terms of Extended Wright Generalized Hypergeometric Function.

815) Naveed Hussain (Defended on 04-05-2024, IUB): The Shape-Preserving Splines with Fractional Order.

816) Asma Mehmood (Defended on 04-05-2024, IUB): Conversion of Some Well-Known Fractional Derivatives to Partial Fractional Derivatives and Their Applications.

817) Ushma Rasheed (Defended on 04-05-2024, IUB): The Multivariate 6-Parameter Mittag–Leffler Function and Related Fractional Integral Operators.

818) Muhammad Kamil (Defended on 04-05-2024, IUB): A New General Parametric Polynomial for the Family of Quaternary Subdivision Schemes and Its Applications in Geometric Modeling.

819) Muqaddas Irshad (Defended on 04-05-2024, IUB): A New General Formula for the Generation of a Family of Ternary Subdivision Schemes and Its Analysis.

820) Saman Sami (Defended on 04-05-2024, IUB): Extended Form of Mittag–Leffler Function and Statistical Distribution.

821) Samia Akram (Defended on 04-05-2024, IUB): The Generalized Bessel–Maitland Function and Its Relation with Integral Operator and Transforms.

822) Rida Nadeem (Defended on 04-05-2024, IUB): A Numerical Solution of Generalized Advection–Diffusion Equation Based on Cubic B-Spline Basis Functions.

823) Abdul Hameed (Defended on 03-06-2023, IUB): A Parametric Family of Quaternary Subdivision Schemes and Its Convexity Preservation.

824) Talia Khalid (Defended on 03-06-2023, IUB): Numerical Solution of Nonlinear Fredholm Integral Equations Based on Bernstein Polynomial.

825) Khawaja Shamsher (Defended on 03-06-2023, IUB): Artifact Analysis of a New Family of Parametric Ternary Subdivision Schemes.

826) Noman Jaffar (Defended on 03-06-2023, IUB): A Family of Parametric Quaternary Subdivision Schemes and Its Artifact Analysis.

827) Tosique Adil (Defended on 03-06-2023, IUB): Effects of Subdivision Schemes in Music Melodies.

828) Khurram Khalil (Defended on 03-06-2023, IUB): Geometric Modeling Using Non-Stationary Ternary Subdivision Schemes.

829) Muhammad Waseem (Defended on 03-06-2023, IUB): A Family of Non-Stationary Quaternary Subdivision

Schemes with Shape Parameter.

830) Iqra Aslam (Defended on 03-06-2023, IUB): Fractal Analysis of Ternary Parametric Subdivision Scheme.

831) Baber Rehman (Defended on 03-06-2023, IUB): A Family of Quaternary Subdivision Schemes and Its Geometric Properties.

832) Rabia Younis (Defended on 2023, NCBA&E RYK): A Family of 3-Points Quaternary Subdivision Schemes for Geometric Modelling.

833) Fiaz Nawaz (Defended on 2023, NCBA&E RYK): Analysis and Graphic Orientation of 4-Point Ternary Parametric Approximating Subdivision Scheme.

834) Muhammad Raza (Defended on 06-06-2022, IUB): A Parametric Control 6-Point Binary Approximating Subdivision Scheme.

835) Hafiz Syed Tauqir Ahmed (Defended on 06-06-2022, IUB): A 5-Point Binary Subdivision Scheme for Curve Modeling.

836) Anum Asghar (Defended on 12-02-2022, NCBA&E BWP): Shape Preservation of Binary Subdivision Schemes.

837) Amreen Irshad (Defended on 12-02-2022, NCBA&E BWP): Regular Surface Generation by 4-Point Binary Subdivision Scheme.

838) Zunaira Asghar (Defended on 12-02-2022, NCBA&E BWP): Shape Preservation of Quaternary Subdivision Schemes.

839) Iqra Saeed (Defended on 12-02-2022, NCBA&E BWP): Shape Preservation of Ternary Subdivision Schemes.

840) Saba Gull (Defended on 12-02-2022, NCBA&E BWP): A Family of Binary Non-Stationary Subdivision Schemes Based on Lane–Riesenfeld Algorithm.

841) Javaria Bashir (Defended on 12-02-2022, NCBA&E BWP): A Family of Ternary Non-Stationary Subdivision Schemes Based on Lane–Riesenfeld Algorithm.

842) Muhammad Arif Malik (Defended on 12-02-2022, NCBA&E BWP): Construction and Analysis of Binary Parametric Subdivision Schemes Based on Lane–Riesenfeld Algorithm.

843) Ammara Khaliq (Defended on 12-02-2022, NCBA&E BWP): The Tensor Product of 6-Point Binary Subdivision Scheme and Its Analysis.

844) Muhammad Salman Javed (Defended on 16-10-2021, NCBA&E BWP): Geometric Properties of a Family of Parametric Binary Subdivision Schemes and Their Analysis.

845) Sana Muzamil (Defended on 16-10-2021, NCBA&E BWP): Discrete Probability Distributions-Based Subdivision Schemes and Their Analysis.

846) Zunaira Afzal (Defended on 16-10-2021, NCBA&E BWP): Construction and Analysis of Penalized Splines-Based Subdivision Schemes.

847) Tanweer Ahmad (Defended on 16-10-2021, NCBA&E BWP): Construction and Analysis of a Family of Quaternary Subdivision Schemes Based on Laurent Polynomial.

848) Muhammad Javaid Iqbal (Defended on 15-10-2021, NCBA&E BWP): A Family of Parametric Quaternary Subdivision Schemes Generated by Laurent Polynomial.

849) Saif ul Malook (Defended on 15-10-2021, NCBA&E BWP): The Effect of Arity of Ridge Regression-Based Subdivision Schemes on Noisy Data.

850) Muhammad Ahmad Raza (Defended on 15-10-2021, NCBA&E BWP): Cubic Polynomial and Moving Least Squares-Based Subdivision Schemes for Noisy Data.

851) Arfan Mahmood (Defended on 15-10-2021, NCBA&E BWP): The Effect of Complexity of Ridge Regression-Based Subdivision Schemes on Noisy Data.

852) Aftab Hussain (Defended on 15-10-2021, NCBA&E BWP): Designing Multi-Parameter Curves by B-Splines.

853) Mehvish Shabeer (Defended on 15-10-2021, NCBA&E BWP): Construction and Analysis of Non-Stationary Subdivision Schemes Based on Moving Least Squares Method.

854) Maryam Akber (Defended on 15-10-2021, NCBA&E BWP): A Family of Parametric Ternary Subdivision Schemes and Their Analysis.

855) Sobia Latif (Defended on 15-10-2021, NCBA&E BWP): The Effect of Arity of Moving Least Squares-Based Subdivision Schemes on Noisy Data.

856) Deeba Tahir (Defended on 15-10-2021, NCBA&E BWP): The Effect of Complexity of Moving Least Squares-Based Subdivision Schemes on Noisy Data.

857) Ruqia Gull (Defended on 15-10-2021, NCBA&E BWP): Construction and Analysis of Family Ternary Subdivision Schemes Based on Laurent Polynomial.

858) Saba Mobeen (Defended on 16-10-2021, NCBA&E BWP): The Comparison of Subdivision Schemes Based on Discrete Probability Distribution.

859) Misbah Ajmal (Defended on 16-10-2021, NCBA&E BWP): Geometric Modeling Using Ridge Regression-Based Subdivision Schemes.

860) Shujaat Wakeel (Defended on 04-05-2019, NCBA&E BWP): Quadratic Polynomial and Ridge Regression-Based Subdivision Schemes for Refinement of Noisy Data.

861) Shahzad Ali (Defended on 04-05-2019, NCBA&E BWP): Refinement of Noisy Data Using Ridge Regression-Based Subdivision Schemes.

862) Ammara Nosheen (Defended on 04-05-2019, NCBA&E BWP): The Even Point Subdivision Schemes for Noisy Data Based on Moving Least Squares.

863) Muhammad Javed (Defended on 04-05-2019, NCBA&E BWP): Quadratic Polynomial and Moving Least Squares-Based Subdivision Schemes for Noisy Data.

864) Syed Laiq Mehmood (Defended on 04-05-2019, NCBA&E BWP): The Odd Point Subdivision Schemes Based on Moving Least Squares for Noisy Data.

865) Muhammad Waseem (Defended on 04-05-2019, NCBA&E BWP): A Family of Binary Approximating Subdivision Schemes Originated by Probability Distribution.

866) Muhammad Waqas Bashir (Defended on 04-05-2019, NCBA&E BWP): New Family of Univariate Subdivision Schemes Based on Negative Binomial Distribution.

867) Shabnam Shamshad (Defended on 04-05-2019, NCBA&E BWP): New Paradigms for Generation of Subdivision Schemes and Their Analysis.

868) Hafiz Haseeb-ur-Rehman (Defended on 04-05-2019, NCBA&E BWP): The Effect of Negative Binomial Distribution in Subdivision Schemes.

869) Faiza Malik (Defended on 04-05-2019, NCBA&E BWP): A Class of Probability Distribution-Based Subdivision Schemes and Their Analysis.

870) Adil Hussain (Defended on 12-08-2018, NCBA&E BWP): A Family of Curve and Surface Subdivision Schemes with Tension Parameter.

871) Sumaira Razzaq (Defended on 12-08-2018, NCBA&E BWP): A Family of Univariate and Bivariate Binary Subdivision Schemes Based on Probability Distribution.

872) Iqra Iqbal (Defended on 12-08-2018, NCBA&E BWP): A Class of Univariate and Bivariate Subdivision Schemes Based on Probability Distribution.

873) Naveen Afzal (Defended on 12-08-2018, NCBA&E BWP): Subdivision Schemes for Curves and Surfaces Modeling.

874) Hafiz Badar-ud-Din (Defended on 12-08-2018, NCBA&E BWP): Generation of Subdivision Schemes for Curves and Surfaces.

875) Nosheen Fayyaz (Defended on 12-08-2018, NCBA&E BWP): Generation of Univariate and Bivariate Subdivision Schemes for Modeling.

876) Ayesha Afzal (Defended on 12-08-2018, NCBA&E BWP): Integer-Point Ternary Approximating Subdivision Schemes.

877) Muhammad Aurangzeb (Defended on 12-08-2018, NCBA&E BWP): Design Multi-Parameter Ternary Subdivision Schemes.

878) Muhammad Imran Hassan (Defended on 12-08-2018, NCBA&E BWP): Ternary Subdivision Schemes with High Continuity.

879) Muhammad Ahsan Saeed (Defended on 12-08-2018, NCBA&E BWP): Tensor Product of 4-Point Binary Subdivision Scheme with Parameter.

880) Muhammad Nasim (Defended on 12-08-2018, NCBA&E BWP): Ternary Approximating Subdivision Schemes.

881) Arzoo Qamar (Defended on 12-08-2018, NCBA&E BWP): A Unified Quaternary Subdivision Schemes.

882) Hina Aleem (Defended on 10-08-2017, NCBA&E RYK): Construction and Analysis of 4-Point Quaternary Subdivision Scheme.

883) Zainab Iqbal (Defended on 10-08-2017, NCBA&E RYK): A 5-Point Quaternary Subdivision Scheme with Its Applications.

884) Uma Aeman (Defended on 10-08-2017, NCBA&E BWP): Construction and Analysis of 6-Point Parametric Subdivision Scheme.

885) Rabia Ahsan (Defended on 10-08-2017, NCBA&E BWP): Analysis of 7-Point Quaternary Approximating Subdivision Scheme.

886) Sadia Irshad (Defended on 10-08-2017, NCBA&E BWP): Analysis of Family of 3-Point Ternary Approximating Subdivision Schemes.

887) Muhammad Adnan Faiz (Defended on 10-08-2017, NCBA&E BWP): A Family of 4-Point Ternary Approximating Subdivision Schemes.

888) Rizwana Shahzadi (Defended on 10-08-2017, NCBA&E BWP): A Family of 5-Point Ternary Approximating Subdivision Schemes.

889) Uzair Ahmed Khan (Defended on 10-08-2017, NCBA&E BWP): Analysis of 6-Point Ternary Approximating Subdivision Scheme.

890) Aneela Rasheed (Defended on 10-08-2017, NCBA&E BWP): Convexity Preservation of 4-Point Binary Parametric Subdivision Scheme.

891) Abdul Sattar (Defended on 10-08-2017, NCBA&E BWP): Analysis of Family of 4-Point Binary Subdivision Schemes.

892) Shabana Mukhtar (Defended on 10-08-2017, NCBA&E BWP): Convexity Preservation of 4-Point Ternary Interpolating Subdivision Scheme with Tension Parameter.

893) Saba Naz Tufail (Defended on 10-08-2017, NCBA&E BWP): Convexity Preservation of 5-Point Ternary Approximating Subdivision Scheme with Free Parameter.

894) Mohammad Azar (Defended on 10-08-2017, NCBA&E BWP): Convexity Preservation of 3-Point Binary Approximating Subdivision Scheme with Tension Parameter.

895) Abdul Wadood Shakir (Defended on 10-08-2017, NCBA&E BWP): A Family of Binary Subdivision Schemes for Noisy Data Based on Kernel Smoother.

896) Muhammad Javed Iqbal (Defended on 10-08-2017, NCBA&E BWP): A Family of (2n+1)-Point Subdivision Schemes Based on Kernel Smoother.

897) Zobia Anwar (Defended on 10-08-2017, NCBA&E BWP): A Family of 4-Point Quaternary Subdivision Schemes.

898) Waqas Muneer (Defended on 10-08-2017, NCBA&E BWP): A Family of Non-Stationary Binary m-Point Approximating Subdivision Schemes.

899) Muhammad Abbas Haider (Defended on 10-08-2017, NCBA&E BWP): A Family of 2n-Point Subdivision Schemes Based on Kernel Smoother.

900) Muhammad Shahzad Qamar (Defended on 10-08-2017, NCBA&E BWP): A Family of Binary Subdivision Schemes Based on Kernel Smoother.

901) Aisha Anum (Defended on 12-11-2016, NCBA&E BWP): Analysis of 4-Point Binary Subdivision Scheme with Tension Parameter.

902) Sadaf Anwar (Defended on 12-11-2016, NCBA&E BWP): A Family of 3-Point Binary Approximating Subdivision Scheme Based on Probability Distribution.

903) Madiha Naveed (Defended on 12-11-2016, NCBA&E BWP): Construction of 6-Point Binary Approximating Subdivision Scheme Based on Probability Distribution.

904) Muhammad Javed Iqbal (Defended on 12-11-2016, NCBA&E BWP): A Family of 5-Point Binary Approximating Subdivision Schemes Based on Probability Distribution.

905) Syed Tahir Nafees Zaidi (Defended on 12-11-2016, NCBA&E BWP): A Family of 4-Point Binary Approximating Subdivision Scheme Based on Probability Distribution.

18.2.17 Dr. Muhammad Yousuf Rafiq

906) Anum Fatima (2024–2026): Sinusoidal Motion of Casson Fluid Within a Vertical Tube Under Lubrication Approximation. The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

907) Nimra Javed (2023–2025): Analysis of a Non-Newtonian Fluid Flow in a Uniform Square Duct with Radiative Heat Transfer. The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

908) Aleesha Javed (2023–2025): Advective Flow of Hybrid Nanofluid Between Hydrothermal Slippery Walls. The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

909) Muhammad Younas (2022–2024): Analysis of Blood Flow in Stenosed Artery for Rabinowitsch Fluid Model. The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

910) Sidra Hanid (2022–2024): Numerical Study of Modified Buongiorno's Model for Nanofluid Adjacent to a Thin Needle. The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

911) Sharia Bashir (2022–2024): Flow of Electro-Osmotically Jeffrey Fluid Through an Axisymmetric Tube. The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

912) Sana Nazir (2022–2024): Metachronal Wave Phenomena of Magnetized Carreau Fluid Model in a Channel. The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

913) Muhammad Naeem (2022–2024): Double-Diffusive Convective Flow of Ferrofluid Over a Heated Rotating Disk. The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

914) Ayesha Sabeen (2022–2024): Stability Analysis of Hybrid Nanofluid on a Stretchable Rotating Disk with Convective Boundary Conditions. The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

915) Ghulam Mustafa (2022–2024): Flow and Dissipative Heat Transfer of a Casson Fluid Over a Flat Surface Bounded by Two Side Walls. The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

916) Salita Yaqoob (2022–2024): Pressure Driven Flow of Non-Newtonian Fluid in a Symmetric Tapered Channel with Entropy Generation. The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

917) Saira Taj (2023–2025): Thermal Radiation and Slip Effects in Powell–Eyring Nanofluid Flow Past an Inclined Cylinder. The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

918) Salman Javed (2023–2025): Soret and Dufour Effects on the Time-Dependent Flow of Viscous Fluid in a Channel. The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

919) Rashida Bashir (2023–2025): Brownian Motion of Non-Newtonian Fluid Over an Infinite Porous Disk with Arrhenius Energy. The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

18.2.18 Dr. Muhammad Nadeem

920) Maria Iqbal D/O Muhammad Iqbal: Various Formulation of the Energies of Jahangir Graph. Department of Mathematics, IUB.

921) Alia Ijaz D/O Muhammad Ijaz: On Distance Anti-Magic Labeling of Planar Graphs. Department of Mathematics, IUB.

922) Muhammad Aamir S/O Falak Sher: The Study of Rainbow Vertex Connection Number of Graphs. Department of Mathematics, IUB.

923) Miffra Saleem D/O Muhammad Saleem: Total Irregularity Strength of Cycle Related Graphs. Department of Mathematics, IUB.

924) Rukhsar Fatima D/O Ali Javed: Chemical Graphs of Special Type Delving Through Valency-Based Topological Indices. Department of Mathematics, IUB.

925) Muhammad Saqib S/O Muhammad Azam: Chromatic Polynomial of Some Cycle Related Fuzzy Graphs. Department of Mathematics, IUB.

926) Muhammad Sohail S/O Ghulam Shabbir: Vertex Prime Labeling of Some Classes of Planar Graphs. Department of Mathematics, IUB.

927) Junaid Nawaz S/O Haji Rab Nawaz: Sombor Indices of Certain Molecular Graphs. Department of Mathematics, IUB.

928) Sobia Akhtar D/O Muhammad Akhtar: 3-Total Edge Product Cordial Labeling for Certain Circular Graphs. Department of Mathematics, IUB.

929) Aqsa Kanwal D/O Zulfiqar Ali: Relation Between Total Irregular Labeling and Antimagic Labeling of Graphs. Department of Mathematics, IUB.

930) Fareeha Zafar D/O Zafar Iqbal: Universal Distance and Universal Distance Spectrum of Jahangir's Graph. Department of Mathematics, IUB.

931) Sidra Nazar D/O Nazar Hussain: Degree-Based Topological Indices for Certain Classes of Inverse Fuzzy Graphs. Department of Mathematics, IUB.

932) Allah Ditta: Irregularity Total Strength of Cycle Related Graphs. NCBA&E Bahawalpur Campus.

933) Muhammad Umair: On Total Irregularity Strength of Some Convex Polytope Graphs with Pendent Edges. NCBA&E Bahawalpur Campus.

934) Muhammad Farooq: Computing the Total Strength of Some Regular Graphs. NCBA&E Bahawalpur Campus.

935) Muhammad Shakeel: On Total Irregularity Strength of Some Convex Polytope Graphs. NCBA&E Bahawalpur Campus.

936) Muhammad Ali Akbar: Polynomial-Based Topological Indices for Certain Molecular Graphs. NCBA&E Bahawalpur Campus.

937) Muhammad Adeel: Some Counting Polynomials and Their Related Indices for Certain 2D Structures. NCBA&E Bahawalpur Campus.

938) Amjad Akram: Topological Polynomial and Valency-Based Molecular Descriptors for Certain Molecular Graphs. NCBA&E Bahawalpur Campus.

939) Muhammad Shahid: Counting Polynomials and Polynomial-Based Topological Indices for Certain Chemical Structures. NCBA&E Bahawalpur Campus.

940) Amina Shoukat: Total Vertex Antimagic Labeling of Some Prism Type Graphs. NCBA&E Bahawalpur Campus.

941) Raj Moohan Murrari: Polynomial-Based Molecular Descriptor on Rhombic Benzenoid Graph and Conrnoid System. NCBA&E Bahawalpur Campus.

942) Tanzeela Rafique: Anti-Magic Labeling of Certain Classes of Planar Graphs. NCBA&E Bahawalpur Campus.

18.2.19 Dr. Ayesha Mahmood

943) Saba Zafar (Spring 2024–2026, Defended on 19-05-2026): A Bipolar Fuzzy-Based Multi-Criteria Evaluation Framework for Assessing Digital Transformation Preparedness in Higher Education. Department of Mathematics, IUB.

18.2.20 Dr. Muhammad Shahbaz

944) Some Generalization of Generalized Type of Homeomorphism, Compactness and Connectedness in Topological Spaces (2023). Department of Mathematics, IUB.

945) Common Fixed Point Theorems for Enriched Jungck Contraction Satisfying Compatible Type A and Asymptotically Regular Conditions in Banach Spaces (2023). Department of Mathematics, IUB.

946) Some Fixed Point Theorems of Almost Picard Operator in Compact Metric Space (2023). Department of Mathematics, IUB.

947) Designing of Nonlinear Components of Block Cipher Over Power Associative Loops (2023). Department of Mathematics, IUB.

948) Some New Types of Mappings in Topological Spaces (2024). Department of Mathematics, IUB.

949) On Fuzzy Weakly Semi-Closed Sets and Open Sets in Fuzzy Topological Spaces (2024). Department of Mathematics, IUB.

950) Time Monitoring and Control of Chemical Reactions Using Low-Dimensional Manifolds (2024). Department of Mathematics, IUB.

951) Some Contraction-Type Mappings in Graphical Metric Spaces (2024). Department of Mathematics, IUB.

952) Optimization of Energy Efficiency in Chemical Processes Using Low-Dimensional Manifolds (2025). Department of Mathematics, IUB.

953) On Weakly Semi-Closed Sets in Generalized Topological Space (2025). Department of Mathematics, IUB.

954) Innovative Notions of Open Set and Their Applications in Neutrosophic Generalized Topological Space (2025). Department of Mathematics, IUB.

955) Generalized Quadripartitioned Sets and Their Associated Open Set Structures in Generalized Topological Space (2025). Department of Mathematics, IUB.

956) Innovative Notions of Open Sets in Soft Generalized Primal Topological Space (2025). Department of Mathematics, IUB.

957) Fixed Point Theorems of Hardy–Rogers Contraction in b-Metric Space Equipped with Graph (2025). Department of Mathematics, IUB.

958) Generalized Fixed Point Theorems of Ćirić Contractions in Graph-Based b-Metric Space (2025). Department of Mathematics, IUB.

959) Some New Insights for Reduced-Order Modeling for Time-Sensitive Chemical Process Optimization (2025). Department of Mathematics, IUB.

960) The Study of Real-Time Control of Non-Linear Chemical Kinetics via Dimensionality Reduction Techniques (2025). Department of Mathematics, IUB.

18.3 MPhil/MS Theses: Institute of Physics: Baghdad-ul-Jadeed Campus

18.3.1 Prof. Dr. Saeed Ahmad

961) Sobia Amjad: "Dosimetric Consideration of Scattering Factor for Absorbed Dose Calculation in Radiotherapy." 2009–2011. IUB.

962) Nazia Farooq: "Role of Magnetic Resonance Angiography in the Management of Brain Hemorrhage." 2009–2011. IUB.

963) Fida Hussain: "Volumetric Differences in Gross Tumor Volume Between CT–MRI Fusion and CT Images." 2010–2012. IUB.

964) Muhammad Akram: "Contra Lateral Breast Dose Using Physical and Enhanced Dynamic Wedges in Radiotherapy Treatment Planning Systems." 2010–2012. IUB.

965) Muhammad Ramzan: "Dose Distribution in Planning Target Volume Using Physical and Enhanced Dynamic Wedges for Rectum Patients." 2010–2012. IUB.

966) Samiya Basharat: "A Numerical Approach to Enhance the Efficiency of Radiation Therapy Dose Measurements of Gamma Rays." 2010–2012. IUB.

967) Qurat-ul-ain: "Verification of Absorbed Radiation Dose for X-Rays Through Lagrange's Interpolation Method." 2010–2012. IUB.

968) Muhammad Adeel: "Evaluation of 5 and 7 Fields in Intensity Modulated Radiotherapy for Co-Planar and Non-Co-Planar Field Settings." 2010–2012. IUB.

969) Atia Atiq: "Computational Tool for Efficient Determination of Tissue Air Ratio (TAR) in Gamma Beam Radiotherapy." 2011–2013. IUB.

970) Maria Atiq: "Efficient Technique for Calculation of Tissue Maximum Ratio (TMR) in Radiotherapy." 2011–2013. IUB.

971) Ali Waqas Shah: "Instantaneous Evaluation of Radiation Exposure in a Cancer Hospital." 2011–2013. IUB.

972) Ateeq-ur-Rehman: "Suitability Considerations of Various Applicators for Gynaecological Malignancies." 2011–2013. IUB.

973) Amir Ali Shahzad: "Intensity Modulated Radiation Therapy with Dynamic and Static Multileaf Collimators for Prostate Cancer." 2012–2014. IUB.

974) Hafsa Mumtaz: "X-Ray Attenuation Characteristics of Various Tissue Equivalent Gels." 2012–2014. IUB.

975) Sanober Jamil: "Evaluation of Depth Dose Characteristics of High Energy Radiation Beams." 2012–2014. IUB.

976) Qaisar Abbas: "Comparison of Multiple Static Segment and Sliding Window Intensity Modulated Radiotherapy Using MapCheck2 Software." 2012–2014. IUB.

977) Muhammad Imran: "Evaluation of External Beam Radiotherapy Dosimetry Using Different Ion Chambers." 2012–2014. IUB.

978) Muhammad Asif: "Comparison of In-Vivo Dosimetry of Breast Cancer Using Thermoluminescent Dosimeters and Gafchromic EBT2 Film." 2012–2014. IUB.

979) Faisal Hanif: "Quality Assurance of Intensity Modulated Radiation Therapy Using Solid Water and Acrylic Phantom." 2013–2015. IUB.

980) Hina Nisar: "Quality Assurance of Physical Wedges and Enhanced Dynamic Wedges for Dose Rate of Photon Beam." 2013–2015. IUB.

981) Farah Naz: "Dose Verification for Intensity Modulated Radiation Therapy Using Gafchromic EBT3 Film." 2013–2015. IUB.

982) Syeda Arooj Ali: "Evaluation of Photon Beam Characteristics Using Gafchromic EBT3 Film." 2013–2015. IUB.

983) Saima Altaf: "Comparison of MapCheck2, EPID and Gafchromic® EBT3 Film for Quality Assurance of IMRT Treatment Planning." 2013–2015. IUB.

984) Qurat-ul-Ain: "Evaluation of Variance in Different Factors of Quantitative Nuclear Medicine." 2013–2015. IUB.

985) Muhammad Arif Khan: "Dose Analysis of Co-60 Beam Profile at Various Depths Using Diode Dosimetry System." 2013–2015. IUB.

986) Malik Younas Imran: "Dosimetric Verification of Surface Applicators Used with High Dose Rate ^{192}Ir Brachytherapy Source." 2013–2015. IUB.

987) Asmat Ullah: "Compensation of Discontinuity in Treatment Fractions of Radiation Therapy." 2013–2015. Allama Iqbal Open University, Islamabad.

988) Syed Hasnain Raza Shah: "Evaluation of Tissue Equivalent Materials for Radiation Therapy." 2014–2016. IUB.

989) Syed Mudassir Mahboob Zaidi: "Dose Conformity in Esophagus Cancer by Three-Dimensional Conformal Radiotherapy and Intensity Modulated Radiation Therapy." 2014–2016. IUB.

990) Nauman Altaf: "Estimation and Measurement of Lens of the Eye Dose for Radiochemists & Nursing Staff Dealing with FDG (F-18)." 2014–2016. IUB.

991) Sidra Saif: "Assessment of Radiation Dose in Normal Tissues During High Dose Rate (HDR) Brachytherapy." 2014–2016. IUB.

992) Aman Rafiq: "Quality Assurance of Intensity Modulated Radiation Therapy for Brain Tumor by Gamma Analysis." 2014–2016. IUB.

993) Asma Bashir: "Effectiveness of Lead Aprons Used for ^{99m}Tc, ^{131}I, ^{18}F, ^{137}Cs, ^{57}Co, and ^{133}Ba in Nuclear Medicine." 2014–2016. IUB.

994) Iqra Almas: "Quality Assurance of Intensity Modulated Radiation Therapy of Prostate Cancer by Using Gamma Analysis." 2014–2016. IUB.

995) Madiha Khalid: "Estimation of Effective Dose from Hybrid SPECT–CT Procedures." 2014–2016. IUB.

996) Ahmad Atta Qureshi: "Dosimetric and Volumetric Evaluation of Intensity Modulated Radiation Therapy for Head and Neck Cancer." 2015–2017. IUB.

997) Abdul Rehman: "Dosimetric Evaluation of Gafchromic EBT3 Film for External Beam Radiotherapy." 2015–2017. IUB.

998) Maryam Javed: "Effect of Scattering on Absorbed Radiation Dose." 2015–2017. IUB.

999) Majid Ali: "Quality Assurance of Physical Wedges Using Dosimetric Properties in External Beam Radiotherapy." 2015–2017. IUB.

1000) Maham Rahim: "Evaluation of Dosimetric Properties of Clinical Photon Beams." 2015–2017. IUB.

1001) Nusara Khan: "Evaluation of Absorbed Radiation Dose for Extended Source to Surface Distance (SSD)." 2015–2017. IUB.

1002) Rafia Jafri: "Evaluation of Attenuation Characteristics of Cobalt-60 Gamma Rays." 2015–2017. Allama Iqbal Open University, Islamabad.

1003) Naveed Ashraf: "Dosimetric Comparison for External Beam Radiotherapy Using Different Parameters." 2015–2017. IUB.

1004) Muhammad Mehran: "Evaluation of Treatment Plans of Head and Neck Cancer Using Intensity Modulated Radiation Therapy (IMRT)." 2016–2018. IUB.

1005) Hafiz Akif Munir: "Dosimetric Verification of Treatment Plan for Pelvic Cancer Using Intensity Modulated Radiation Therapy (IMRT)." 2016–2018. IUB.

1006) Esha Basit: "Evaluation of Treatment Planning for Prostate Cancer in Intensity Modulated Radiation Therapy (IMRT)." 2016–2018. IUB.

1007) Inam ur Rehman: "The Role of 160 Slice High Resolution Computed Tomography (HRCT) for the Diagnosis of Pulmonary Tuberculosis." 2016–2018. IUB.

1008) Ulfat Rasool: "Radiation Dose Distribution Using Tissue Equivalent Gels." 2016–2018. IUB.

1009) Majid Ali Akbar: "Applications of Gel Dosimeters in Clinical Radiation Therapy." 2016–2018. IUB.

1010) Syeda Sundas Gillani: "Quality Factor Variation with Beam Quality for Different Chambers." 2016–2018. IUB.

1011) Urooj Qadir: "Dosimetric Characteristics of Clinical Electron Beams for Radiation Therapy." 2016–2018. IUB.

1012) Majid Ali Durrani: "Evaluation of Percent Depth Dose and Tissue Maximum Ratio for Cobalt-60 Gamma Beam." 2016–2018. Allama Iqbal Open University, Islamabad.

1013) Abdul Rehman: "Dosimetric Characteristics of Mega Voltage Electron Beams." 2016–2018. Allama Iqbal Open University, Islamabad.

1014) Suria Kausar: "Depth Dose Characteristics of Cobalt-60 Gamma Beam in External Beam Radiotherapy." 2016–2018. Allama Iqbal Open University, Islamabad.

1015) Humera Akbar: "Evaluation of Central Axis Depth Dose in Photon Beam Radiotherapy." 2016–2018. Allama Iqbal Open University, Islamabad.

1016) Muzamil Warsi: "Evaluation of Mass Energy Absorption Coefficient for Various Gases." 2016–2018. IUB.

1017) Nabila Shahbaz: "Evaluation of Mass Energy Absorption Coefficient for Various Metals." 2016–2018. IUB.

1018) Maryam Khan: "Evaluation of Tissue Maximum Ratios and Scatter Maximum Ratios for Cobalt-60 Gamma Beam." 2016–2018. IUB.

1019) Tabinda Mushtaq: "Photon Beam Attenuation and Specific Absorbed Fraction of Photon Energy in Various Target Tissues." 2016–2018. IUB.

1020) Muhammad Usman Mustafa: "Dosimetric Characteristics of Physical Wedges in Photon Beams." 2017–2019. IUB.

1021) Ayesha Akhlaq: "Dosimetric Characteristics of Electron Beams Using Linear Accelerator." 2017–2019. IUB.

1022) Sana Salah-ud-Din: "Dose Profile Characteristics of Photon Beams Using True Beam Linear Accelerator." 2017–2019. IUB.

1023) Khush Bakht Noon: "Comparison of Photon Beam with FFF Mode Photon Beam in True Beam Linear Accelerator." 2017–2019. IUB.

1024) Mamona Aslam: "Depth Dose Characteristics of Photon Beam Using True Beam Linear Accelerator." 2017–2019. IUB.

1025) Aqsa Saeed: "Dosimetric Measurements and Attenuation Characteristics of Megavoltage Radiation Therapy." 2018–2020 (Spring). IUB.

1026) Samina Tariq: "Dose Distribution Modification in High Energy Photon Beam Radiotherapy." 2018–2020 (Fall). IUB.

1027) Tayyaba Tariq: "Evaluation of Attenuation Characteristics of High Energy Photon Beam in Various Materials." 2018–2020 (Fall). IUB.

1028) Mussarat Iqbal: "Efficacy of Volumetric Modulated Arc Therapy (VMAT) Treatment Plans for Prostate Cancer." 2018–2020 (Spring). IUB.

1029) Muhammad Abid: "Estimation of Dose Rate Pattern for Iodine-131 Therapy." 2018–2020 (Spring). IUB.

1030) Muhammad Adnan: "Effectiveness of Dosimetric Factors in Electron Beam Radiotherapy." 2018–2020 (Spring).

IUB.

1031) Sumbul Fyaz: "Surface and Depth Effects of High Energy X-Rays for Various Field Settings." 2018–2020 (Fall). IUB.

1032) Anam Syed: "Treatment Planning and Dose Calculation Parameters for Modern Radiation Therapy." 2018–2020 (Fall). IUB.

1033) Syeda Zoha Rizwi: "Photoelectric Absorption of High Energy Photon Beams – Radiotherapy Perspective." 2019–2021 (Fall). IUB.

1034) Tania Shahid: "Pair Production in Nuclear and Electron Field for Mega-Voltage Radiation." 2019–2021 (Fall). IUB.

1035) Noor Fatima: "Impact of Mass Attenuation Coefficient and Density in Photon Interactions with Matter." 2019–2021 (Fall). IUB.

1036) Shamsa Kanwal: "Evaluation of Scatter Maximum Ratio for Circular Fields in Cobalt-60 Gamma Radiations." 2019–2021 (Fall). IUB.

1037) Anam Ishaq: "Coherent Scattering and Incoherent Scattering of Mega-Voltage Radiation." 2019–2021 (Fall). IUB.

1038) Mahwish Lashari: "Photon Mass Attenuation and Mass Energy-Absorption Coefficients for Various Materials." 2019–2021 (Fall). IUB.

1039) Mahe Mubeen: "Comparison of Dosimetric Characteristics of Photon and Electron Beams in Modern Radiation Therapy." 2019–2021 (Fall). IUB.

1040) Qurat-ul-Ain: "X-Rays Mass Attenuation in Bone, Muscle and Water." 2019–2021 (Fall). IUB.

1041) Ayesha Yousuf: "Evaluation of Scatter Maximum Ratio for Circular Fields in Photon Beam Radiotherapy." 2019–2021 (Fall). IUB.

1042) Maryam Zafar: "Specific Absorbed Fraction in High Energy X-Rays with Anatomical Variations." 2020–2022 (Fall). IUB.

1043) Ayesha Javed: "Evaluation of Attenuation in Mega Voltage Photon Beams Through Specific Absorbed Fraction." 2019–2021 (Fall). IUB.

1044) Usama Rashid: "Preparation and Characterization of Iron Nanoparticles of Tea Leaves Extract Using Green Biosynthesis." 2020–2022 (Fall). IUB.

1045) Sagheer Ahmad: "Green Biosynthesis and Characterization of Metal Oxide Nanoparticles Using Onion Peels." 2020–2022 (Fall). IUB.

1046) Maryam Arshad: "Analysis of Tissue Maximum Ratio and Scatter Maximum Ratio for 10 MV Photon Beam." 2020–2022 (Fall). IUB.

1047) Sidra Nasir: "Analysis of Tissue Maximum Ratio and Percent Depth Dose for Cobalt-60 Gamma Beam." 2020–2022 (Fall). IUB.

1048) Bushra Meraj: "Exploration of Tissue Maximum Ratio for 4 MV X-Rays for Dosimetric Applications." 2020–2022 (Fall). IUB.

1049) Tahreem Qadir Abbasi: "Evaluation of Tissue Maximum Ratio and Percent Depth Dose for 10 MV X-Rays." 2020–2022 (Fall). IUB.

1050) Niaz Ahmad: "Green Synthesis, Characterization and Applications of Iron Nanoparticles Using Moringa Oleifera Leaves Extraction." 2020–2022 (Fall). IUB.

1051) Laraib Habib: "Iron Nanoparticles Production Using Mint Leaves and Evaluation of Their Diverse Applications." 2020–2022 (Fall). IUB.

1052) Amina Azhar: "Green Biosynthesis, Characterization and Applications of Metal Oxide Nanoparticles Using Conocarpus Powder." 2020–2022 (Fall). IUB.

1053) Tabeer Hafeez: "Modification in Percent Depth Dose of 10 MV X-Rays for Extended Source to Surface Distances." 2020–2022 (Fall). IUB.

1054) Abdul Hannan: "Percent Depth Dose Correction Due to Contour Irregularities Using Source to Surface Distance (SSD)." 2020–2022 (Fall). IUB.

1055) Maham Fatima: "Percent Depth Dose Correction Due to Contour Irregularities Using Tissue Air Ratio Method." 2020–2022 (Fall). IUB.

1056) Muhammad Adeel: "Interaction of Mega Voltage Photon Beam with Transition Metals." 2021–2023 (Spring). IUB.

1057) Saif Ullah: "Photoelectric Absorption for X-Rays in Actinide Series Transition Metals." 2021–2023 (Spring). IUB.

1058) Aalia Javed: "Evaluation of Photon Attenuation in Lanthanide Series Transition Metals." 2021–2023 (Spring). IUB.

1059) Amara Fatima: "Photoelectric Absorption for High Energy X-Rays in Alkali Metals." 2021–2023 (Spring). IUB.

1060) Ambreen Gull: "Coherent and Incoherent Scattering for High Energy X-Rays in Alkali Metals." 2021–2023 (Spring). IUB.

1061) Ayesha Ambreen: "Evaluation of Pair Production in Alkali Metals for High Energy Photon Beam." 2021–2023 (Spring). IUB.

1062) Fareeha Shabbir: "Evaluation of Total Attenuation Characteristics of Alkali Metals in Mega Voltage Range of Photon Beam." 2021–2023 (Spring). IUB.

1063) Javaria Khan: "Coherent and Incoherent Scattering for Low Energy X-Rays in Alkali Metals." 2021–2023 (Spring). IUB.

1064) Majid Ali: "Evaluation of Total Attenuation Characteristics of Transition Metals in Mega Voltage Range of Photon Beam." 2021–2023 (Spring). IUB.

1065) Rabia Saleem Faizi: "Pair Production in Actinide Series Transition Metals for High Energy X-Rays." 2021–2023 (Spring). IUB.

1066) Shagufta Saleem Faizi: "Pair Production in Reactive Non-Metals for Mega Voltage Photon Beams." 2021–2023 (Spring). IUB.

1067) Sana Iqbal: "Evaluation of Attenuation of Photon in Semiconductor Materials." 2021–2023 (Spring). IUB.

1068) Aqsa Habib: "Geometric Considerations for Field Settings and Field Separation in Radiation Therapy Treatment Planning." 2021–2023 (Fall). IUB.

1069) Arooj Shaheen: "Depth Dose Calculations for Electron Beams, for Air Gap Corrections and Beam Obliquity." 2021–2023 (Fall). IUB.

1070) Ayesha Javed: “Electron Beam Treatment Planning for Sloping Surfaces.” 2021–2023 (Fall). IUB.

1071) Kamran Shafi: “Calculation of Air Kerma Strength for Radionuclides Used in Brachytherapy.” 2021–2023 (Fall). IUB.

1072) Farah Ameer: “Specification of Brachytherapy Sources in Terms of Equivalent Mass of Radium.” 2021–2023 (Fall). IUB.

1073) Janees Naveed: “Effect of Attenuation Factor in Radiation Dose Fall-Off.” 2021–2023 (Fall). IUB.

1074) Nusaiba Rehman: “Evaluating the Impact and Procedures of Quality Assurance in Cobalt-60 Radiation Therapy.” 2021–2023 (Fall). IUB.

1075) Nadia Naz: “Analysis of Dosimetric Parameters of Linear Accelerators.” 2021–2023 (Fall). IUB.

1076) Saba Asghar: “Designing a Dose Calculation System for Mega Voltage Photon Beams, for SSD Technique.” 2021–2023 (Fall). IUB.

1077) Saba Mahnoor: “Conversion of PDD for Circular Fields from Square Field Data.” 2021–2023 (Fall). IUB.

1078) Sana Tahir: “Designing a Dose Calculation System for Mega Voltage Photon Beams, for SAD Technique.” 2021–2023 (Fall). IUB.

1079) Saqlain Mushtaq: “Evaluation of Radiation Dose Variation in Rotation Therapy.” 2021–2023 (Fall). IUB.

1080) Shahzaib Aslam: “Analysis of Relationship Between Percentage Depth Dose and Tissue Maximum Ratio for High Energy X-Rays.” 2021–2023 (Fall). IUB.

1081) Sidra Mumtaz: “Variation in Treatment Time and Dose of Cobalt-60 Radiation with Tumor Depth.” 2021–2023 (Fall). IUB.

1082) Azka Maryam: “Estimating the Difference in Dose for Various Source-to-Surface Distances (SSDs) in Photon Beam Radiation Therapy.” 2022–2024 (Spring). IUB.

1083) Babar Bilal: “A Comparison of Important Dosimetric Parameters for Radiation Dose Calculation.” 2022–2024 (Spring). IUB.

1084) Shahid Mahmood: “Calculation of Monitor Units for Isocentric Fields in Medical Linear Accelerators.” 2022–2024 (Spring). IUB.

1085) Muhammad Usman Ghani: “Applications and Effectiveness of Radiation Therapy and Radiation Dosimetry of Gamma Rays.” 2022–2024. IUB.

1086) Asif Nazir: “Evaluation of Characteristics of Nucleus in Perspective of Radiation Therapy.” IUB.

1087) Saba Saleem: “Analysis of the Impact of Radiation Generators – Evolving from Low Energy to High Energy.” IUB.

1088) Tanveer Kazmi: “Relative Importance of Various Types of Interactions of X-Rays with Water.” IUB.

1089) Ulfat Shoib: “Calculation of Effective Atomic Numbers for Various Materials and Their Applications in Radiation Therapy.” IUB.

1090) Mahwish Nazir: [Title not provided]. IUB.

1091) Zara Bushra: “Evaluation of X-Rays Attenuation and Its Impact in Radiotherapy Treatment Planning.” IUB.

1092) Hafsa Nasir: “Evaluation and Comparison of Energy Transfer Coefficient and Energy Absorption Coefficient – Radiation Therapy Viewpoint.” IUB.

1093) Aqsa: “Determination of Specific Activity of Radioactive Elements and Evaluation of Its Impact.” IUB.

1094) Sumera Kanwal: “Consideration of Compton Effect and Its Impact While Interaction of Radiation with Matter.” IUB.

1095) Muhammad Wajahat: “Dosimetric Properties of the Materials Used in Radiation Shielding.” IUB.

1096) Muhammad Rashid: “Impact of Tissue Maximum Ratio in Treatment Planning for Cobalt-60 Gamma Beam Radiation Therapy.” IUB.

1097) Syed Ali Hassan: “Transformation of Radioactive Characteristics Through Alpha Decay.” IUB.

1098) Mahnoor Sajid: “Photon Beam Attenuation in Water and Its Interaction Components.” IUB.

1099) Sharjeel Jillani: “Evaluation of Scatter Maximum Ratio for Circular Fields in Radiation Therapy.” IUB.

1100) Muhammad Mushtaq: “Evaluation of Effective Energy and Half Value Layers of Radiation Beams for Different Elements.” IUB.

1101) Sabiha Batool: “Impact of Scatter Maximum Ratio for Photon Beam Radiotherapy in Circular Fields.” IUB.

1102) Muhammad Qasim: “Evaluation of Biologically Equivalent Dose in Radiation Therapy Treatment Planning.” IUB.

1103) Anam Fatima: “Dosimetric Properties of Radioactive Elements and Their Applications in Radiation Therapy.” IUB.

1104) Muhammad Faryad: “Consideration of Compton Effect and Its Impact While Interaction of Radiation with Matter.” IUB.

1105) Asad Ahmad Khan: “Quality Assurance & Impact of Cobalt-60 Gamma Rays Radiotherapy.” 2023–2024. IUB.

1106) Abdul Salam: “Evaluation of Characteristics of Clinical Electron Beam for Radiation Therapy.” 2024–2025. IUB.

1107) Hadia Saeed: “Radiation Therapy Treatment Planning and Dosimetry for Electron Beams.” 2024–2025. IUB.

18.3.2 Prof. Dr. Altaf Hussain

1108) M. Nasir Rasool (2011–2013): Ab-initio Electronic Structure Calculations and Optical Properties of Ni_3Ga Binary Intermetallic Alloy System. IUB.

1109) Salman Mehmood (2011–2013): First Principle Electronic Structure Calculations and Optical Properties of the Two Phases ($L1_2$ & $D0_{22}$) of $TiAl_3$ Intermetallic Alloy System. IUB.

1110) Rohail Ali Shah (2013–2015): A Comparative Study of Electronic Structure, Mechanical and Optical Properties of C12A7 (Crystal and Electride) from All-electron Density Functional Calculations. IUB.

1111) Saif-ur-Rehman (2013–2015): Ab-initio Calculation of Core Level Excitation (XANES) in Ti-Si-C Max System. IUB.

1112) Muhammad Zaid (2013–2015): Mechanical Properties and Electronic Structure of Alumino-silicate Mullite ($Al_{4+2x}Si_{2-2x}O_{10-x}$, x=0.1–0.5) using First-principles Modeling. IUB.

1113) M. Abbas Hussain (2013–2015): Exploring the Electronic Structure, Bonding, Elastic, Mechanical, and Optical Properties of Mono-calcium Aluminate: A First-principles Investigation. IUB.

1114) Muhammad Irfan (2013–2015): Ab-initio Study of Ti-Si-C Max System: An Approach towards Electronic Struc-

ture, Mechanical, and Optical Properties. IUB.

1115) Muhammad Amjad (2014–2016): Electronic Structure, Bonding, Elastic, Mechanical, and Optical Properties of Ternary Carbide: YAl_3C_3. IUB.

1116) Zaheer Abbas (2014–2016): DFT Based Electronic Structure Calculations and Optical Properties of Ni_3In Intermetallic Compound. IUB.

1117) Zaheer Aslam (2014–2016): Ti-Al-C MAX System: An Approach based upon First Principles. IUB.

1118) Shahid Naeem (2014–2016): Investigating the Electronic Structure, Elastic, Mechanical and Optical Properties of Tri-Calcium Aluminate: $3CaO{\cdot}Al_2O_3$. IUB.

1119) Nadia Azeem (2015–2017): Spin-polarized ab initio study of YCoVZ (Z = Si, Ge) Heusler Compounds: GGA and GGA+U approaches. IUB.

1120) Muhammad Shahid (2015–2017): Ab initio Study of Holmium based Rare-earth Intermetallics: HoX (X = Ni, Pd, Ag, Cd). IUB.

1121) Mujahid Bashir (2015–2017): Structural, Electronic, Elastic and Bulk Mechanical Properties of Neodymium Doped Rare-earths NdX (X = Sn, Sb, Te, Tl). IUB.

1122) Hina Ambreen (2015–2017): Spin-polarized ab initio study of YCoTiZ (Z = Si, Ge) Heusler Compounds: GGA and GGA+U approaches. IUB.

1123) A. Waqar Aslam (2015–2017): Mechanical Properties and Electronic Structure of Alumino-Silicate Mullite ($Al_{4+2x}Si_{2-2x}O_{10-x}$, x=0.0–1.0) using First-principles Modeling. IUB.

1124) Muhammad Ishtiaq (2015–2017): Electronic Structure and Optical Properties of Sillimanite: An ab-initio Study. IUB.

1125) Humaira Yasmin (2015–2017): Exploring the Electronic Structure, Bonding and Optical Properties of $HfAl_4C_4$ Ternary Carbide via Ab Initio Tools. IUB.

1126) Shahbaz Arshad (2015–2017): Calcium Hexa-Aluminate ($CaO{\cdot}6Al_2O_3$): An ab initio Study of Electronic Structure, Bonding, Elastic, Mechanical and Optical Properties. IUB.

1127) Naila Ibrahim (2015–2017): Density Functional Theory (DFT) based Calculation of Electronic Structure, Bonding and Optical Properties of V-Al-C MAX System. IUB.

1128) Asra Hafeez (Spring 2016–2018): Ab initio Modeling of the Electronic Structures and Physical Properties of $CaO{\cdot}2Al_2O_3$. IUB.

1129) Hannan Ashravi (Spring 2016–2018): Electronic Structure and Magnetic behavior of Quaternary ScNiCrAl Heusler Alloy under Pressure. IUB.

1130) Nyla Muneer (Spring 2016–2018): Pressure Effects on Structural Stability, Electronic and Magnetic behavior of ScNiCrGa Heusler alloy. IUB.

1131) Mumtaz Ahmad (Spring 2016–2018): Structural, Electronic and Optical Properties of Copper based Intermetallics: CuTi and $CuTi_3$. IUB.

1132) M. Sohail Akbar (Spring 2016–2018): Structural, Electronic and Optical properties of $HfAl_4C_4$: An ab-initio study. IUB.

1133) Ghulam Murtaza (Spring 2016–2018): Density Functional Approach towards Structural, Electronic and Optical Properties of $Zr_2Al_4C_5$ and $Zr_3Al_4C_6$. IUB.

1134) Asifa Anam (Spring 2016–2018): Structural, Electronic and Optical Properties of $In_{1-x}B_xP$ (x = 0.0, 0.25, 0.50, 0.75, 1.0) Compounds: An Approach Based on DFT. IUB.

1135) Nouman Qureshi (Fall 2016–2018): Structural, Electronic and Optical Properties of $ZrGa_2$ and $ZrGa_3$ Compounds: An ab-initio Approach. IUB.

1136) Muhammad Asif: Exploring the Electronic Structure, Bonding and Optical Properties of Cr-Al-N MAX System via Density Functional Theory based Tool. IUB.

1137) S. Zeeshan Haider (Fall 2016–2018): Structural, Electronic and Optical Properties of MAX phases M_2GaN (M = Ti, V and Cr). IUB.

1138) Abdul Rahim: Ab initio Study of Electronic Structure, Bonding, and Optical Properties of Cr-Al-C MAX System. IUB.

1139) Aniqa Sahar (Spring 2017–2019): Study on Structural, Electronic and Optical Properties of Zr_2SnC and Zr_2SnN via ab-initio Approach. IUB.

1140) Jawaria Arooj (Spring 2017–2019): Electronic Structure Modeling of $Ti_5Al_2C_3$: A New Ternary Carbide Belonging to Ti–Al–C MAX System. IUB.

1141) Waqar Ahmad (Spring 2017–2019): Density Functional Theory based Structural, Mechanical, Electronic and Magnetic Properties of YFeCrX (X = Al, Si, P). IUB.

1142) Izhar Mahmood (Spring 2017–2019): Ab initio Calculations on Structural, Mechanical, Electronic and Magnetic Properties of YFeCrX (X = Ga, Ge, As). IUB.

1143) Sidra Shafiq (Fall 2017–2019): First Principle Structural, Electronic and Optical Properties of Scandium based Ternary Indide System $Sc_5T_2In_4$ (T = Pd, Ni, Pt). IUB.

1144) Memoona Mehmood (Fall 2017–2019): OLCAO based Electronic Structure Calculations and Optical Properties of $LiBaPO_4$ (M-$LiBaPO_4$ and T-$LiBaPO_4$). IUB.

1145) Wakeel Ahmad (Fall 2017–2019): Electronic Structure, Structural and Optical Properties of Mo based MAX Phase Compounds Mo_2ZC (Z = Al, Si, P, S). IUB.

1146) Shahid Akbar (Spring 2017–2019): First Principles Calculations on Structural, Mechanical, Electronic and Magnetic Properties of YFeCrX (X = In, Sn, Sb). IUB.

1147) Muhammad Imran (Spring 2017): Physical Properties of Y_3AlC_3 Ternary Carbide System using Density Functional Theory based Tools. IUB.

1148) Aamir Rafiq (Spring 2018–2020): Crystal Structure, Electronic and Optical Properties of Cr_4AlB_4: A Newly Discovered MAB Phase Compound. IUB.

1149) Noman Akhtar (Spring 2018–2020): Exploring the Structural, Electronic and Optical Properties of Zn_2NX (X = Cl, Br, I) via First-principles Calculations. IUB.

1150) Mehvish Javed (Spring 2018–2020): Ab-initio Study on Structural, Electronic, Magnetic and Optical Behavior of AGa_2O_4 (A = Ge, Co) Spinel Oxides. IUB.

1151) Saddam Hussain (Spring 2018–2020): Synthesis, Characterization and Comparative Catalytic Applications of Fe_2O_3, NiO and TiO_2 Nanoparticles. IUB.

1152) Fareeha Amin (Fall 2018–2020): Probing Substitutional Effect on Structural, Electronic, Magnetic and Optical Behavior of Stoichiometric AGa_2O_4 (A = Ge, Fe) Spinel Oxides: Ab-initio Computational Study. IUB.

1153) Uroosa Ijaz (Fall 2018–2020): First-principles investigation on crystallographic, electronic, magnetic and optical

properties of stoichiometric AFe_2O_4 (A = Ge, Fe) Spinel Oxides. IUB.

1154) Fatima Younis (Fall 2018–2020): Exploring the Physical Properties of Novel Ternary Compound $Ce_4Pt_9Al_{13}$. IUB.

1155) Kousar Javaid (Fall 2019–2021): Physical Properties of Y_3AlC_3, YAl_3C_3 and Y_3AlC Carbides: A Study based on First-principles Approach. IUB.

1156) Muhammad Haseeb (Fall 2019–2021): Mechanical, Thermal, Optical and Electronic Properties of Nanolaminated Ternary Carbide $U_3Al_3C_5$. IUB.

1157) Laraib Liaqat (Fall 2019–2021): Theoretical Investigations on Structural and Optical Properties of Bismuth based Metal Oxide Bi_2TeO_5. IUB.

1158) Tooba Tariq (Fall 2019–2021): Exploring the Physical Properties of Eu_2M_2In (M = Pd, Pt) Indides via ab-initio Tools. IUB.

1159) Saima Sajjad (Fall 2019–2021): Structural, Electronic and Optical Properties of Calcium based Metal Indides Ca_2M_2In (M = Pd, Pt). IUB.

1160) H. Bushra Hussain (Fall 2019–2021): DFT based Structural, Electronic, Mechanical and Optical Properties of $MeMgN_2$ (Me = Ti, Zr). IUB.

1161) Arham Javed (Fall 2019–2021): Structural, Electronic, Mechanical, Magnetic and Thermophysical Insights of $XCNi_3$ (X = Sc, Ti). IUB.

1162) Javaria Kanwal (Fall 2019–2021): Structural, Electronic, Mechanical, Magnetic and Thermophysical Insights of $XCNi_3$ (X = V, Cr). IUB.

1163) Rabia Zafar (Fall 2020–2022): Down Conversion of Er/Yb Doped AlN Thin Film by RF Magnetron Sputtering. IUB.

1164) Isha Akbar (Fall 2020–2022): Structural and Optical Investigation of Ni Doped AlN Thin Films by Co-Sputtering. IUB.

1165) Muhammad Riaz (Fall 2020–2022): Preparation and Characterization of Ni Doped AlN Thin Films. IUB.

1166) Nimra Iram (Fall 2020–2022): Structural, Electronic, Optical and Mechanical Properties of Various Phases of APo (A = Ge, Sn, Pb) Binary Polonides. IUB.

1167) Tahira Batool (Fall 2020–2022): Ab-initio Study of Structural, Mechanical and Thermophysical Properties of GeS, SnS and PbS Monochalcogenides. IUB.

1168) M. Abubakar Raza (Fall 2020–2022): Structural, Mechanical, Electronic and Optical Properties of XAl_3C_3 (X = Er, Tm, Yb, Lu) Carbides via First-principles Approach. IUB.

1169) Aqsa Maqbool (Fall 2020–2022): DFT Based Structural, Mechanical and Thermophysical Insights of XSe (X = Ge, Sn, Pb) Binary Compounds. IUB.

1170) Muhammad Farooq (Fall 2020–2022): Ab-initio Study of Physical Properties of MAl_3C_3 (M = Gd, Tb, Dy, Ho) Ternary Carbides. IUB.

1171) Muhammad Saeed (Fall 2020–2022): First-principles Mechanical and Thermophysical Insights of $LaCd_3P_3$ Compound. IUB.

1172) M. Aabid I. Masood (Fall 2020–2022): Structural, Bulk Mechanical, Electronic, Optical and Thermodynamic Properties of Ti-Ga-C Based 211 and 312 MAX Phases. IUB.

1173) Waseem Razzaq (Fall 2020–2022): Structural, Electronic, Thermophysical Properties of $MnCNi_3$ and $FeCNi_3$ Anti-perovskites. IUB.

1174) Zobia Gill (Spring 2021–2023): Structural, Electronic, Mechanical and Thermodynamic Properties of $XCRh_3$ (X = Tc, Ru) Anti-perovskites. IUB.

1175) Muhammad Umar (Spring 2021–2023): Study of Various Physical Properties of Newly Developed Anti-perovskite Materials $MnCRh_3$ and $FeCRh_3$. IUB.

1176) M. Farooque Abid (Spring 2021–2023): DFT Insights of Physical Properties of $TiCRh_3$ and $VCRh_3$ Anti-perovskite Materials. IUB.

1177) Muhammad Asif (Spring 2021–2023): Ab-initio Physical Properties of $PdCRh_3$ and $CdCRh_3$: A Comparative Study. IUB.

1178) Anam Habib Gull (Spring 2021–2023): Insights of Structural, Electronic, Magnetic, Thermodynamic and Optic Properties of Ternary LiXMg (As, Sb, Bi) Half Heusler Compounds. IUB.

1179) Iqra Rasheed (Spring 2021–2023): Physical Properties of Eight Electron LiYZ (Y = N, P; Z = Be, Mg) Heusler Compounds: An Ab-initio Approach. IUB.

1180) Qaisar Abbas (Spring 2021–2023): First-principles Based Structural, Electronic and Magnetic Properties of $XCRh_3$ (X = Ni, Cu, Zn) Inverse Perovskites. IUB.

1181) Muhammad Asghar (Spring 2021–2023): Investigation on Mechanical, Thermodynamic and Charge Transfer Properties of Rh_3CX (X = Ni, Cu, Zn) Anti-perovskites. IUB.

1182) Ayesha Asghar (Fall 2021–2023): A Comparative Study of Structural, Electronic and Optical Properties of Ternary $Ti_3(Ga_{1-m}In_m)C_2$ MAX-phase Carbides with $m = 0, 1$. IUB.

1183) Ghulam Fatima (Fall 2021–2023): A Comparative Study of Different Physical Properties of Nowotny Phase TM_5Si_3C (TM = Nb, Mo) Ternary Silicides. IUB.

1184) Nisar Azeem (Fall 2021–2023): Exploring the Structural, Electronic, Optical and Mechanical Properties of Cr_2GaC and Cr_2GeC. IUB.

1185) Ayesha Bilal (Fall 2021–2023): Physical Properties of M_2AlN (M = Ti, V, Cr) Hexagonal Nitrides: A First-principles Approach. IUB.

1186) M. Hasnain (Fall 2021–2023): Physical Insights of Ternary Ti_3MC_2 (M = Al, Ga, Ge) Carbides: An Ab-initio Approach. IUB.

1187) Tayyaba Fatima (Fall 2021–2023): Theoretical Prediction of Structural, Optoelectronic and Elastomechanical Properties of TM_5Si_3C (TM = Ta, W) Silicides. IUB.

1188) Summan Saleem (Fall 2021–2023): A Comparative Investigation of Structural, Electronic and Optical Properties of Cr_2GaC and Cr_2GaN MAX-phase Compounds using Density Functional Theory. IUB.

1189) Asma Shabir (Fall 2021–2023): Investigation of Different Physical Properties of Ternary X_2AlN (X = Ti, Zr, Hf) Nitrides using ab-initio Methods. IUB.

1190) Usama Rasheed (Fall 2021–2023): Elastomechanical and Optoelectronic Properties of $TaSi_2$ and WSi_2. IUB.

1191) Saba Iqbal (Fall 2021–2023): Structural, Electronic and Optical Properties of Li-U-N System: A DFT Study. IUB.

1192) Haris Rasheed (Fall 2021–2023): Prediction of Structural, Electronic and Optical Properties of TM_2GaC (TM = Cr, Mn, Mo) Carbides. IUB.

1193) Saba Bibi (Fall 2021–2023): An Overview of Structural, Electronic and Optical Properties of New Layered Ternary Transition Metal $FeWN_2$ Nitride. IUB.

1194) Waheed Ahmed (Fall 2021–2023): Ab-initio Physical Properties of $NbSi_2$ and $MoSi_2$ Binary Silicides: A Comparative Picture. IUB.

1195) Mahmood-ul-Hassan (Spring 2022–2024): Physical Properties of YCr_2Si_2 Ternary di-Silicide using Density Functional Approach. IUB.

1196) Muhammad Nawaz (Spring 2022–2024): Investigation of Physical Properties of $BaTiO_3$ Perovskite Oxide Compound: An Ab-Initio Study. IUB.

1197) M. Kashif Bashir (Fall 2022–2024): First-principles Thermodynamic, Thermoelectric and Dielectric Properties of Co_2CuAl Full Heusler Alloy. IUB.

1198) Muhammad Munir (Fall 2022–2024): Exploring Spintronic and Optoelectronic Applications of X_2TeO_2 (X = La, Ce, Pr) Oxytellurides: A DFT Study. IUB.

1199) Saba Azhar (Fall 2022–2024): Exploring the Optical and Thermoelectric Properties of $ZnTiS_2$ Chalcopyrite: A Theoretical Approach. IUB.

1200) Asma Munir (Fall 2022–2024): DFT-based Physical Properties of Co_2TMAl (TM = Cr, Mn, Fe, Ni) Heusler Alloys. IUB.

1201) Ghulam Yasin (Fall 2022–2024): First-principles Investigation of LiYC, LiYSi, and LiYGe Half-Heusler Compounds for Energy Conversion and High Temperature Applications. IUB.

1202) Mazhar Iqbal (Fall 2022–2024): A DFT Study of Structural, Electronic and Optical Properties of KAF_3 (A = Mn, Fe). IUB.

1203) Mahpara Zulfiqar (Fall 2022–2024): Theoretical Study of Elastomechanical, Thermoelectric and Optoelectronic Properties of $TMCrN_2$ (TM = V, Nb) Ternary Nitrides. IUB.

1204) M. Abdullah (Fall 2022–2024): Examining the Bonding and Optoelectronic Characteristics of $KCoF_3$ and $KNiF_3$ using Ab-initio Tools. IUB.

1205) Basit Ali (Fall 2022–2024): An Exploration of Optical, Thermodynamic and Thermoelectric Properties of Ni_3X (X = Al, Ga) Intermetallic Compounds. IUB.

1206) Muhammad Yousaf (Fall 2022–2024): Physical Properties of Hf_2Si and Hf_3Si_2: An Ab-initio Study. IUB.

1207) Farah Zanib (Fall 2022–2024): A Computational Study of Thermoelectric, Dielectric, and High Temperature Responses of TM_3Al_2C (TM = Cr, Mo, W) MAX Phases. IUB.

1208) Manahal Sabeeh (Fall 2022–2024): Elastomechanical and Thermodynamic Conducts of Zn_2AN_3 (A = V, Nb) Nitrides: A Computational Study. IUB.

1209) Unzla Nasir (Fall 2022–2024): $BaCeAgCh_3$ (Ch = S, Se) Chalcogenides for Photovoltaics and Renewable Energy Applications: A DFT Investigation. IUB.

1210) Adnan Haider (Fall 2022–2024): Ab-initio Study of Elastomechanical and Thermoelectric Responses of Cubic and Rhombohedral Phases of $LiNbO_3$. IUB.

1211) Habib ur Rehman (Fall 2022–2024): Exploring the Optoelectronic and Bonding Nature of V_2Se using Density Functional Theory. IUB.

1212) S.A. Mohy ud Din Gilani (Fall 2022–2024): Computational Insights into the Optical and Thermodynamic Performances of Ti_4GaC_3 MAX Phase. IUB.

1213) Mohsin Atta Bukhari (Fall 2022–2024): Density Functional Physical Properties of Hf_5Si_3 and Hf_5Si_4. IUB.

1214) Muhammad Afzal (Spring 2022–2024): Spin-polarized DFT-based Study of Structural, Electronic and Mechanical Properties of FeCrZrAl Quaternary Heusler Compound. IUB.

1215) Irsa Batool (Fall 2023–2025): Computational Insights into the Optical and Thermoelectric Properties of $U_3Si_2C_2$ Ternary Silicide. IUB.

1216) Sawera Rafique (Fall 2023–2025): Comprehensive Investigation of the Structural, Thermodynamic, and Thermoelectric Properties of Ternary Cu_3SnS_4 and Cu_3TaTe_4 Chalcogenides: A DFT Study. IUB.

1217) Hira Iqbal (Fall 2023–2025): Optoelectronic, Thermodynamic, and Thermoelectric Insights of Copper-based Transition Metal Cu_3MnX_4 (X = S, Se, Te) Chalcogenides. IUB.

1218) Syed Raza Ali (Fall 2023–2025): Structural, Electronic and Optical Properties of $Nb_2V_4Si_5$ and $Nb_2Cr_4Si_5$: DFT Insights. IUB.

1219) Muhammad Kashif (Fall 2023–2025): A First-principles Approach to Examine the Behavior of $BeAH_3$ (A = Ti, Zr, Hf) Hydride Perovskites for Energy Harvesting. IUB.

1220) Adnan Manzoor (Fall 2023–2025): Unveiling the Bonding and Optoelectronic Behavior of Transition Metal-based XC (X = Cr, Mo, W) Binary Carbides: A First-principles Approach. IUB.

1221) Muhammad Younis (Fall 2023–2025): A Theoretical Study to Explore the Structural, Electronic and Thermoelectric Properties of $NaCuZrS_3$ Quaternary Chalcogenide. IUB.

1222) M. Usman Asim (Fall 2023–2025): Density Functional Insights into the Electronic, Optical and Bonding Behavior of XSi_2 (X = Co, Ni) Binary Silicides. IUB.

18.3.3 Dr. Muhammad Azhar Khan

1223) Rabia Akram (Session Spring 2024–2026): Structural, Spectroscopic and Optical Characterization of Ba-Zn U Type Hexaferrites Synthesized Via Sol-gel Auto-Combustion Route. IUB.

1224) Tooba Arshad (Session Spring 2024–2026): Structural, Spectroscopic and Magnetic Properties of Cr-Al Substituted Ba-Co Based Z-Type Hexaferrites. IUB.

1225) Habib ur Rehman (Session Spring 2024–2026): Effect of Yb Substitution on Structural and Spectroscopic Properties of Sr-Ba based Y-Type Hexaferrites. IUB.

1226) Muhammad Arslan (Session Fall 2023–2025): Structural, Spectral, and Dielectric Properties of $Ba_3Co_2Cr_xFe_{24-x}O_{41}$ Z-type Hexaferrites Via Cr Substitution. IUB.

1227) Umaima Khalid (Session Fall 2023–2025): Structural, Spectral, and Dielectric Aspects of La Substituted Betaferrites for High Frequency Applications. IUB.

1228) Sania Zubair (Session Fall 2023–2025): Unraveling the Structural, Spectral, and Dielectric Properties of Yttrium Substituted $LiFe_{11-x}Al_xO_{17}$ Betaferrites. IUB.

1229) Seerat Siddique (Session Fall 2023–2025): Investigation of Structural, Spectral, and Dielectric Properties of Cd Substituted Chromates Synthesized Via Sol-gel Route. IUB.

1230) Muhammad Khan (Session Fall 2023–2025): Exploring the Structural, Spectral, and Dielectric Parameters of $Ba_3Cd_2Fe_{24-x}Al_xO_{41}$ (0.0, 0.25, 0.5, 0.75) Z-type Hexaferrites. IUB.

1231) Hafiza Iqra Gul Zareen (Session Fall 2023–2025): Influence of Ce Substitution on Structural and Dielectric Properties of U-type Hexaferrites Produced by Sol-Gel Method. IUB.

1232) Aima Shafaq (Session Fall 2023–2025): Effect of La Substitution on U-type $Ba_4Co_2Fe_{36-x}La_xO_{60}$ Hexaferrites Synthesized via Sol-gel Combustion Route. IUB.

1233) Ghulam Mustafa (Session Fall 2022–2024): Fabrication and Characterization of Al-doped Li Based Spinel Oxide. IUB.

1234) Amina Sidra (Session Fall 2022–2024): Synthesis of Porous Glass Adsorbent Using Snail Shells as Modifier. IUB.

1235) Naeem Mahmood (Session Fall 2022–2024): Synthesis and Characterization of Zn^{2+} Substituted $CdAl_2O_4$ Nanocrystalline Aluminates. IUB.

1236) Ahsan Mehmood (Session Fall 2022–2024): Exploration of Structural, Spectral, Dielectric and Reflection Loss Properties of La^{3+} Substituted U-type Strontium Hexaferrites. IUB.

1237) Basit Ali Shah (Session Fall 2022–2024): Evaluation of Structural, Spectral and Dielectric Properties of Cr^{3+} Cations Substituted ZnCu X-type Strontium Nano-hexaferrites. IUB.

1238) Hafiz Sajjad Ahmad (Session Fall 2022–2024): Evaluation of Structural, Spectral and Dielectric Properties of Zr-Zn Cations Substituted Z-type Nano Hexaferrites. IUB.

1239) Hafiz Khalil ur Rehman (Session Fall 2022–2024): Investigation of Structural, Spectral and Dielectric Properties of Zr-Ni Substituted W-type Barium Hexaferrites. IUB.

1240) Muhammad Ayyub Bhutta (Session Fall 2022–2024): Influence of Nd^{3+} Substitution on the Structural, Spectral, and Dielectric Properties of Barium Y-type Nano-hexaferrites. IUB.

1241) Ammad Asif (Session Fall 2022–2024): Structural, Spectral and Dielectric Properties of Cr^{3+} Substituted NiZn Y-Type Strontium Nano-hexaferrites. IUB.

1242) Shabana Kousar (Session Fall 2022–2024): Study on Structural, Spectral and Dielectric Properties of La-substituted U-Type Barium Hexaferrites. IUB.

1243) Saba Liaqat (Session Fall 2022–2024): Synthesis and Characterization of Zn-substituted $SrCr_2O_4$ Nanoparticles. IUB.

1244) Umama Saeed (Session Fall 2022–2024): Physical and Dielectric Properties of Magnesium Substituted $BaCr_2O_4$ Nanoparticles. IUB.

1245) Sidra Abid (Session Fall 2022–2024): Structural and Dielectric Study of Co-Mg-substituted Sr-M Hexaferrites. IUB.

1246) Ayesha Fatima (Session Fall 2022–2024): Structural, Spectral and Dielectric Properties of La-doped Z-Type Hexaferrites. IUB.

1247) Zahra Hasnain (Session Fall 2022–2024): Preparation, Structural and Dielectric Properties of Cr-substituted R-Type Hexaferrites. IUB.

1248) Asma Ghous (Session Fall 2022–2024): Influence of Cobalt Substitution on $BaAl_2O_4$ Nanomaterials. IUB.

1249) Noman Javed (Session Fall 2021–2023): Structural, Spectral and Dielectric Studies of Ni^{2+} Substituted $CrFeO_3$ Nano-perovskite. IUB.

1250) Ghulam Mustafa (Session Fall 2021–2023): Synthesis and Characterization of Cd^{2+} Substituted $CrFeO_3$ Nanocrystalline Multiferroics via Sol-gel Auto-combustion Route. IUB.

1251) Rafia Asif (Session Fall 2021–2023): Study of Structural, FTIR and Dielectric Response of Sm^{3+} Substituted β-type Hexagonal Ferrites Synthesized by Sol-gel Auto-combustion Route. IUB.

1252) Aqsa Bibi (Session Fall 2021–2023): Evaluation of Structural, Spectral and Dielectric Parameters of Nd^{3+} Ions Substituted Zr R-type Nano Hexagonal Ferrites Prepared via Sol-gel Auto-combustion Method. IUB.

1253) Bushra Aslam (Session Fall 2021–2023): Investigation of Structural, Spectral and Dielectric Properties of Dy^{3+} Substituted R-type Hexagonal Ferrites. IUB.

1254) Muhammad Rashid (Session Fall 2021–2023): Influence of Ni^{2+} Ions on the Structural, Spectral and Dielectric Properties of Sr-Co Nano Spinel Ferrites Synthesized by Sol-Gel Auto-Combustion Route. IUB.

1255) Mujahid Iqbal (Session Fall 2021–2023): Structural, Spectral and Dielectric Properties of Ni^{2+} Ions Substituted Sr-Zn Spinel Ferrites. IUB.

1256) Shaista Nargis (Session Fall 2021–2023): Crystal Structure Analysis and Dielectric Response of Nd^{3+} Substituted β-type Hexagonal Ferrites. IUB.

1257) Noman Hussain (Session Spring 2021–2023): The Study of Structural and Physical Properties of Samarium Substituted $Mg_{0.3}Co_{0.7}Fe_2O_4$ Nano Sized Ferrites. IUB.

1258) Khalil Ahmad (Session Spring 2021–2023): Investigation of Structural, Physical and Dielectric Properties of $Cu_{0.2}Co_{0.8}Cr_xFe_{2-x}O_4$ Ferrites Prepared by Sol-gel Auto Combustion Route. IUB.

1259) Muhammad Usman (Session Spring 2021–2023): Trivalent Ions Substitution in $GdFeO_3$ for Direct Band Gap and Thermoelectric Investigation. IUB.

1260) Hajra Sana (Session Spring 2021–2023): First Principles Investigations of Rare Earth Substituted $GdFeO_3$ Perovskites. IUB.

1261) Sonaina Yasir (Session Spring 2021–2023): Investigation of the Effects of Ho^{3+} and Y^{3+} on Structural and Dielectric Phenomenon of $BiFeO_3$ Nanomaterials Prepared by Sol-gel Technique. IUB.

1262) Fiza Zafar (Session Spring 2021–2023): Study of Ca^{2+} and Zr^{4+} Co-substitution on Structural and Physical Properties of $YFeO_3$ Nanomaterials. IUB.

1263) Rizwana Bibi (Session Spring 2021–2023): Effects of Samarium Substitution on the Structural and Dielectric Properties of Sr-Zn Z-type Hexagonal Ferrites Synthesized by Sol-gel Technique. IUB.

1264) Zeshan Javed (Session Spring 2021–2023): Structural and Dielectric Characteristics of Ho Substituted Sr-Mg X-type Hexagonal Ferrites Synthesized through Sol-gel Auto Combustion Technique. IUB.

1265) Areeba Iqbal (Session Fall 2020–2022): Impact of Chromium Substitution on the Structural and Dielectric Properties of Barium-Strontium Based W-type Hexagonal Ferrites. IUB.

1266) Ayesha Safdar (Session Fall 2020–2022): Synthesis and Characterization of Cd Substituted R-type Hexagonal Ferrites. IUB.

1267) Hafiza Ayisha Khan (Session Fall 2020–2022): Fabrication and Characterizations of Mg Substituted Ba-Zn Nanocrystalline Ferrites for High-Frequency Applications. IUB.

1268) Muhammad Waqas (Session Fall 2020–2022): Structural Elucidation and Evaluation of Dielectric Properties of Nd-substituted $BiFeO_3$ Ceramics. IUB.

1269) Sibgha Kanwal (Session Fall 2020–2022): Structural, Physical, and Dielectric Evaluations of Cr Substituted BaCu U-type Hexaferrites Prepared via Sol-gel Technique. IUB.

1270) Ishra Kanwal (Session Fall 2020–2022): Evaluations of Structural and Dielectric Parameters of BaZn-Y Hexagonal Nano-sized Ferrites. IUB.

1271) Kanwal Majeed (Session Fall 2020–2022): Structural, Physical, and Dielectric Properties of Indium Substituted

$Ba_3Co_2Fe_{24}O_{41}$ Z-Type Hexaferrites Synthesized via Sol-Gel Technique. IUB.

1272) Muhammad Ejaz Anjum (Session Fall 2019–2021): Physical and Dielectric Properties of Ba-Hexaferrite Nanoparticles Synthesized by Sol-Gel Auto-Combustion Method. IUB.

1273) Javairia Bibi (Session Fall 2019–2021): The Effect of Gd-Substitution on Structural and Dielectric Properties of Z-Type Hexaferrites Synthesized via Sol-Gel Auto-Combustion Route. IUB.

1274) Amna Shareef (Session Fall 2019–2021): Synthesis and Characterization of Gd-Substituted Y-Type Hexaferrite Powders via Sol-Gel Combustion Method. IUB.

1275) Muhammad Yosif (Session Fall 2019–2021): Structural Elucidation and Dielectric Behavior Evaluation of Ba-Sr Based W-Type Hexaferrites. IUB.

1276) Sohail Afzal (Session Fall 2019–2021): Structural Features and Dielectric Behavior Evaluation of Ba-Co Based X-Type Hexaferrites. IUB.

1277) Misbah Idrees (Session Fall 2019–2021): Influence of Gd-Substitution on Structural and Dielectric Properties of Sr-U-Type Hexaferrites. IUB.

1278) Syed Ali Hamid Saeed (Session 2017–2019): Magnetic and Dielectric Properties of Cobalt Doped W-type Ferrites. Allama Iqbal Open University Islamabad Pakistan.

1279) Imrana Kousar (Session Fall 2018–2020): Structural Elucidation and Characterization of Chemically Synthesized Erbium Substituted Manganese Spinel Ferrites. IUB.

1280) Rizwana Afzal (Session Fall 2018–2020): Synthesis, Characterization and Photocatalytic Studies of $NiCe_{0.04}Fe_{1.96}O_4/Ce_{0.96}Fe_{0.04}O_2$/rGO Composite. IUB.

1281) Umair Ashraf (Session Spring 2018–2020): Impact of Cadmium Substitution on Structural, Spectral and Dielectric Properties of Z-type Hexagonal Ferrites. IUB.

1282) Nimra Farooq (Session Spring 2018–2020): Synthesis and Characterization of Aluminum Substituted U-type Hexagonal Ferrites. IUB.

1283) Naveed Ahmad (Session Spring 2018–2020): Influence of Praseodymium Substitution on Structural, Spectral and Dielectric Properties of Z-type Hexagonal Ferrites. IUB.

1284) Muhammad Anwar-ul-Hassan (Session Spring 2018–2020): Structural Elucidation and Dielectric Behavior Evaluation of Cobalt Substituted R-type Hexagonal Ferrites. IUB.

1285) Muhammad Khalid (Session 2017–2019): Investigation of Structural and Physical Properties of Ca-Hf Substituted $YFeO_3$ Nanoceramics. University of Agriculture Faisalabad Pakistan.

1286) Ijaz Ahmad Qazafi (Session 2017–2019): Ni-Zr Co-doped Lithium Ferrites for Microwave Devices Applications. Allama Iqbal Open University Islamabad Pakistan.

1287) Kiran Aslam (Session Fall 2017–2019): Influence of Copper and Cadmium on Structural and Dielectric Properties of W-type Hexagonal Ferrites. IUB.

1288) Muhammad Zahid (Session Fall 2017–2019): Influence of Hf and Mg on Physical Properties of $YFeO_3$ Ceramics. IUB.

1289) Fatima Maryam (Session Fall 2017–2019): Structural and Dielectric Properties of Indium Substituted U-type Hexagonal Ferrites. IUB.

1290) Iqra Iqbal (Session Fall 2017–2019): Synthesis and Characterization of Cadmium Substituted Sr Based W-Type Ferrites. IUB.

1291) Raheel Arshad (Session Fall 2016–2018): Fabrication and Characterization of Gd Doped W-type Hexagonal Ferrites. IUB.

1292) Salman Ahmad (Session 2017–2019): Influence of Gd and Cr Substitution on Crystal Structure and Physical Properties of $BiFeO_3$. IUB.

1293) Malik Tahir Mehmood (Session 2017–2019): Fabrication and Characterization of Al-Pr Co-doped Nanocrystalline Multiferroic $BiFeO_3$. IUB.

1294) Muhammad Usman (Session 2017–2019): Improvisation in Physico-chemical, Structural, Spectral and Dielectric Properties of Bi-Co Substituted Sr-hexaferrites Prepared by Sol-gel Route. IUB.

1295) Muhammad Hamza Iqbal Lodhi (Session 2017–2019): Sol-gel Synthesis and Characterization of Hf-Co Substituted $BiFeO_3$ Nanoceramics. IUB.

1296) Shagufta Gulbadan (Session 2017–2019): Influence of Al-Co Substitution on Structural and Dielectric Properties of M-type Strontium Hexagonal Ferrites Synthesized via Sol-gel Technique. IUB.

1297) Abdul Qadeer Khan (Session Fall 2016–2018): Impact of Dy on Structural and Magnetic Properties of Sr Based W-type Hexagonal Ferrites. IUB.

1298) Muhammad Waqar (Session 2016–2018): Structural Elucidation and Magnetic Behavior Evaluation of Nd-doped Nickel-Cobalt Spinel Ferrites Synthesized by Sol-gel Technique. IUB.

1299) Muhammad Javed Akhtar (Session 2016–2018): Sol-gel Synthesis and Characterization of Cu Substituted U-type Barium Hexagonal Ferrites. IUB.

1300) Muhammad Javed Iqbal (Session 2016–2018): Crystallographic, Magnetic and Dielectric Properties of Mg and Cr Co-doped $BiFeO_3$ Multiferroic. IUB.

1301) Arslan Ashraf (Session 2016–2018): Preparation and Multi-properties of K and Cd Substituted $BiFeO_3$ Multiferroic. IUB.

1302) Arfa Riaz (Session 2016–2018): X-ray Diffraction and Magnetic Studies on Nd Substituted Ferrites: $Co_{0.6}Zn_{0.4}$ $Nd_xFe_{2-x}O_4$ ($x = 0.0$–0.1) Obtained by Sol-gel Technique. IUB.

1303) Muhammad Qamar uz Zaman (Session 2015–2017): Structural and Magnetic Properties of Cu-Cr Doped X-type Hexagonal Ferrites. IUB.

1304) Rukhsana Kausar (Session 2016–2018): Investigation into the Structural and Dielectric Features of Ni Doped U-type Hexaferrites Prepared through Sol-gel Method. IUB.

1305) Shaheen Aslam (Session 2016–2018): Investigation on Structural and Magnetic Characteristics of Z-type Ba_3 Co_{2-x} $Mg_xFe_{24}O_{41}$ Hexaferrites Fabricated via Sol-gel Method. IUB.

1306) Muhammad Adil Mahmood (Session 2016–2018): Effect of Cd Additive on the Structural and Dielectric Properties of Z-type Hexaferrites Synthesized via Sol-gel Method. IUB.

1307) Muhammad Irshad (Session 2014–2016): Magnetic and Dielectric Properties of Co-Tb Ferrite/Polymer Composites. Allama Iqbal Open University Islamabad Pakistan.

1308) Muteeha Dilshad (Session 2014–2016): Fabrication and Characterization of $Ni_{1+x}Zr_xFe_{2-2x}O_4$ Nanostructures for Potential Applications in High Frequency Devices. Allama Iqbal Open University Islamabad Pakistan.

1309) Muhammad Nadeem (Session 2015–2017): Influence of Bismuth and Chromium Ions on the Structural, Dielectric and Magnetic Properties of Y-type Hexagonal Ferrites. IUB.

1310) Zubair Mahmood Hashmi (Session 2015–2017): Effect of Bismuth on the Physical Properties of $Li_{0.5}Co_{0.5}Fe_2O_4$

Nano-structured Spinel Ferrites. IUB.

1311) Nabeela Zahoor (Session 2015–2017): Influence of Yb Substitution on the Properties of W-type Hexagonal Nano-sized Ferrites Synthesized by Micro-emulsion Technique. IUB.

1312) Mubsher Hussain (Session 2015–2017): Fabrication and Characterization of Cobalt and Chromium Doped X-type Hexagonal Ferrites Synthesized via Micro-emulsion Route. IUB.

1313) Madiha Hanif (Session 2015–2017): Synthesis and Characterization of Praseodymium Doped Y-type Hexaferrites. IUB.

1314) Muhammad Rashid (Session 2015–2017): Structural Elucidation and Dielectric Behavior of Cu-Cr Doped Nanostructured X-type Hexagonal Ferrites. IUB.

1315) Aysha Saeed (Session 2015–2017): Impact of Cr-Co Doping on Structural and Dielectric Properties of $CdFe_2O_4$ Nanocrystalline Ferrites. IUB.

1316) Nadia Jabbar (Session 2014–2016): Impact of Dy-Ni Doping on the Structural, Dielectric and Magnetic Properties of $MnFe_2O_4$ Ferrites. IUB.

1317) Muhammad Riaz (Session 2014–2016): Fabrication and Characterization of $Co_{0.975}Tb_{0.025}Fe_2O_4$ and $Ca_{0.5}Ba_{0.5}Fe_{12}O_{19}$ Composite Ferrites. IUB.

1318) Gulbahar Bano (Session 2014–2016): Fabrication and Characterization of $Co_{0.95}Tb_{0.05}Fe_2O_4$ Ferrite/Polyethylene Oxide Nanocomposites. IUB.

1319) Nighat Zahoor (Session 2014–2016): Synthesis and Characterisation of $Ni_{0.93}Tb_{0.07}Fe_2O_4$ Ferrite/Polystyrene Nanocomposites. IUB.

1320) Ifra Luqman (Session 2014–2016): Synthesis and Characterization of Gd Doped Y-type Hexagonal Ferrites/Poly (Vinyl Alcohol) Nanocomposites. IUB.

1321) Muhammad Nasir Naeem (Session 2014–2016): Structural, Magnetic and Dielectric Properties of Co-Ni Doped $MnFe_2O_4$ Spinel Ferrites Synthesized by Micro-emulsion Route. IUB.

1322) Skindar Hayat (Session 2014–2016): Structural Elucidation and Dielectric Behavior Evaluation of Cu-Co Doped Manganese Spinel Ferrites. IUB.

1323) Habib Ullah (Session 2014–2016): Structural, Magnetic and Dielectric Properties of Yb^{3+} Doped $Ba_2Co_2Fe_{28}O_{46}$ X-type Hexagonal Ferrites. IUB.

1324) Faseeh-ur-Raheem (Session 2014–2016): Structural, Electrical, Dielectric and Magnetic Properties of Yb-doped $Sr_2NiCoFe_{28-x}O_{46}$ X-type Hexagonal Nano-ferrites Fabricated via Micro-emulsion Route. IUB.

1325) Abdul Majeed (Session 2014–2016): Synthesis and Characterization of Rare Earth (La, Nd, Gd, Tb, Dy) Doped BaCoNi-X Hexagonal Nanocrystallites. IUB.

1326) Muhammad Junaid (Session 2013–2015): Synthesis of $Li_{0.2}Ni_{0.8}Tb_{0.5x}Dy_{0.5x}Fe_{2-x}O_4$ Nanocrystalline Ferrites via Micro-emulsion Technique: Structural Elucidation and Dielectric Behavior Evaluation. IUB.

1327) Muhammad Kashif Sharif (Session 2013–2015): Synthesis and Characterization of Zr and Mg Doped $BiFeO_3$ Nanocrystalline Multiferroics. IUB.

1328) Muhammad Ejaz (Session 2013–2015): Synthesis and Characterization of Nanocrystalline $Mg_{0.7}Co_{0.3}Yb_xFe_{2-x}O_4$ Spinel Ferrites. IUB.

1329) Allah Ditta (Session 2013–2015): Impacts of Rare Earth Co-doping on the Structural and Dielectric Properties of $Ni_{0.4}Co_{0.6}Fe_2O_4$ Soft Ferrites. IUB.

1330) Muhammad Khurram Abbas (Session 2013–2015): Structural and Dielectric Properties of Nanocrystalline $Li_{0.5}Ni_{0.48}Tb_{0.02}Dy_xFe_{2-x}O_4$ Spinel Ferrites. IUB.

1331) Javed Rehman (Session 2013–2015): Structural and Dielectric Properties of Nanocrystalline Terbium Doped $Sr_2NiCoFe_{28}O_{46}$ X-type Ferrites. IUB.

1332) Muhammad Nasir (Session 2013–2015): Fabrication and Characterization of Nanocrystalline $Mn_2Ba_2Gd_xFe_{12-x}O_{22}$ Y-type Hexagonal Ferrites. IUB.

1333) Mushtaq Ahmad (Session 2013–2015): Synthesis and Characterization of Ytterbium Doped $NiCr_{0.1}Fe_{1.9}O_4$ Soft Ferrites. IUB.

1334) Shakeel Abbas (Session 2013–2015): Influence of Dy Doping on the Properties of Nanocrystalline $Ni_2Sr_2Fe_{12}O_{22}$ Y-type Hexagonal Ferrites. IUB.

1335) Abdul Hameed (Session 2013–2015): Synthesis and Characterization of Tb and Cr Co-doped $CoFe_2O_4$ Soft Ferrites. IUB.

1336) Kamran Khan (Session 2012–2014): Structural, Dielectric and Magnetic Behavior Evaluation of $La_{1-x}Sr_xCo_{1-y}Fe_yO_3$ Nanostructures. IUB.

1337) Muhammad Asif (Session 2012–2014): Influence of Co and Ni Doping on the Properties of $BiFeO_3$ Multiferroics Synthesized via Micro-emulsion Technique. IUB.

1338) Sawera Riaz (Session 2012–2014): Synthesis and Characterization of Ferrites/Polymers Composites for High Frequency Application. Allama Iqbal Open University Islamabad Pakistan.

1339) Muhammad Javid ur Rehman (Session 2012–2014): Structural and Magnetic Properties of Terbium Substituted Cobalt Spinel Ferrites. IUB.

1340) Muhammad Sabir (Session 2012–2014): Structural, Magnetic and Dielectric Properties of Terbium Doped Zinc Spinel Ferrites. IUB.

18.3.4 Dr. Hafeez Ullah

1341) Ghulam Gilanie (2011): Spectroscopy of T2 Weighted Brain MR Image for Object Extraction Using Prior Anatomical Knowledge Based Spectroscopic Histogram Analysis. M.Phil (Computer Sciences), Department of Computer Science & Information Technology, IUB. Co-supervisor.

1342) Muhammad Attique (2011): Colorization and Automated Segmentation of Human T2 MR Brain Images for Characterization of Soft Tissues. M.Phil (Computer Sciences), Department of Computer Science & Information Technology, IUB. Co-supervisor.

1343) Abdul Jabbar (2014): Qualitative and Quantitative Monitoring of Diffusible Analytes in Human Whole Blood: An *in vitro* Study. Laser and Optronics Laboratory, Department of Physics, BZU.

1344) Ejaz Ahmad Khera (2014): Optical Properties of Chicken Stomach Tissue Measured *ex vivo* with Optical Diffuse Reflectance. Department of Physics, AIOU.

1345) Muddasar Hussain Malik (2015): Quantification of Sucrose Levels in Rat Blood: An *ex vivo* Analysis with He-Ne Laser. Department of Physics, AIOU.

1346) Shabbeer Ahmad (2015): Automated Analysis and Segmentation of Breast Regions in Digital Mammogram: Artificial Neural Network Based Texture Analysis Approach. Department of Physics, AIOU.

1347) Muhammad Asim (2015): Quantification of Lycopene in Tomato and Tomato Products with Spectrophotometry. Laser and Optronics Laboratory, Department of Physics, BZU.

1348) Muzammil Ahmad (2015): Nitrated Tyrosine Used as Biosensor on BN Sheet: A DFT Study. Laser and Optronics Laboratory, Department of Physics, BZU.

1349) Munir Akhtar (2016): Rouleaux Formations of Leukocytes and Thrombocytes in the Presence of Sugar, Salt and Distilled Water. Department of Physics, BZU.

1350) Khalid Naeem (2016): Rouleaux Formation and Aggregation of Leukocytes and Thrombocytes in Blood Cancer. Department of Physics, BZU.

1351) Ashfaq Rasool (2016): Photodiagnosis of Dengue Virus in Human Blood: An *in vitro* Study. Department of Physics, BZU.

1352) Asif Shehzad (2016): Optical Properties Measurements of Bio-tissues with Homemade Optical Diffuse Reflectance Probe in Visible and IR Regime. Department of Physics, BZU.

1353) Namra Samain (2016): Salt Levels Quantification in Blood with Fourier Domain Optical Coherence Tomography: A Simulation Approach with Matlab Code. Department of Physics, BZU.

1354) Ansar Jehangir (2016): Classification of Chronic Kidney Diseases with Statistical Analysis of Texture Parameters: A Data Mining Technique. Department of Physics, BZU.

1355) Attia Batool (2016): Classification of Brain Tumor with Statistical Analysis of Texture Parameters: A Data Mining Technique. Department of Physics, BZU.

1356) Sidra Aftab (2016): Classification of Liver Cirrhosis with Statistical Analysis of Texture Parameters: A Data Mining Technique. Department of Physics, BZU.

1357) Muhammad Rizwan (2018): Identification of Liposarcoma and Skin Tumor from Cellular Biopsy Sample Using Optical Microscope. Institute of Physics, IUB.

1358) Asad Ur Rehman Khan (2018): Measurement of Glucose and Cholesterol Concentration in Blood from Absorption Peaks of UV/VIS Spectrum. Institute of Physics, IUB.

1359) Muhammad Asad Ihsan (2018): Measurement of Optical Density Difference Between Blood of Healthy and Leukemia Samples Using Spectrophotometer. Institute of Physics, IUB.

1360) Uzair Akhtar (2018): Measurement of Protein and Triglycerides in Blood at Specific Absorption Peaks of UV/VIS Spectrum. Institute of Physics, IUB.

1361) Muhammad Waseem Akram (2019): Analysis of Whole Blood and Blood Plasma of Different Mammals with Spectrophotometer. Institute of Physics, IUB.

1362) Muhammad Mehran (2019): Simulation of Dynamic Light Scattering Under Diffuse Wave Spectroscopy from Turbid Media. Institute of Physics, IUB.

1363) Saif Ullah (2019): An Intelligent Approach to Classify the Primary and Secondary Brain Tumor Using MRI Images and Deep Learning. Institute of Physics, IUB.

1364) Muhammad Zuhair Qasim (2019): Physical and Optical Properties of Calcium-Lead-Aluminate Glass. Institute of Physics, IUB.

1365) Mujahid Iqbal Shah (2019): Detection of Uric Acid Using UV-Vis Spectrophotometer. Institute of Physics, IUB.

1366) Fakhira Afzal (2019): 2D Imaging of Skeletal Muscles Using Light Microscope. Department of Physics, AIOU.

1367) Muhammad Bilal Shairwani (2019): Transport Mean Free Path of Photon in Turbid Media Under Dynamic Light Scattering. Center of Solid State Physics (CSSP), Department of Physics, PU.

1368) Muhammad Yasir (2019): Magnetic Resonance Imaging Technique to Differentiate Metastases and Normal Brain Tumor Through Image Processing. Institute of Physics, IUB.

1369) Khalil Ahmad (2019): Synthesis and Characterization of Cerium and Gold Core-Shell Nanoparticles for Their Computerized Tomography Contrast Agents. Institute of Physics, IUB.

1370) Samina Kousar (2020): Extraction and Quantification of DNA from Human Saliva by Using Spectrophotometer. Institute of Physics, IUB.

1371) Syed Mohsin Bin Arif (2020): Synthesis and Characterization of Graphene Oxide Based Nanoparticles. Institute of Physics, IUB.

1372) Abdul Sattar (2020): Intellectual Study of Medical Images Using MRI and CT Scan Techniques and Their Comparison. Institute of Physics, IUB.

1373) Muhammad Faran (2020): Diagnosis/Identification of Ocular Diseases Using OCT Database. Institute of Physics, IUB.

1374) Tahseen Sana (2020): Synthesis and Characterization of Gd-doped Mesoporous C-Al_2O_3 Nanoparticles and Its Biomedical Applications. Institute of Physics, IUB.

1375) Muniba Yaseen Naz (2020): Evaluation of Rh 640 Perchlorate Mediated Photodynamic Therapy on Rhabdomyosarcoma Cell Line. Institute of Physics, IUB.

1376) Iqra Tabssum (2020): Fabrication and Characterization of Nickel Oxide Thin Films for Energy Conversion Applications. Institute of Physics, IUB.

1377) Syeda Asma Gilani (2021): Enhancement in the Penetration Depth of the Time Domain Optical Coherence Tomography Signal. Department of Physics, AIOU.

1378) Muhammad Abu Bakar (2021): Automated Grading of Brain Tumor Using Transfer Learning from MRI Images. Institute of Physics, IUB.

1379) Maha Zafar (2021): White Light Microscopy and Fourier Domain Spectroscopy for Early Detection of Liver, Ovary and Breast Tumor. Institute of Physics, IUB.

1380) Shamsa Kanwal (2021): White Light Microscopy and Fourier Domain Spectroscopy for Early Detection of Brain, Intestine and Bone Tumor. Institute of Physics, IUB.

1381) Muhammad Raza (2022): Diagnosis of Liver Cancer Using Radiation Oncology Tools and Biomarkers: A Comparative Study. Institute of Physics, IUB.

1382) Arslan Ghalib (2022): Hyperproteinemia Measurements in Blood Using Optical Diagnostic Techniques: An *ex vivo* Study. Institute of Physics, IUB.

1383) Khalid Farooq (2022): Hyperkalemia and Hemochromatosis Investigation in Whole Blood. Institute of Physics, IUB.

1384) Muhammad Mazhar (2022): Hypercalcemia and Blood Pressure Investigation in Blood Under Different Concentrations of Calcium and Sodium. Institute of Physics, IUB.

1385) Tariq Mehmood (2022): Investigation of Whole Blood Cells Under Different Concentrations of Methanol (CH_3OH). Institute of Physics, IUB.

1386) Kiran Aslam (2022): 1D and 2D Imaging Modalities for Early Detection of Tumor in Bio-tissues: An *in vitro* Study. Institute of Physics, IUB.

1387) Bushra Mehmood (2022): Measurement of Cholesterol in Blood by Using Photo-diagnostic Techniques. Institute

of Physics, IUB.

1388) Muhammad Fiazz (2022): Hematological and Statistical Deviation of Blood Parameters and Components Under Cobalamin and Liquor. Institute of Physics, IUB.

1389) Humayun Shahzad (2023): Ab-initio Investigation of Characteristics of Metal Doped $GdScO_3$ for Enhanced Performance of RRAM Devices. Department of Physics, Bahawalnagar Campus, IUB.

1390) Muhammad Adnan Javed (2023): Characterization of Metal Doped $NdSO_3$ for Memory Storage Devices Using Density Functional Theory. Department of Physics, Bahawalnagar Campus, IUB.

1391) Muhammad Javed (2023): First Principles Study of Key Properties of Metal Doped $DyScO_3$ for Memristor Applications. Department of Physics, Bahawalnagar Campus, IUB.

1392) Muhammad Kashif Farooq (2023): DFT-based Study of $TbSc_{1-x}M_xO_3$ (M = Ni, Cu, Zn) for RRAM and Allied Applications. Department of Physics, Bahawalnagar Campus, IUB.

1393) Samra Rehman (2023): Retardance or Attenuation in Components, Parameters and Hormones of COVID-19 Recovered and Normal Blood Under Metoclon. Institute of Physics, IUB.

1394) Zunaira Arif (2023): Retardance or Attenuation in Components, Parameters and Hormones of Normal and Hepatitis-C Blood Under Metochlopramide. Institute of Physics, IUB.

1395) Muhammad Shahid (2023): Adverse Impact of Neurobion on Health Using Normal and Cancerous Blood Under Histopathology Technique. Institute of Physics, IUB.

1396) Jhan Zaib Khan (2023): Hematological Complications and State of Normal Blood Under Cefexime and Ciprofloxacin Analyses: An *in vitro* Study. Institute of Physics, IUB.

1397) Tooba Javed (2023): Comparative Physiology and State of Blood Cells and Parameters of Blood Cancer and Breast Cancer Under Ciprofloxacin. Institute of Physics, IUB.

1398) Ali Haider Karar (2023): Histopathological Investigation of Cancerous Blood and Tissues Under Cefexime Using Microscopy and FTIR. Institute of Physics, IUB.

1399) Iqra Ramzan (2023): Histopathological Investigation of Rectal Cancer and Normal Blood Under Cefixime and Calcium Chloride Using Microscopy. Institute of Physics, IUB.

1400) Alia Mustafa (2023): Physiology and State of Normal and Thalassemia Blood Under Neurobion Using Optical Techniques and Statistical Tools. Institute of Physics, IUB.

1401) Iram Nadeem (2023): Complications of Components and Parameters of Normal and Hepatitis-B Blood Under Cefexime. Institute of Physics, IUB.

1402) Muhammad Arfan Sardar (2024): Fabrication of CZTS Nanoparticles at Various Reaction Parameters via Solvothermal Method. Department of Physics, Rahim Yar Khan Campus, IUB.

1403) Amina Shahid (2024): Characterization of Fibroadenoma and Grade III Breast Cancer Under Analyte Iron Zinc Composite. Institute of Physics, IUB.

1404) Jahangeer Khan (2024): Hematological Calculations and Anisotropic Variations of Normal and Breast Cancer Blood Under Analyte Zinc. Institute of Physics, IUB.

1405) Muhammad Fiaz (2024): *Ex-vivo* Characterization of Breast Cancer and Cervix Under Analyte Moringa Through Optical Technique. Institute of Physics, IUB.

1406) Muhammad Nabeel Mirza (2024): Facial Action Units (FAUs) of Depression Patients. Institute of Physics, IUB.

1407) Madeeha Rasool (2024): Fibroadenoma (Breast Cancer) Normal and Grade II Under Analyte Moringa. Institute of Physics, IUB.

1408) Saba Iqbal (2024): Quantification of Benign and Malignant Cervix Blood Under Analyte Moringa. Institute of Physics, IUB.

1409) Zarfshan Noreen (2024): Structural and Hematological Variations of Polyp and Poorly Differentiated Squamous Cell Carcinoma Under Analyte Iron Zinc Composite. Institute of Physics, IUB.

1410) Muhammad Saeed (2024): Characterization of Benign and Malignant Cervix Under Zinc Analyte Through Optical Technique. Institute of Physics, IUB.

1411) Kaleem Ullah Mughal (2024): Physiological and Hematological Adaptations in Papillary Carcinoma and Goiter Under Analyte Iron Zinc Composite. Institute of Physics, IUB.

1412) Ambreen Fatima (2026): Synthesis of ZnO-Polymer Based Composites for Biomedical Applications. Institute of Physics, IUB.

1413) Aimen Chaudhary (2026): Early Prognosis and Differentiation of Breast and Kidney Cancer Using Mueller Matrix Polarimetry. Institute of Physics, IUB.

1414) Zeeshan Azam (2026): Fabrication of CeO_2 Polymer Based Composite Particles for Biomedical Applications. Institute of Physics, IUB.

1415) Amjad Ali (2026): Extraction and Quantification of DNA from Thalassemia Patients Using Spectrophotometer. Institute of Physics, IUB.

1416) Muhammad Junaid (2026, Thesis Submitted): ZnO/RGO Nanocomposites Synthesis and Characterization for Effective Water Purification Applications. Institute of Physics, IUB.

1417) Aifa Firdous (2026, Thesis Submitted): Sol-gel Synthesis and Characterizations of Pure and Yttrium-doped ZnO. Institute of Physics, IUB.

1418) Tabinda Noreen (2026, Thesis Submitted): Sol-gel Synthesis and Characterizations of Pure and Ca^{2+} Doped Bismuth Ferrites. Institute of Physics, IUB.

18.3.5 Dr.Aalia Nazir

1419) Sidra Rafaqat (2024): Impact of Diabetes Mellitus on Knee Functionality Through Doppler Ultrasound Diagnosis. IUB.

1420) Khizra Mubarak (2024): Dosimetric Verification of Prostate Cancer Treatment Using the Rapid Arc Technique. IUB.

1421) Afeera Khan (2024): Diagnostic Role of Ultrasound to Differentiate the Intima-Media Thickness Values of Carotid Arteries of Diabetic Type-II Patients. IUB.

1422) Shumaila Irum (2024): Selenium Nanoparticles in Biomedicine: Harnessing the Power of Aloe Vera, Garlic, and Neem Extracts. IUB.

1423) Noshaba Ibrahim (2024): Exploring the Efficacy of Zinc-Based Nanogel for Wound Healing: An In Vivo Study. IUB.

1424) Maham Fatima (2024): Validation of Dosimetry for Cervical Cancer Treatment Utilizing the Rapid Arc Technique: A Comprehensive Study. IUB.

1425) Iqra Akram (2024): Assessment of Optimal Treatment Planning for Breast Cancer Using 3D Conformal Radiotherapy. IUB.

1426) Asia Ahmed (2024): Comprehensive Exploration of Biomedical Applications: Zirconia Nanoparticles Enhanced with Aloe Vera, Moringa, and Neem Extract. IUB.

1427) Nadia Asad (2024): Exploring the Effects of Type II Diabetes Mellitus on Brain Efficiency Through Doppler Ultrasonography. IUB.

1428) Laiba Kanwal (2023): Evaluation of Zinc Oxide Nanoparticles for Contrast Enhancement in MRI. IUB.

1429) Maryam Sattar (2023): Green Synthesis and Characterization of Zinc Oxide, Copper Oxide and Their Nanocomposite for Biomedical Application. IUB.

1430) Fareeha Bibi (2023): In Vitro Study of Bismuth Based Nanoparticles as MRI Contrast Agent. IUB.

1431) Amna Asif (2023): A Comprehensive Analysis of MnO Nanoparticles Embedded in MAGIC Gel as MRI Contrast Agent. IUB.

1432) Erum Younas (2023): Analysis of Biocompatibility of Bismuth Doped Copper Oxide Nanoparticles by Using Mint and Spinach Extracts. IUB.

1433) Sara Qudoos (2023): An Automated Approach for MRI Brain Image Enhancement and Tumor Segmentation Using Deep Learning Technique. IUB.

1434) Muhammad Aslam (2023): A Comparative Analysis of American Thyroid Association (ATA) and European Thyroid Association (ETA) Guidelines for Thyroid Cancer Management. IUB.

1435) Sadia Islam (2023): Structural and Optical Properties of Sn Doped CdS Nanowires. IUB.

1436) Anum Akbar (2022): Risk-Free and Automated Approach of Brain Tumor Types Detection from MR Images Using Deep Learning Techniques. IUB.

1437) Mehreen Iqbal (2022): An Automated and Efficient Approach of Normal and Hepatocellular Carcinoma Slices Classification from Liver CT Scan Using Machine Learning Techniques. IUB.

1438) Noor ul Ain (2022): A Non-Invasive and Automated Method of Brain Disorders Detection from MR Images Using Deep Convolutional Neural Networks. IUB.

1439) Khalida Bibi (2022): Synthesis, Characterization and Biomedical Applications of Polymer-Based Zinc Oxide/Cerium Oxide Nanocomposite. IUB.

1440) Aneeba Fatima (2022): Enhanced Photocatalytic and Antibacterial Activity of Green Synthesized Cadmium Oxide and Manganese Oxide Nanocomposite. IUB.

1441) Maryam Zulfiqar (2022): Facile Synthesis and Characterization of Metal Oxide Nanocomposite for Application in Environmental Remediation. IUB.

1442) Saba Amir (2021): Quality Enhancement for High Dose Rate Brachytherapy. IUB.

1443) Maria Sarwar (2021): Efficacy of Radioactive Iodine in Thyroid Cancer Patients. IUB.

1444) Maryam Iqbal (2021): Investigation of High Dose Rate Brachytherapy for the Treatment of Cervical Cancer. IUB.

1445) Anam Arshad (2020): Feasibility of Implementation of CT in Brachytherapy Gel Dosimetry. IUB.

1446) Sadaf Yasmeen (2020): A Comparative Analysis of Mammographic Breast Density Measurement with MRI. IUB.

1447) Sanam Iftikhar (2020): Assessment of Breast Density Measurement for the Women at Higher Cancer Risk. IUB.

1448) Atif Bilal (2020): Analysis of Different Abnormalities in Brain Tissues. IUB.

1449) Khadija Aslam (2019): Three-Dimensional Visualization of Brain Tissues by Using X-Ray Computed Tomography. IUB.

1450) Neelam Rehman (2019): Evaluation of T1 and T2-Weighted Images of Soft Tissues of MRI. IUB.

1451) Zainab Shah (2019): A Comparative Analysis of CT and MRI for Brain Tumor. IUB.

1452) Tooba Rafiq (2019): Development and Characterization of Gold Nanoparticles for Biomedical Applications. IUB.

1453) Arifa Bano (2019): Synthesis and Characterization of Lipid Coated Nanoparticles for Biomedical Applications. IUB.

1454) Amir Shahzad (2019): Analyzing Different Aspects of Lung Cancer by Using Computed Tomography. IUB.

1455) M. Ismail (2019): Role of MRI in Spinal Cord Injuries. IUB.

1456) M. Zeeshan Arshad (2018): Investigation of Brain Tumor by Using MRI. IUB.

1457) M. Irshad (2018): Investigation of Brain Hemorrhage by Using MRI. IUB.

1458) Akhtar Rasool (2018): Investigation of Hepatocellular Carcinoma (HCC) by Computed Tomography. IUB.

1459) Iftikhar Alam (2018): Assessment of Pancreatitis by Using Computed Tomography. IUB.

1460) M. Hussain (2018): Diagnosis of Kidney Renal Failure by Using Computed Tomography. IUB.

1461) M. Bilal (2018): Assessment of Bronchiectasis by Using CT Scan. IUB.

1462) Kalsoom Shahab (2015): MRI of Acquired Hydrocephalus. IUB.

1463) Tanzila Shabbir (2015): Role of MRI in Congenital Hydrocephalus. IUB.

1464) Shumaila Zareen (2015): Role of Magnetic Resonance Imaging in Brain Hemorrhage Stroke. IUB.

1465) M. Zahid (2014): Portal Vein Doppler in Cirrhosis of Liver. IUB.

1466) Robina Naz (2013): Evaluation of Temporal Bone Fractures with 3D Computed Tomography. IUB.

18.3.6 Dr. Muhammad Arshad Javid

1467) Muhammad Ali Raza (Fall 2023–2025, F23BPHYS3E01039): Enhancing Outcomes in Hypo-fractionated Breast Radiotherapy Using 3D Conformal Radiotherapy. IUB.

1468) Tehmina Mustafa (Fall 2023–2025, F23BPHYS3E01089): Estimation of Iron Content in Basal Ganglia in Brain Using High Pass Filter. IUB.

1469) Muhammad Irfan (Fall 2023–2025): Computational Investigation of the Structural, Optoelectronic and Mechanical Properties of Si Doped ZnO Crystal. IUB.

1470) Sadia Aslam (Fall 2023–2025): Effect of Sn-doping on the Optoelectronic Properties of Zinc Oxide Crystal: A DFT Study. IUB.

1471) Ahmad Aftab (Fall 2023–2025): Synthesis of Biomedical Nonmagnetic Materials for Enhanced Contrast Agents. IUB.

1472) Muhammad Mudassir (2021–2023): Mechanical Properties of Dental Material for Biomedical Applications.

IUB.

1473) Irbaz Ishfaq (2022–2024): Detection and Segmentation of Multiple Sclerosis Lesions in MRI FLAIR Images Using Deep Learning Technique. IUB.

1474) Salwa Saeed (2021–2023): Comparison of Blood Flow in Vessels and Arteries of Brain in Multiple Sclerosis Patients Using Magnetic Resonance Angiography. IUB.

1475) Shoaib Arshad (2021–2023): Improved Segmentation of Periventricular Multiple Sclerosis Lesions Through Convolutional Neural Networks with ResNet Architecture. IUB.

1476) Kiran (2021–2023): Detection and Measurement of the Intensity of Multiple Sclerosis Lesions of Spinal Cord and Brain Using 2D FLAIR Magnetic Resonance Imaging. IUB.

1477) Ayesha Ghaffar (2021–2023): Identifying High Grade Glioma Using the EfficientNet Model with Magnetic Resonance Spectroscopy and Imaging. IUB.

1478) Muhammad Zeeshan (2022–2024): Filter Effect of Magnetic Susceptibility in Deep Gray Matter in Brain Using Quantitative Susceptibility Mapping. IUB.

1479) Sammar Shabir (2022–2024): Computing Resistivity, Thermal Conductivity, Phase Diagrams, and Phase Transitions in Aluminium Alloys Using Thermo-Calc. IUB.

1480) Ali Raza: Optimization of Rotational Angle Assessment in Acetabular Fractures Through Judet Views in X-Ray Imaging. IUB.

1481) Amna Mazoor: An Advanced Convolutional Neural Network Approach for Lung Tumor Diagnosis Using CT Imaging. IUB.

1482) Ifrah Fatima: Diagnosis of Breast Cancer from Hematoxylin and Eosin-Stained Slides Using FTIR and UV-Vis Spectroscopy. IUB.

1483) Kiran Bashir: Computing Thermodynamics and Electrical Properties of Nitinol Alloys Using Thermo-Calc. IUB.

1484) Hafiz Muhammad Faisal: A Comparative Simulation Study of the Different Variations of PZT Piezoelectric Material Using COMSOL Multiphysics. IUB.

1485) Muhammad Touheed Ul Hassan: Enhanced Mechanical and Physical Properties of Conventional Glass Ionomer Cement by Adding Zirconium Oxide Nanoparticles. IUB.

1486) Humaira Kanwal: Synthesis and Fabrication of Magnetic Ferrites for Energy Harvester. IUB.

1487) Madeeha Ashraf: 2D TOF Magnetic Resonance Venography of Jugular Veins in Patients with Multiple Sclerosis. IUB.

1488) Sidra Khan: Diagnosis of Blood Cancer from Glass Slides Using FTIR and Histopathology. IUB.

1489) Khansa Khalil: Mechanical Properties of Green Synthesized Ni Added Glass Ionomer Cement. IUB.

1490) Tayyaba Qayyum: FTIR and UV-Vis Spectroscopy in Liver Cancer Diagnosis. IUB.

1491) M. Imran (2017–2019): Pathological Evaluation of Ultrasound Waves in Human Blood. IUB.

1492) Adeel Ahmad (2019–ongoing): Nickel Based Iron Oxide Nanoparticles as T2-W MRI Contrast Agents. IUB.

1493) Nazih (2017–2019): Synthesis of Ag-Cu Based Epoxy Polymer Composite for Electrical Conductivity. IUB.

1494) Aqeel Ahmad: Synthesis and Mechanical Properties of Ag Based Glass Ionomer Cements. IUB.

1495) Waleed Raza: Synthesis and Characterization of Cobalt Ferrites for MRI Contrast Agent. IUB.

1496) Qurat ul Ain: Synthesis and Mechanical Properties of Dental Amalgam. IUB.

1497) Mudssar Jilani: Mechanical and Thermal Properties of Resin Based Epoxy Filling Materials. IUB.

1498) Waleed Ali (2016–2017): Preparation and Characterization of Magnetic Nanoparticles for Hyperthermia. IUB.

1499) Khalida Mubeen (2016–2017): Polyethylene Glycol Coated Magnetic Nanoparticles for Biomedical Application. IUB.

1500) Uzma Hanif (2016–2017): Filter Effect on Magnetic Susceptibility in Deep Grey Matter of Multiple Sclerosis Brain. IUB.

1501) Qudsia (2016–2017): Preparation and Characterization of Chitosan Coated Magnetic Nanoparticles. IUB.

1502) Zafar Ullah (2016–2017): A DFT Study of Electronic and Optical Properties of Lithium Niobate. IUB.

1503) Ammar Sadique: Toxicity Evaluation of Magnetite in Human Blood. IUB.

1504) Adil Mahmood: Toxicity Assessment of PEG Coated Fe_3O_4 Fluids in Different Groups of Blood Cells. IUB.

1505) Sajjad Ahmad: Thermodynamics of Magnetite Nanocomposites. IUB.

1506) Rohail: A Nanomagnet Towards Micro Current — A Thermoelectric Analysis. IUB.

1507) M. Rafi (2014–2016): Synthesis and Characterization of Sn Doped ZnO Nanoparticles. IUB.

1508) Atif Hameed (2016–2017): MRI Study of Chitosan Coated Magnetic Nanoparticles. IUB.

1509) Arsalan Aslam (2016–2017): Mechanical Properties of Iron Oxides Composite Materials. IUB.

1510) Sumair Ijaz (2016–2017): A DFT Study of Electronic and Optical Properties of ZnS. IUB.

1511) Afifa (2017–2018): Quantification of Blood Flow in Small and Large Vessels. IUB.

1512) Farwa (2017–2018): NMR Study of PEG Coated Ferric Oxides. IUB.

1513) Qurat ul Ain (2017–2018): Quantification of Diamagnetic and Paramagnetic Properties of Human Brain. IUB.

1514) Farwa Shukat (2019–2021): Development and Phase Transformation Study of Shape Memory Alloy. IUB.

1515) Hafiz M. Waseem (2019–2021): Fabrication and Pulse Sequences Evaluation of Iron Oxides Nanoparticles as MRI Contrast Agent. IUB.

1516) Irfan Ali (2019–2021): Development of Oxidation Resistive Coating for High Temperature Applications. IUB.

1517) Hina (2019–2022): To Assess Covid-19 in Lungs Using Medical Imaging Technique. IUB.

1518) Deeba Azhar (2019–2022): To Study the Dosimetry Aspects of Commissioning of Medical Linear Accelerator for Radiotherapy of Cancer Patients. IUB.

1519) Sidra Nighat (2019–2020): Synthesis of Graphene Based PVDF Composite with Enhanced Mechanical and Thermal Properties. University of Wah.

1520) Hifsa Asghar (2019–2020): Enhanced the Mechanical Properties of Poly Vinyl Alcohol (PVA) by Using Graphene. University of Wah.

1521) Sanaullah Khan (2017–2019): To Develop an Algorithm for Quantitative Analysis of Cancerous Cells Using Magnetic Resonance Spectroscopy Imaging. IUB.

1522) Saba Syed (2017–2019): Metabolic Evaluation of Brain Tumor Using Magnetic Resonance Spectroscopy. IUB.

1523) Umme Habiba (2017–2019): Age-dependent Assessment of Chemical Changes in Glioma Using Magnetic Resonance Spectroscopy. IUB.

18.3.7 Dr. Muhammad Hashim

1524) ... 2024–2026: Effect of Lanthanum Substitution on Structural and Dielectric Properties of Li-Cu-Cd Spinel Ferrites. Institute of Physics, IUB.

1525) ... 2023–2025: Role of La^{3+} Ion Doping in Modulating the Structural, Optical Characteristics of Co-Li-Cd Spinel Ferrites. Institute of Physics, IUB.

1526) Tahreem Saleem (2022–2024): Synthesis, Characterizations and Photocatalytic Property of Bismuth Molybdate Nanoparticles. Institute of Physics, IUB.

1527) Zahid Hussain (2022–2024): Effect of Cerium Ion on Optical and Structural Properties of Zn-Cd-Cu Soft Ferrites. IUB.

1528) Ejaz Munir (2022–2024): Effect of Lanthanum Ion on Optical and Structural Properties of Zn-Cd-Cu Soft Ferrites. Institute of Physics, IUB.

1529) Kashif Mukhtar (2022–2024): Effect of Cerium Ion on Optical and Structural Properties of Zn-Cd-Mg Soft Ferrites. Institute of Physics, IUB.

1530) Muhammad Bilal (2021–2023): First Principle Study of Structural, Electronic, Optical and Elastic Properties of $HfMgO_3$. Institute of Physics, IUB.

1531) Muhammad Ijaz (2021–2023): A DFT Theory of Electronic, Optical, Mechanical, Elastic and Thermodynamic Properties of $KZnF_3$ with Applied Stress. Institute of Physics, IUB.

1532) Muhammad Towqeer Ashraf (2021–2023): First Principle Calculations of Structural, Elastic, Electronic and Optical Properties of $KMgF_3$. Institute of Physics, IUB.

1533) Muhammad Amir Yameen (2021–2023): Analysis of the Structural and Optical Properties of Lanthanum-Doped Mn-Cd-Cu Soft Ferrites Prepared by Sol-Gel Method. Institute of Physics, IUB.

1534) Muhammad Waqas (2021–2023): Structural and Optical Properties of Lanthanum-Doped Cu-Cd-Co Soft Ferrites Synthesized by Sol-Gel Method. Institute of Physics, IUB.

1535) Hammad Ghaffar (2020–2022): Effect of Composition of ZnO/NiO Nanocomposites on Their Structural, Optical and Photocatalytic Property. Institute of Physics, IUB.

1536) Usama Mureed (2020–2022): Effect of Cobalt Concentration on Optical Properties of Antimony Sulphide Thin Film for Solar Cell Application. Institute of Physics, IUB.

1537) Muhammad Imran (2020–2022): Synthesis and Photocatalytic Property of Co Doped NiO Nanostructures. Institute of Physics, IUB.

1538) Fatima Javed (2018–2020): Iron Doped TiO_2 Nanoparticles for Magnetic Resonance Imaging and Photo-therapy Applications. KFUEIT, Rahim Yar Khan.

1539) Sara Yaseen (2018–2020): Deposition and Characterization of Bi Doped Sb_2S_3 Thin Films by Chemical Bath Deposition. KFUEIT, Rahim Yar Khan.

1540) Mubashra Arshad (2018–2020): Synthesis and Characterization of Mn Doped TiO_2 Nanoparticles for Photocatalytic Applications. KFUEIT, Rahim Yar Khan.

1541) Hafiz Muhammad Shoaib Sajid (2018–2020): Synthesis and Characterization of Co Doped NiO Nanostructures by Chemical Solution Method. KFUEIT, Rahim Yar Khan.

1542) Muhammad Ramzan (2018–2020): Preparation and Physical Characteristics of $Cu_xNi_{1-x}O$ for Solar Cell Applications. KFUEIT, Rahim Yar Khan.

1543) Hafiza Ishrat Fatima (2018–2020): Investigation of Mn Doped CuO Nanostructures Prepared by Composite Hydroxide Mediated Approach. KFUEIT, Rahim Yar Khan.

1544) Muhammad Shafiq (2018–2020): Synthesis of CdTe Based Efficient Light Absorbing Nanostructures. KFUEIT, Rahim Yar Khan.

18.3.8 Dr. Muhammad Shahzad Shifa

1545) Aniqa Javed (2026, Thesis Under Review): AI-Assisted Noise Reduction and Image Quality Improvement in Low Dose CT Scan. IUB.

1546) Zeeshan Hussain (2026, Thesis Under Review): Automated High-Resolution Image Enhancement of CT Scans Using Machine Learning. IUB.

1547) Nimra Tariq (2026, Viva Remaining): Effect of Cerium Ion Substitution on Structural, Optical and Dielectric Properties of Li–Cd–Mg Spinel Ferrite. IUB.

1548) Rimsha Arshad (2026, Viva Remaining): Contrast Agents of CT Scan Using Bismuth Nitrate and Disodium Sulfide Coated with Bismuth Oxide. IUB.

1549) Hafsa Batool (2025): Silver Sulfide-Decorated Graphene Quantum Dots as a Computed Tomography Contrast Agent. IUB.

1550) Ikram Ul Haq (2024): Structural and Dielectric Properties of Ni–Zr Substituted M-Type Hexagonal Ferrites Synthesized via Sol-Gel Auto-Combustion Technique. IUB.

1551) Hafiz Muhammad Javed Gul (2024): Structural and Dielectric Properties of Strontium–Chromium Substituted Z-Type Hexagonal Ferrites. IUB.

1552) Hamza Zafar (2024): Influence of Gadolinium Substitution on Structural and Dielectric Properties of Zinc Chromates. IUB.

1553) Toqeer Arif (2024): Impact of Lanthanum Substitution on Structural and Dielectric Properties of Cobalt Chromates. IUB.

1554) Waqar Ali (2024): Structural and Dielectric Properties of Yttrium Substituted U-Type Hexaferrites. IUB.

1555) Hafiz Nadeem Akram (2023): Crystal Structure Analysis and Dielectric Response of Zn^{2+} Substituted $La_{0.8-x}Mg_xCd_{0.2}FeO_3$ Multiferroics. IUB.

1556) Hafiz Rashid Ullah Khan (2023): Structural Elucidation, Spectral and Dielectric Properties of $La_{0.8-x}Mg_xCd_{0.2}FeO_3$ Multiferroics. IUB.

1557) Farhan Haider (2023): Crystal Structure Analysis and Dielectric Measurements of Ho^{3+} Substituted CoZn Y-Type Barium Hexaferrites. IUB.

1558) Amad Ali (2023): Crystal Structure and Dielectric Response of Sm^{3+} Substituted CoZn Y-Type Barium Hexaferrites. IUB.

1559) Sana Batool (2022): Structural and Dielectric Properties of Neodymium Doped Z-Type Hexaferrites. IUB.

1560) Mehboob Alam (2022): Synthesis and Characterization of Holmium Substituted W-Type Hexaferrites. IUB.

1561) Aamir Saleem (2022): Impact of Samarium on U-Type Hexaferrites. IUB.

1562) Muhammad Azeem Khan (2021): Study of Bismuth Substituted Cobalt Ferrites at Different Temperatures. IUB.

1563) Waseem Sajjad (2020): Aluminum Substituted Cobalt Zinc Ferrite Synthesized via Micro-Emulsion Method. IUB.

1564) Humaira Akhter Shahia (2020): Zr–Al Substituted M-Type Barium Hexaferrites Synthesized via Co-Precipitation Technique. IUB.

1565) Ghulam Rasool (2020): Bi Substitution of Strontium Cobalt Zinc Ferrite Synthesized via Micro-Emulsion Technique. IUB.

1566) Ruba Akbar (2019): Pr Substituted Bismuth Cobalt Zinc Ferrite Synthesized via Micro-Emulsion Technique. IUB.

1567) Muhammad Tayyab (2019): Cerium Substituted Co–Zn Ferrite Synthesized via Micro-Emulsion Method. IUB.

1568) Waqar Ahmed Khan (2019): Characterization of Strontium Substituted Barium Zinc Hexaferrite Synthesized via Co-Precipitation. IUB.

1569) Khalid Mahmood (2018): Characterization of Praseodymium Substituted Cobalt Zinc Ferrites ($Co_{0.5}Zn_{0.5}Pr_x Fe_{2-x}O_4$) Synthesized via Co-Precipitation Method. IUB.

1570) Muhammad Tariq (2018): Study of Neodymium Substituted X-Type Hexagonal Ferrites Synthesized via Co-Precipitation Method. IUB.

1571) Khudija Tahir (2018): Impact of Li^{1+} Substitution on Ca–Zn Spinel Ferrites Synthesized via Micro-Emulsion Method. IUB.

1572) Amina Saleem (2018): Characterization of Bismuth Substituted Lithium Cobalt Ferrites Synthesized via Micro-Emulsion Method. IUB.

1573) Muhammad Azhar Abbas (2018): Characterization of Bismuth Substituted Lithium Nickel Ferrites Synthesized via Micro-Emulsion Method. IUB.

1574) Misbah Khan (2018): Electric Dipole Moment and Structural Properties of Polar Fluids Using Molecular Dynamic Simulations. IUB.

1575) Zeshan Mehboob (2017): Effect of Ca on Cobalt Zinc Ferrite (Co–$ZnFe_2O_4$) Synthesized by Micro-Emulsion Technique. IUB.

1576) Muhammad Usman ul Ghani (2017): Role of Li on Structural and Morphological Properties of Cobalt Zinc Ferrites Synthesized via Micro-Emulsion Technique. IUB.

1577) Misbah Ahmad (2017): Zr^{3+} Substituted Cobalt Zinc Ferrites Prepared by Co-Precipitation Route and Investigation of Its Properties. IUB.

1578) Imran Khan (2017): Synthesis and Characterization of Nd^{3+} Substituted Cobalt Zinc Spinel Ferrites ($Co_{0.5}Zn_{0.5} Fe_{2-x}Nd_xO_4$) via Co-Precipitation Method. IUB.

1579) Safdar Hussain (2016): Implication of Solar Energy on Cotton Crop Patterns Using Crop Canopy Models and Vegetative Indices. IUB.

1580) Muhammad Asif Shehzad (2015): Optical Investigation of Zinc Sulphide Prepared by Solid-State Reaction. IUB.

18.3.9 Dr. Majid Niaz Akhtar

1581) Ahmad Loqman Bin Zainal Abidin (2009): Development of Electromagnetic Detector Using Carbon Nanotubes and Smart Data Logger System. B.Eng (Hons) EAB4012/4034, IUB.

1582) Rayzeme Bin Harun (2009): Development of Wireless Control Mechanism for Better EM Source and Receiver Positioning for Onshore Application. B.Eng (Hons) EAB4012/4034, IUB.

1583) Muhammad Hafiz Bin Mohameed Kassim (2009): EM Wave Amplifier: A New Concept for Seabed Logging. B.Eng (Hons) EAB4012/4034, IUB.

1584) Mohd Faizan Fahmi B. Kamaruddin (2009): Development of Novel Terminated Antenna in a Conducting Medium. B.Eng (Hons) EAB4012/4034, IUB.

1585) Nur Intan Baizura Bt Zainal Abidin (2010): Development of EM Twin Dipole Antenna for Hydrocarbon Exploration. B.Eng (Hons) EAB4012/4034, IUB.

1586) Suhaili Aifah Binti Seth (2010): Development of EM Versatile Ferromagnetic Loop Antenna for Shallow Water Hydrocarbon Exploration. B.Eng (Hons) EAB4012/4034, IUB.

1587) Muhammad Faqih Othman (2010): Microreactor Design for Ammonia Synthesis. B.Eng (Hons) EAB4012/4034, IUB.

1588) Nurliyana Bt. Che Zul (2010): Synthesis of Zinc Oxide Nanoparticles and Carbon Nanotubes with PVA Polymer for Dye-Sensitized Solar Cell. B.Eng (Hons) EAB4012/4034, IUB.

1589) Ahmad Aiman B. Zorkepli (2010): Simulation on Hydrocarbon Detection in 1-D Using MATLAB. B.Eng (Hons) EAB4012/4034, IUB.

1590) Izzah Amani Bt. Tarmizi (2011): Design of Microreactor for Ammonia Synthesis. B.Eng (Hons) EAB4012/4034, IUB.

1591) Ismayadi Bin Ismail (2011): Preparation and Characterisation of Multi-Walled Carbon Nanotubes via Pulsed Laser Deposition Technique. M.Sc. (Physics) PHY 5999, IUB.

1592) Samaila Bawe Waja (2011): Catalytic Effect on the Growth of Carbon Nanotubes. M.Sc. (Physics) PHY 5999, IUB.

1593) Nur Azliza Bt. Ahmad (2011): Simulation and Development of a Powerful Web-Like Hexagon Shape EM Transmitter. M.Eng (EE), IUB.

1594) Muhammad Hanis Bin Zakaria (2011): Development of a Superconductors-Based Electromagnetic Wave Detector. M.Eng (EE), IUB.

1595) Husnain Ahmad (2014): Fabrication of High-Frequency YIG Nanoferrites-Based Devices. MS Project, IUB.

1596) Insarullah Khan, Muhammad Tauqeer (2015): Synthesis and Characterization of Cu–Ce Spinel Nanoferrites. BS Project, IUB.

1597) Muhammad Yousaf (2015): Synthesis and Characterization of Gd–Ce Garnet Ferrite Nanoparticles. BS Project, IUB.

1598) Muhammad Babar (2015): Synthesis and Characterization of Pr-Substituted Co-Based Spinel Ferrite Nanoparticles. BS Project, IUB.

1599) Ahad Ali Khan (2015): Synthesis and Characterization of Co–Cu-Based Spinel Ferrite Nanoparticles. BS Project, IUB.

1600) Asia Rehman (2015): Synthesis and Characterization of $Ni_{0.5}Mg_xZn_{0.5-x}Fe_2O_4$ Prepared by Sol-Gel Method. MS Project, IUB.

1601) Muhammad Yousaf (2016): Effect of Rare Earth Ions on Garnet Nanoferrites for High-Frequency Applications. MS Project, IUB.

1602) Sunder Makhdom (2016): Synthesis and Characterization of Rare Earth Doped Spinel Nanoferrites for Biomedical Applications. MS Project, IUB.

1603) Hafiza Ayesha Siddiqa (2016): Preparation and Characterization of Doped Spinel Ferrites for Environmental Application. MS Project, IUB.

1604) Aleena Kiran (2016): Study of High-Frequency Electromagnetic Properties of Rare Earth Doped Spinel Ferrites. MS Project, IUB.

1605) Muhammad Asif (2016): Synthesis and Characterization of Y-Type Hexagonal Nanoferrites for High-Frequency Applications. MS Project, IUB.

1606) Amna Abidin (2016): Synthesis and Characterization of Bi-Doped Cu Spinel Ferrites. MS Project, IUB.

1607) Ahmad Iftikhar Quraishi (2017): Synthesis and Characterization of Ni–Cu Doped M-Hexaferrites for High-Frequency and Energy Storage Devices. MS Project, IUB.

1608) Jawaria Shaheen (2017): Investigation of Sr-Substituted $BaFe_2O_4$ Synthesized by Sol-Gel Method. MS Project, IUB.

1609) Asma Noor (2017): Synthesis and Characterization of Ca–Mg Spinel Ferrites for Biomedical Application. MS Project, IUB.

1610) Syed Tassawar Ali (2017): Synthesis and Characterization of Bismuth-Doped Garnet Nanoferrites and Their Applications in Communication Devices. MS Project, IUB.

1611) Sumbal Javed (2017): Synthesis and Characterization of Doped W-Type Hexagonal Ferrites for Microwave Absorption and High-Frequency Device Applications. MS Project, IUB.

1612) Muhammad Babr (2018): Synthesis and Characterization of Spinel-Doped Ferrites for High-Frequency Applications. MS Project, IUB.

1613) A. A. Khan (2018): Preparation of Magnetic Nanoparticles for Microwave Absorption Applications. MS Project, IUB.

1614) Marwah Ijaz (2023): Synthesis and Characterization of Sm-Substituted U-Type Hexaferrites. MS Project, IUB.

1615) Uzma Tanveer (2023): Evaluation of Structural and Dielectric Response of Nd-Substituted Y-Type Hexaferrite Synthesized Sr–Mg–W-Type Hexaferrites. MS Project, IUB.

1616) Muhammad Shahid (2023): Influence of Yb on the Structural and Dielectric Properties via Sol-Gel Method. MS Project, IUB.

1617) Mirza Waqar Baig (2023): Study of Various Properties of La-Doped Cr–Fe–O System. MS Project, IUB.

1618) Muhammad Sohail (2023): Physical and Dielectric Response of Bi–La Co-Doped $CrFeO_3$ Nanomaterials. MS Project, IUB.

1619) Amjad Khan (2023): Structural, Spectral and Dielectric Features of Yb-Doped Bi–Cr–Fe–O System. MS Project, IUB.

1620) Muhammad Sheraz (2023): Synthesis and Evaluation of Mobility Range of Charge Carriers in Cr-Doped Z-Type

Hexaferrites. MS Project, IUB.

1621) Malik Salman Tariq (2024): Synthesis and Characterization of Cr-Substituted Z-Type Hexaferrites. MS Project, IUB.

1622) Saim Rizvi (2024): Investigations of Structural and Dielectric Response of Al-Substituted R-Type Hexaferrite. MS Project, IUB.

1623) Naveed Ahmad (2024): Influence of Ce on the Structural and Dielectric Properties of CFO Multiferroics. MS Project, IUB.

1624) Yasir Bilal (2024): Study of Various Properties of La-Doped CFO Multiferroics. MS Project, IUB.

1625) Muhammad Ramzan (2024): Physical and Dielectric Response of La-Doped Co–Cd Spinel Ferrites. MS Project, IUB.

1626) Hasnain Haroon (2025): Structural, Spectral and Dielectric Features of Cd-Doped Chromates System. MS Project, IUB.

1627) Hafsa Muhammad Din (2025): Synthesis and Characterization of Cr-Doped Co–Cu Spinel Ferrites. MS Project, IUB.

1628) Muhammad Tashfeen (2026): Structural, Spectral and Dielectric Evaluation of Doped Z-Type Hexagonal Ferrites. MS Project, IUB.

1629) Iqra Shakir (2026): Synthesis and Characterization of Doped Multiferroics. MS Project, IUB.

1630) Atiq-ur Rehman (2017): Fabrication and Characterization of Hexagonal-Based Nanoferrites for High-Frequency Applications. Ph.D Dissertation, IUB.

1631) Raees Asif (2022): Analysis and Design of MIMO Antenna to Improve the Radiation Performance Using Nanomaterials. Ph.D Dissertation, IUB.

1632) Maira Younas (2026): Insights into the Physicochemical and Dielectric Features of Garnet Ferrites for High-Frequency Applications. Ph.D Dissertation, IUB.

18.3.10 Dr Hasan Mehmood Khan

1633) Mr. Zahid Hussain: “Synthesis and Characterization of Rare Earth Substituted M-Type (Sr–Ba) Hexaferrites.” IUB.

1634) Mr. Sohail Mumtaz: “Effect of Trivalent and Divalent Cations on the Properties of M-Type (Ca–Ba) Hexaferrites.” IUB.

1635) Mr. Husnain Shakeel: “Magnetic and Electrical Study of Rare Earth Doped Y-Type Hexaferrites.” IUB.

1636) Mr. Aniq Noman: “Structural, Electrical and Magnetic Properties of Ytterbium (Yb) Substituted M-Type Hexaferrites.” IUB.

1637) Mr. Zahid Ghafoor: “Modification in Dose Distribution for Radiotherapy Treatment Planning.” IUB.

1638) Muhammad Nadeem: “Synthesis and Characterization of Bismuth Cobalt Substituted M-Type Calcium Hexaferrites.” IUB.

1639) Sohail Ahmed: “Synthesis and Characterization of Lead Substituted M-Type Calcium Hexaferrites.” IUB.

1640) Hafiz Shahzaman: “Synthesis and Characterization of Aluminium–Lead Co-Substituted M-Type Hexaferrites.” IUB.

1641) Mushtaq Ahmed: “Effect of Trivalent Cations on the Properties of M-Type Strontium Hexaferrites.” IUB.

1642) Fawad-ul-Hasan: “Synthesis and Characterization of Gallium Substituted M-Type Calcium Hexaferrites.” IUB.

1643) Muhammad Dilshad: “Structural and Electrical Properties of Aluminum Substituted M-Type Hexagonal Ferrite.” IUB.

1644) Hammad Ahmad: “Synthesis and Characterization of Sr–Ba M-Type Hexaferrites.” IUB.

1645) Noreen Fatima: “Synthesis and Characterization of Cobalt Substituted W-Type Hexagonal Ferrites.” IUB.

1646) Muhammad Mujahid: “Synthesis and Characterization of Aluminum and Cobalt Substituted W-Type Hexagonal Ferrites.” IUB.

1647) Muhammad Junaid: “Synthesis and Characterization of Calcium Substituted Cobalt X-Type Hexagonal Ferrite.” IUB.

1648) Muhammad Wajad: “Structural Elucidation, Morphological Properties, and Dielectric Properties of Nickel-Substituted Cobalt and Lead-Based X-Type Hexagonal Ferrites.” IUB.

1649) Mubashir Rasool: “Synthesis and Characterization of Aluminium and Cobalt Substituted M-Type Hexagonal Ferrites.” IUB.

1650) Ahmad Ali: “Synthesis and Characterization of Calcium–Zinc Substituted Spinel Ferrite.” IUB.

1651) Sajida Hashmi: “Synthesis and Characterization of Cobalt Substituted M-Type Hexagonal Ferrite.” IUB.

1652) Imran Ali: “Synthesis and Characterization of Zinc Substituted Spinel Ferrites.” IUB.

1653) Zunaira Munawar: “Synthesis and Characterization of Chromium Substituted M-Type Hexaferrites.” IUB.

1654) Zia-Ur-Rehman: “Synthesis of Cr M-Type Hexagonal Ferrites by Sol-Gel Auto-Combustion Methods.” IUB.

1655) Muhammad Javed: “Synthesis and Characterization of Cd Substituted W-Type Barium Hexaferrites.” IUB.

1656) Siraj Sadiq: “Synthesis and Preparation of M-Type Hexaferrites by Sol-Gel Method.” IUB.

1657) Zain ul Abideen: “Structural and Dielectric Study of M-Type Zn–Cd Hexaferrite Nanoparticles Prepared Using Sol-Gel Method.” IUB.

1658) Gulzar Ahmad: “Synthesis and Characterization of Cadmium Substituted X-Type Zinc Hexaferrites.” IUB.

1659) Muhammad Abu Bakkar: “Effects of Trivalent Substitution on M-Type Hexaferrites.” IUB.

1660) Safi Ahmed: “Synthesis and Characterization of Chromium Substituted M-Type Hexaferrites.” IUB.

1661) Sara Saif: “Synthesis and Characteristics of Cadmium Doped M-Type Hexaferrites.” IUB.

1662) Maria Riaz: “Synthesis and Characterization of Barium-Based R-Type Hexaferrites.” IUB.

1663) Hafiz Muhammad Arslan Shoukat: “Synthesis and Characterization of Chromium Substituted M-Type Hexaferrites.” IUB.

1664) Nuzhat Shameem: “Fabrication and Characterization of Cadmium Doped M-Type Hexagonal Ferrites.” IUB.

1665) Mehboob Ahmad: “Synthesis and Characterization of Barium M-Type Hexagonal Ferrites.” IUB.

1666) Sania Khadim: “Synthesis and Characterization of Cobalt Substituted Calcium M-Type Hexagonal Ferrites.” IUB.

1667) Nimra Ikram: "Enhanced Structural, Electrical, and Dielectric Properties of M-Type Hexagonal Ferrites." IUB.

1668) Aqsa Ilyas: "Structural, Electrical and Dielectric Properties of Cobalt Substituted M-Type Hexagonal Ferrites." IUB.

1669) Muhammad Zahid: "Structural, Electrical and Dielectric Properties of Nickel Substituted Strontium R-Type Hexagonal Ferrites." IUB.

1670) Saba Tariq: "Synthesis and Characterization of Nickel Substituted Barium R-Type Hexagonal Ferrites." IUB.

1671) Muhammad Hamza: "Synthesis and Characterization of Cobalt Substituted Strontium M-Type Hexagonal Ferrites." IUB.

1672) Zoya Nisar: "Synthesis and Characterization of Cadmium Substituted Calcium R-Type Hexaferrites." IUB.

1673) Naseer Ahmad: "Structural, Physical and Dielectric Properties of Cobalt-Substituted $Sr_{1-x}Co_xZn_2Fe_4O_{11}$ R-Type Hexagonal Ferrites." IUB.

1674) Muhammad Sufiyan Asghar: "Synthesis and Characterization of Calcium-Based Nickel Substituted R-Type Hexaferrites." IUB.

1675) Nimra Latif: "Synthesis and Characterization of Chromium Substituted R-Type Hexagonal Ferrite." IUB.

1676) Hafiz Muhammad Akbar: "Synthesis and Characterization of Aluminium Substituted Calcium-Based R-Type Hexaferrites." IUB.

1677) Muhammad Tariq Khan: "Synthesis and Characterization of Strontium-Based Zinc Substituted R-Type Hexaferrites." IUB.

18.3.11 Dr. Hafiz Naeem-ur-Rehman Khan

1678) Muhammad Imran (2015–2017, M.Phil): Study of Structural and Optical Properties of Ni-doped Zinc Oxide Nanostructures, UoL Lahore.

1679) Maria Khalid (2015–2017, M.Phil): Investigation of Structural and Magnetic Properties of Cobalt-doped Zinc Oxide Nanostructures, UoL Lahore.

1680) Muhammad Musaddiq (2015–2017, M.Phil): Synthesis, Structural and Optical Properties of Tin Oxide Nanostructures, UoL Lahore.

1681) Maria Rajab (2015–2017, M.Phil): Improvement in the Optical and Electrical Properties of (Co–Ag) Co-doped SnO_2 Nanomaterials, UoL Lahore.

1682) Muhammad Rizwan (2015–2017, M.Phil): Structural and Optical Properties of Silver-doped Titanium Dioxide Nanoparticles, UoL Lahore.

1683) Tafazzul Hussain (2015–2017, M.Phil): Band Gap Engineering of SnO_2 Nanomaterials by Adding Various Types of Dopants, UoL Lahore.

1684) Muhammad Imran (2015–2017, M.Phil): Structural and Optical Properties of Cobalt-doped Titanium Dioxide Nanoparticles, UoL Lahore.

1685) Hafiz Ansar Sohail (2016–2018, M.Phil): Analysis of Laser Irradiated Surfaces of Metals, UoL Lahore.

1686) Khalid Ramzan (2016–2018, M.Phil): Optical and Structural Properties of Cadmium Sulphide Quantum Dots, UoL Lahore.

1687) Owais Manzoor (2016–2018, M.Phil): Synthesis and Characterization of Magnesium-doped Cobalt Sulphide,

UoL Lahore.

1688) Muddasir Manzoor (2016–2018, M.Phil): Structural, Optical and Electrical Properties of (Ni–Cu) Co-doped Tin Oxide Nanoparticles, UoL Lahore.

1689) Ashiq Hussain (2018–2020, M.Phil): Size Dependent Electrical Properties of Cd-doped SnO_2 Nanoparticles, KFUEIT RYK.

1690) Zain Akhtar (2018–2021, M.Phil): Study of Fe-doping Induced Effects in Cadmium Sulphide Thin Films Deposited by SILAR Method, KFUEIT RYK.

1691) Muhammad Jabbar Ali (2018–2020, M.Phil): Optical and Transport Properties of Cu-doped Nickel Oxide Films, KFUEIT RYK.

1692) Wajeeha Farooq (2018–2020, M.Phil): Investigation of Cu-doping on the Properties of Cd Sulphide Thin Films, KFUEIT RYK.

1693) Tayyaba Naz (2018–2020, M.Phil): Quantification of Effects of Cd Contents in Zinc Oxide, KFUEIT RYK.

1694) Amaima Raza (2018–2020, M.Phil): Effects of Nickel Doping on the Optical and Electrical Properties of CdS Films Deposited by SILAR Method, KFUEIT RYK.

1695) Iqra Muanam (2018–2020, M.Phil): Characterization of Copper Cobalt Oxide Prepared by Electrodeposition Method, KFUEIT RYK.

1696) Muhammad Aqeel Khan (2018–2020, M.Phil): Effect of Bath Temperature on the Structural, Optical and Electrical Properties of ZnCoO Thin Films Prepared by Electrodeposition, KFUEIT RYK.

1697) Muhammad Bilal Ramzam (2018–2020, M.Phil): Study of Fe-doping Induced Effects in Cadmium Sulphide Thin Films Deposited by SILAR Method, KFUEIT RYK.

1698) Jameel Ahmad (2018–2021, M.Phil): Effect of Zn Contents on Electrical and Optical Properties of Hydrothermally Grown Zn_xCd_{1-x} Nanostructures, KFUEIT RYK.

1699) Muhammad Riaz (2019–2021, M.Phil): Influence of Gamma Irradiation on the Structural, Optical and Electrical Properties of CdS/P-Si Heterojunction, AIOU Islamabad.

1700) Batool Riaz (2020–2022, M.Phil): Effect of Oxidation Medium on Physical Properties of Copper Cobalt Oxide Layers Deposited on Copper Substrate, IUB Bahawalpur.

1701) Fareeha Naseem (2020–2022, M.Phil): Investigation of Various Structural and Electrical Parameters of Ni-doped CdS Nanostructures, IUB Bahawalpur.

1702) Saima Irum (2020–2022, M.Phil): Effect of Cu-doping on the Various Physical Properties of Nanoparticles, IUB Bahawalpur.

1703) Lariab Gull (2020–2022, M.Phil): Study of Physical Properties of ZnO/CdS Nanocomposites, IUB Bahawalpur.

1704) Muhammad Asad (2020–2022, M.Phil): Study of Various Physical Aspects of ZnO/CoS Nanocomposites, IUB Bahawalpur.

1705) Nouman Ali (2021–2023, M.Phil): Simulation of Various Performance Factors of TiO_2 and $SrTiO_3$ Based Perovskite Solar Cells, IUB Bahawalpur.

1706) Muhammad Ibrar (2021–2023, M.Phil): Simulation of Various Performance Factors of TiO_2 and CoS Based Perovskite Solar Cells, IUB Bahawalpur.

1707) Muhammad Irfan Ullah (2021–2023, M.Phil): Study of ZnO/ZnS Nanocomposites for Various Physical Proper-

ties and Applications, IUB Bahawalpur.

1708) Maryam Hussain (2021–2023, M.Phil): Simulation of Various Performance Factors of TiO_2 and CdS Based Perovskite Solar Cells, IUB Bahawalpur.

1709) Sadaf Siraj (2021–2023, M.Phil): Simulation of Various Performance Factors of TiO_2 and CuS Based Perovskite Solar Cells, IUB Bahawalpur.

1710) Shumail Riaz (2021–2023, M.Phil): Effect of Variable Ni and 1% Cu Co-doping on the Various Physical Properties of Tin Dioxide Nanostructures, IUB Bahawalpur.

1711) Iqra Fatima (2021–2023, M.Phil): Effect of Variable Cu and 1% Ni Co-doping on the Various Physical Properties of Tin Dioxide Nanostructures, IUB Bahawalpur.

1712) Kainat Shafiq (2022–2024, M.Phil): Effect of Nickel Doping on the Antibacterial Activity of Cobalt Oxide, Cobalt Sulphide and Their Nanocomposites, IUB Bahawalpur.

1713) Maria Rajab (2022–2024, M.Phil): Antibacterial Activity of Cobalt Oxide, Cobalt Sulphide and Nanocomposites, IUB Bahawalpur.

1714) Muhammad Islam (2022–2024, M.Phil): Comparison of Various Performance Factors of $CH_3NH_3SnI_3$ and $CH_3NH_3PbI_3$ Based Perovskite Solar Cells Using SCAPS, IUB Bahawalpur.

1715) Hafiz Atiq (2022–2024, M.Phil): Comparison of Various Performance Factors of $Cs_2AgSbCl_6$ and $Cs_2AgInCl_6$ Based Perovskite Solar Cells Using SCAPS, IUB Bahawalpur.

1716) Abdul Ghaffar (2022–2024, M.Phil): SCAPS-1D Modelling of Lead-Free $Cs_2AgBiBr_6$ Double Perovskite Solar Cells, IUB Bahawalpur.

1717) Hooria Firdaos (2023–2025, M.Phil): Fabrication of DBSA Doped MoS_2/Polyaniline Composite for Supercapacitor Applications, IUB Bahawalpur.

1718) Waqas Saeed (2023–2025, M.Phil): SCAPS-1D Modelling of Lead-Free $Cs_2AgBiBr_6$ Double Perovskite Solar Cells, IUB Bahawalpur.

18.3.12 Dr. Muhammad Shoaib

1719) Ayesha Jan Muhammad: Study of Flavor Changing Neutral Current Couplings (FCNC) in Triple Top Quark Using LHC Energies via Delphes Simulations. IUB.

1720) Tahir Munir: Radiation Hard Silicon Sensor Qualification for CMS Phase-2 Upgrade and Application at NCP Islamabad. NCP Islamabad.

1721) Ikram Ali: Study of Flavor Changing Neutral Current (FCNC) of Single Top Quark in Association with Z Boson Using LHC Energies via MadAnalysis-5 Simulations. IUB.

1722) Nishat Younis: Study of 2S Module Assembly and Metrology for CMS Tracker Phase-2 Upgrade at NCP Islamabad. NCP Islamabad.

1723) Faiqa Bashir: Study of Testing of 2S Module for CMS Tracker Phase-II Upgrade at LHC, CERN at NCP Islamabad. NCP Islamabad.

1724) Saad (Under Study): The Study of Single Top Quark in Association with a Z Boson at High Luminosity LHC and Future Circular Collider Using Machine Learning. IUB.

1725) Tooba (Under Study): The Study of Higgs Boson in Association with a W Boson at High Luminosity LHC and Future Circular Collider Using Machine Learning. IUB.

1726) Anan (Under Study): The Study of Single Top Quark in Association with a Photon at High Luminosity LHC Using Machine Learning. IUB.

18.3.13 Dr. Muhammad Irfan

1727) Uswa Afzal: Synthesis and Characterization of Yb-substituted W-Type Hexaferrites. IUB.

1728) Kinza Fatima: Study of Indium Substituted $YFeO_3$ Nanoparticles. IUB.

1729) Irsa Muhammad Yar: Investigation into Structural and Dielectric Features of Gd-substituted W-Type Hexaferrites. IUB.

1730) Shumaila Kanwal: Impact of Dy-substitution on Structural, Spectral and Dielectric Properties of Y-Type Hexaferrites. IUB.

1731) Farah Naheed: Physical and Dielectric Study of Pr-substituted Co_2-Y Hexaferrites. IUB.

1732) Madiha Ameer: Morphological and Magnetic Analysis of Fe Nanowire Synthesized via Template-assisted Electrodeposition Approach. IUB.

1733) Waqas Anwar: Influence of Gd Cations on Structural, Spectral and Dielectric Properties of $CrFeO_3$ Nanoparticles. IUB.

1734) Syed Mazhar Rasool: Synthesis and Characterization of Li-substituted Spinel Ferrites. IUB.

1735) Muhammad Shahid: Impact of Lithium Cation on Various Parameters of Nanocrystalline Zn-Co Spinel Ferrites. IUB.

1736) Muhammad Mohsin Rasool: Effect of Yttrium-substitution on Structural and Dielectric Properties of $CrFeO_3$ Nanoparticles. IUB.

1737) Komal Farooq: Investigation of Structural and Dielectric Properties of $CdCr_xFe_{2-x}O_4$ Spinel Ferrites. IUB.

1738) Iqra Manzoor: Synthesis and Characterization of Sr-Ba-Zr R-type Ferrites. IUB.

1739) Muhammad Zeeshan Qamar: Influence of Pr-cation on Structural, Spectral and Dielectric Properties of Zr_2-R Ferrites. IUB.

1740) Muhammad Anas: Determination of Structural, Vibrational and Dielectric Properties of Zn Doped Cd-Co Spinel Ferrites. IUB.

1741) Ali Hussain: Investigation of Physiochemical and Dielectric Properties of Zn Substituted Cd-Mg Spinel Ferrites. IUB.

1742) Asad Ali: Development of Cr Doped Li-based β-Ferrites; Structural and Dielectric Features. IUB.

1743) Muhammad Saqib Ahmad: Exploration of Structural, Atomic Dynamics and Electrical Properties at Microwave Region of Al-substituted β-Ferrites. IUB.

1744) Intsam Zahoor: Synthesis and Analysis of Structural, Spectral and Dielectric Behaviour of Y-substituted Co-Mg Ferrites. IUB.

1745) Sahar Perveen: Structural, Vibrational and Dielectric Response of Rare Earth (Sm^{3+}) Substituted Spinel Ferrites. IUB.

1746) Javeria Tariq: Influence of Yb-cations on Various Properties of Co-Ni Ferrites. IUB.

1747) Ajmal Sultan: Insight of Structural and Dielectric Features of (Zr-Cu)-substituted M-type Hexaferrites. IUB.

1748) Amrah Hassan: Exploring Structural, Spectral and Dielectric Properties of Zn^{2+} Modified Y-Type Hexaferrites. IUB.

1749) Hafiza Qurat-ul-Ain: Impact of Yb-substitution on Crystallographic, Atomic Dynamics and Dielectric Characteristics of Zn^{2}-Y-type Hexaferrites. IUB.

1750) Ayesha Farooq: Synthesis and Characterization of Yttrium Substituted W-type Hexaferrites Prepared by Sol-gel Auto-combustion Route. IUB.

1751) Kiran Shahzadi: Study of Crystal Structure, Atomic Dynamics and Electrical Properties at Microwave Region of Nd Substituted $BaZn_2$-W-type Hexaferrites. IUB.

1752) Hafiz Ghulam Shabbir: Unveiling the Impact of La/Cu Co-substitution on the Structural and Electrical Properties in Microwave Region of X-type Hexagonal Ferrites. IUB.

1753) Hafiza Tehreem Idrees: Structural Integrity and Dielectric Response of Ce Modified X-type Hexagonal Ferrites. IUB.

1754) Fatima Khan: Impact of Rare Earth (Yb^{3+}) Ions on Structural and Dielectric Properties of X-type Hexagonal Ferrites. IUB.

1755) Komel Maryam: Uncovering the Role of Sn-Co Cations Substitution in U-type Hexagonal Ferrites for High Frequency Applications. IUB.

1756) Maryam Chaudary: Effect of Tin and Copper Cations on Various Properties of Sr-Co-Fe-O System. IUB.

1757) Isbah Shamshad: Study of Co-substituted Z-type Hexaferrites Synthesized via Sol-gel Auto Combustion Route. IUB.

1758) Abdul Rehman Ashiq: Evaluation of Mobility Range of Charge Carriers at Microwave Region in (Zr-Zn) Substituted Z-type Hexaferrites. IUB.

1759) Nayyab Sajjad: Unlocking the Role of (Zr-Cu) Modified U-type Hexagonal Ferrites. IUB.

18.3.14 Dr. Saba Saeed

1760) MPhil Students (14) (2022–2024): The Islamia University of Bahawalpur. IUB.

1761) MPhil Student (1) (2018): The Women University, Multan.

18.3.15 Dr. Gul Naz

1762) Metal-doped Zinc Oxide Nanoparticles for Enhanced Optical and Antibacterial Analyses. IUB.

1763) Antibacterial Measurements of Green-synthesized Gold Nanoparticles. IUB.

1764) Characterization and Antibacterial Activities of Copper Nanoparticles. IUB.

1765) Effect of Quats Ligand on the Morphology of Gold Nanostructures. IUB.

1766) Synthesis and Characterization of Vanadium Oxide Nanoparticles. IUB.

1767) Effect of the Ligand on Silver Nanoparticles Synthesis. IUB.

1768) Synthesis and Characterization of Cuprous-oxide Nanostructures for UV Photocatalytic Degradation of Organic Pollutants in Contaminated Water. IUB.

1769) Copper(I) Oxide Nanostructures with Structural and Visible Light-induced Photocatalytic Properties. IUB.

1770) Visible Light Driven Photocatalytic Properties of Copper(I) Oxide and Graphene Based Nanocomposites. IUB.

1771) Green Synthesized Iron Nanoparticles for the Treatment of Heavy Oil Viscosity. IUB.

1772) Antibacterial Activities of Fagonia Synthesized Copper Nanoparticles. IUB.

1773) Electrochemical Measurements of Silver/Copper Oxide Nanocomposites. IUB.

1774) Investigation of Structural and Morphological Properties of Graphene-based Zinc Oxide Hybrid Nanostructures. IUB.

1775) Graphene-based Tin Oxide Hybrid Nanostructures: Synthesis, Characterization and Investigation of Properties. IUB.

1776) Investigation of Sunlight-driven Photocatalysis by Gold Nanoparticles Incorporated ZnO/rGO Heterostructures. IUB.

1777) Synthesis and Characterization of Reduced Graphene Oxide and Cobalt Nanocomposites for the Degradation of Organic Pollutants. IUB.

1778) Investigation of Photocatalytic Properties by Green-synthesized Tin Oxide Nanoparticles. IUB.

1779) Graphene Doped Silver Nanowires-based Flexible Conducting PET Film for Optoelectronics Application. IUB.

1780) Silver-coated Zinc Oxide Hybrid Nanostructures with Enhanced Photoresponses. IUB.

1781) Hydrothermal Synthesis of Zinc Oxide Nanostructures for Their Enhanced Electrical Responses. IUB.

1782) Investigation of Structural and Optical Properties of Copper Oxide Nanoparticles Applicable in Flexible and Transparent Windows. IUB.

1783) Fabrication of Nanostructured Metal Titanate Based Anode Materials for Reversible Lithium-ion Batteries. IUB.

1784) Hydrothermal Synthesis of Zinc Stannate for Electrochemical Performance. IUB.

1785) Graphene/Tin Oxide Nanocomposites for Photodetector Applications. IUB.

1786) Synthesis and Characterization of Gold@Copper Oxide Core@Shell Nanostructures. IUB.

1787) Silver-doped Tin Oxide Nanoparticles as Efficient Antibacterial Agents. IUB.

1788) Tin Oxide and Graphene Based Nanomaterials with Enhanced Properties. IUB.

1789) Effect of Transition Metal Loading on Various Properties of Zinc Oxide Nanostructures Fabricated by Polyol Method. IUB.

1790) Performance of Green Synthesized Vanadium Oxide Nanoparticles for Photo-driven Application. IUB.

1791) Fagonia-synthesized Titanium Dioxide Nanostructures for Dye-sensitized Solar Cell Application. IUB.

18.3.16 Dr. Muhammad Shahid Khan

1792) Tahira Jabeen (F22BPHYS3E01174): Synthesis and Characterization of β-$NaFeO_2$ Ferrite Nanoparticles: A Multifunctional Approach on Photocatalytic Degradation of Methyl Red Dye, Anti-Bacterial Efficacy, and Antioxidant Properties. IUB.

1793) Rabia Ayoub (F22BPHYS3E01168): Medicago Sativa Mediated Strontium-Bismuth Nanocomposites: Synthesis Methods and Characterization Routes for Pharmacological and Biomedical Applications. IUB.

1794) Areeba Chaudhry (F22BPHYS3E01090): Synthesis and Characterization of *Stevia Rebaudiana* Mediated Strontium Oxide Nanoparticles for Photocatalytical and Antimicrobial Applications. IUB.

1795) Akasha Fatima (F22BPHYS3E01206): Comparative Study of Sol-Gel and Co-Precipitation Techniques for Synthesizing *Calotropis Procera* Mediated Bismuth Ferrite for Biomedical and Environmental Applications. IUB.

1796) Fatima Jaleel Nasir (F22BPHYS3E01076): Synthesis and Characterization of Chick Pea Mediated Zinc and Silicon Doped Bismuth Ferrite for Water Splitting and Biological Applications. IUB.

1797) Sara Ashraf (F22BPHYS3E01064): Synthesis and Characterization of *Curcuma longa* Mediated Cadmium Ferrite for Multifunctional Applications. IUB.

1798) Fatima Iqbal (F22BPHYS3E01172): Synthesis and Characterization of *Olea Europaea* Mediated Zinc Ferrite for Its Biomedical Applications. IUB.

1799) Saba Aslam (F22BPHYS3E01170): Synthesis and Characterization of *Lawsonia Inermis* Mediated Vanadium Oxide Nanoparticles and Its Antioxidant Defense System in Plants. IUB.

1800) Arsalan Qasim (F22BPHYS3E01159): Synthesis and Characterization of *Lawsonia Inermis* Mediated Zinc Oxide Nanoparticles and Its Foliar Application. IUB.

1801) Alveena (F22BPHYS3E01130): Evaluation of the Biocompatibility and Environmental Impact of Strontium Ferrite for Safe and Sustainable Antimicrobial and Antifungal Applications. IUB.

1802) Abdul Maroof (S22RPHYS3E01009): Synthesis and Characterization of *Aerva Javanica* Mediated Iron Oxide Nanoparticles for Antibacterial Application. IUB.

1803) Hamid Ghafoor (S22RPHYS3E01018): Synthesis and Characterization of *Aerva Javanica* Mediated Metal Oxide (CuO) Nanoparticles for Biomedical Applications in Plants. IUB.

1804) Nawal Mehdi (F21BPHYS3E01046): Synthesis and Characterization of *Jasminum sambac* Mediated Silver Ferrite Nanoparticles for Biological and Adsorption Application. IUB.

1805) Sana Javaid (F21BPHYS3E01028): Synthesis and Characterization of *Tinospora cordifolia* Mediated Silver Ferrite for Biological and Photocatalytic Application. IUB.

1806) Zohaib Irshad (F21BPHYS3E01027): Synthesis and Characterization of *Spinacia oleracea* Mediated Copper Ferrite and Its Anti-bacterial Application. IUB.

1807) Aliza Ishaq (F21BPHYS3E01066): Synthesis and Characterization of *Jasminum sambac* Mediated Copper Ferrite and Its Anti-microbial Application. IUB.

1808) Mansoor Ahmad (F21BPHYS3E01025): Synthesis and Characterization of Cellulose-based Sodium Alginate Loaded Iron Oxide Nanoparticles for Antibacterial Application. IUB.

1809) Bilawal (F21BPHYS3E01079): Synthesis and Characterization of Lecithin Loaded Iron Oxide Nanoparticles for Antibacterial Application. IUB.

1810) Shoaib Zafar (F22BPHYS3E01081): Synthesis and Characterization of Transition Metal Oxide and Rare Earth Oxide for Their Structural Study. IUB.

18.3.17 Dr. Muhammad Shakil

1811) Abrar Hussain: Ab initio Calculations of Structural, Electronic and Magnetic Properties in Pure and Mn-doped AlGaN. IUB.

1812) Muhammad Kashif Masood: Theoretical Study of Physical Properties of $In_xGa_{1-x}N$. IUB.

1813) Anam Zia: Ab-initio Calculations of Structural, Electronic and Optical Properties of Al-doped GaP. IUB.

1814) Anum Aman: Theoretical Study of Structural, Electronic and Optical Properties of Pure and Al-doped InGaP. IUB.

1815) Arfan Akram: Theoretical Investigation of Structural, Electronic and Optical Properties of $CsSnI_{3-x}Br_x$ Perovskites. IUB.

1816) Shahrukh: Theoretical Investigation of Dielectric Constants of $Sr_{1-x}Y_xTiO_3$. IUB.

1817) Shahzad Ahmed: Theoretical Study of Structural and Magnetic Properties of LiMZ (M = Ru, Rh; Z = As, Se, Sb, Te) Half Heusler Alloys. IUB.

1818) Anam Naz: Theoretical Investigations of Transition Metal Doped MoS_2. IUB.

1819) Sharjeel Hassan: Theoretical Investigations of Structural and Magnetic Properties of LiCrZ (Z = P, As, Bi) Heusler Alloys. IUB.

1820) Sunila Mushtaq: Theoretical Investigations of Structural and Magnetic Properties of Full Heusler Alloys Co_2YZ (Z = Ge, S, Se). IUB.

1821) Hafsa Arshad: Theoretical Investigations of Physical Properties of CoScCrZ (Z = Al, Ga, Ge, In) Heusler Alloys. IUB.

1822) Memoona Kousar: Theoretical Investigations of Structural and Magnetic Properties of KMnZ (Z = B, Si, Ge, As) Half Heusler Alloys. IUB.

1823) Tayyaba Larab: Computational Study of Magnetoelectric Effect in CoYCrAl/$BaTiO_3$ Multiferroic Tunnel Junction. IUB.

1824) Muhammad Kazim Ali: Deposition and Characterization of Thin Films of TiN, TiC and TiCN on Stainless Steel 420J1. IUB.

18.3.18 Dr. Faisal Mukhtar

1825) M. Samar Abbas (2022–2024): Visible Light-Activated Z-scheme Metal Oxide Photocatalyst for Enhanced Photodegradation of Diverse Dye Pollutants Under Sunlight Irradiation. IUB.

1826) Shanza Kazmi (2022–2024): A Novel S-scheme Photocatalyst: Preparation, Characterization and Photodegradation of Methylene Blue Under Sunlight. IUB.

1827) Ramzan Ali (2022–2024): Development of Noble Metal-Free Catalysts for Electrochemical Water Splitting. IUB.

1828) Qaiser Khalil (2022–2024): Designing Direct Dual-Z-scheme Composite Photocatalysts with Enhanced Sunlight-driven Performance Towards Dye Degradation. IUB.

1829) Asfa Yousaf (2022–2024): Co and Ni Co-doped Metal-Organic Framework Derived Carbon Composites as Electrode Materials for Supercapacitor. IUB.

1830) Saadia Parveen (2021–2023): Study of Structural and Optical Properties of Nanocomposite for Photocatalytic Application. IUB.

18.3.19 Dr. Muhammad Saleem

1831) Sohail Aslam (CIIT/FA10-BPH-025): Efficient and Highly Porous Working Electrodes for Dye-sensitized Solar Cells (DSSCs). Completed. CIIT.

1832) Shahid Ali (CIIT/FA13-RPH-013): Recycling of Waste Batteries to Fabricate Perovskite Materials for Efficient Dye-sensitized Solar Cells. Completed. CIIT.

1833) Amtul Naseer (CIIT/SP12-BPH-012): Synthesis and Characterization of Metal Oxide Nanostructures for Energy Applications. Completed. CIIT.

1834) Rabia Tabassum (CIIT/SP12-BPH-024): Fabrication of Energy Conversion Devices from UPS Waste Batteries. Completed. CIIT.

1835) Hafeez ur Rehman (CIIT/SP12-BPH-035): Fabrication of Energy Conversion Devices from UPS Waste Batteries. Completed. CIIT.

1836) Fakhar Abbas (CIIT/SP12-BPH-005): Fabrication of Energy Conversion Devices from UPS Waste Batteries. Completed. CIIT.

1837) M. Sarwar (CIIT/SP12-BPH-010): Fabrication of Energy Conversion Devices from UPS Waste Batteries. Completed. CIIT.

1838) Waqas Ahmed (CIIT/SP12-BPH-033): Fabrication of Energy Conversion Devices from UPS Waste Batteries. Completed. CIIT.

1839) Aqsa Ashfaq (CIIT/FA12-BPH-008): Fabrication and Characterization of NTC Thermistor Devices. Completed. CIIT.

1840) Moin Ahmed Khan (CIIT/FA12-BPH-018): Perovskite Materials for Dye-sensitized Solar Cells. Completed. CIIT.

1841) Waqas Ahmed (CIIT/SP12-BPH-022): Perovskite Materials for Dye-sensitized Solar Cells. Completed. CIIT.

1842) Anita Ayub (CIIT/FA12-BPH-034): Synthesis and Characterization of Single Phase Bismuth Ferrite. Completed. CIIT.

1843) Shehnaz Akhter (CIIT/FA12-BPH-032): Synthesis and Characterization of Single Phase Bismuth Ferrite. Completed. CIIT.

1844) Ahmad Iftikhar (CIIT/SP12-BPH-008): Synthesis and Characterization of ZnO Nanomaterials for Gas Sensing Applications. Completed. CIIT.

1845) Hamza Quyyum (PHYS18151066): Enhancement of the Performance of TiO_2 Nanostructure-based Dye-sensitized Solar Cells Using Inorganic and Natural Dyes. Completed. IUB.

1846) Abas Ali (PHYS18151079): Preparation and Characterization of Nano Nests for Energy Applications. Completed. IUB.

1847) Faizan Arif (PHYS18151086): Study of Cu-doped ZnO-Sm Nanostructures for Dye-sensitized Solar Cells (DSSCs). Completed. IUB.

1848) Anwar Shahzad (PHYS18151090): Synthesis and Study of Photovoltaic Properties for Undoped and Sn-doped ZnO Thin Films. Completed. IUB.

1849) Muhammad Riaz (PHYS18151092): Green Synthesis of ZnO Nanoparticles and Their Integration into Dye-sensitized Solar Cells. Completed. IUB.

1850) Azka Rehman (PHYS18151093): Study of Au-doped ZnO-Sm Nanoparticles for Dye-sensitized Solar Cell Applications. Completed. IUB.

1851) Muhammad Arshad (PHYS18151095): Construction and Characterization of Metal Oxide Nanostructures for Photovoltaic Applications. Completed. IUB.

1852) Muhammad Kashif Ashraf (S21RPHYS3E01047): Synthesis of Bimetallic Oxide Nanocomposites for Photocatalytic Degradation of Methylene Blue Dye. Completed. IUB.

1853) Shahid Mehoob (S21RPHYS3E01040): Semiconductor Oxide Nanowires for Photovoltaic Application. Completed. IUB.

1854) Muhammad Shahzad Sarwar (S21NPHYS3E01024): Synthesis, Characterization and Energy Application of Semiconductor Oxide Nanostructures. Completed. IUB.

1855) Salman Khan (F21BPHYS3E01128): Influence of ZnO Nanostructures on Dye-sensitized Solar Cell Performance. Completed. IUB.

1856) Syed Farman Ali (F21BPHYS3E01045): Fabrication of Sn-doped Zinc Oxide Photoanodes for Photovoltaic Applications. Completed. IUB.

1857) Hifza Kabeer (F21BPHYS3E01036): Down-Conversion Inspired Nanostructures for Energy Applications. Completed. IUB.

1858) Iqra Naeem (F21BPHYS3E01032): Up-Conversion Inspired Hierarchical Design for High Efficient Dye-sensitized Solar Cell. Completed. IUB.

1859) Mohsin Abbas (F21BPHYS3E01037): Self-ordered Zinc Oxide Nanorod Arrays for Energy Devices. Completed. IUB.

1860) Ateeq Ul Rehman (F21BPHYS3E01073): Efficient System of ZnO Microstructures for Stable Dye-sensitized Solar Cell. Completed. IUB.

1861) Iqra Naeem (F21BPHYS3E01065): An Experimental Study of Metal Oxide Nanostructures for Photovoltaic Applications. Completed. IUB.

1862) Mohsin Abbas (F21BPHYS3E01037): Self-ordered Zinc Oxide Nanorod Arrays for Energy Devices. Completed. IUB.

1863) Ateeq Ul Rehman (F21BPHYS3E01073): Efficient System of ZnO Microstructures for Stable Dye-sensitized Solar Cell. Completed. IUB.

1864) Iqra Naeem (F21BPHYS3E01065): An Experimental Study of Metal Oxide Nanostructures for Photovoltaic Applications. Completed. IUB.

1865) Muhammad Fazul (F22BPHYS3E01237): An Extensive Study of Different Hole Transport Materials to Enhance the Performance of Perovskite Solar Cells. Completed. IUB.

1866) Mohsin Khurshid (F22BPHYS3E01049): Investigating the Effect of Back Contact Materials on the Performance of Perovskite Solar Cells. Completed. IUB.

1867) Zahid Mehmood Zain (F22BPHYS3E01029): Computer-aided Study of Lead-based Perovskite Solar Cells. Completed. IUB.

1868) Dilawaiz Bibi (F22BPHYS3E01198): Comparative Study of Lead-based and Lead-free Perovskite Solar Cells Using SCAPS-1D. Completed. IUB.

1869) Usama Saleem (F22BPHYS3E01201): Defect Investigation and Numerical Analysis of Lead-free Perovskite Solar Cells. Completed. IUB.

1870) Muhammad Kamran Chand (F22BPHYS3E01141): Simulation Analysis of Metal Chalcogenide Perovskites for Photovoltaic Devices. Completed. IUB.

1871) Muhammad Ahmad (F22BPHYS3E01057): Theoretical Investigation of Chalcohalides Perovskites for Energy

Applications. Completed. IUB.

1872) Syed Muhammad Adeel Rashid (F22BPHYS3E01215): Optimization of Different Parameters of Lead-free Perovskite Solar Cells Through Computational Simulation. Completed. IUB.

1873) Muhammad Nouman (F21BPHYS3E01065): An Experimental Study of Metal Oxide Nanostructures for Photovoltaic Application. Completed. IUB.

1874) Muhammad Yousaf (F22BPHYS3E01223): Effect of Various Electron Transport Materials (Layers) Using SCAPS-1D Simulation Program. Completed. IUB.

1875) Waheed Khan (F22BPHYS3E01155): Numerical Simulation of Wide-band Gap Perovskites Using SCAPS-1D. Completed. IUB.

1876) Muhammad Adnan Yasin (F22BPHYS3E01037): Exploring the Perovskite Solar Cell Performance Enhancement at Different Temperatures. Completed. IUB.

1877) Sohail Ahmed (S22RPHYS3E01019): Solvothermally Controlled Growth of Zirconium Selenide Nanostructures and Their Electrochemical Performance. Completed. IUB.

18.3.20 Dr. Noor Ul Ain

1878) Nasir Abbas (2020–2022): Sol-gel Synthesis and Characterizations of ZnO Nanoparticles for Glucose Biosensors. Completed. IUB.

1879) Attia Shafique (2020–2022): Synthesis of Barium Doped Bismuth Ferrite by Sol-gel Method and Its Characterizations. Completed. IUB.

1880) Sonum Ghulam Hussain (2020–2022): Sol-gel Synthesis of ZnO Nanoparticles and Their Characterization for Glucose Sensors. Completed. IUB.

1881) Anber Ismail (2021–2023): Characterizations of Cerium Oxide Nanoparticles Prepared by Green Synthesis Method and Their Antibacterial Activity. Completed. IUB.

1882) Rida Fatima (2021–2023): Synthesis of Magnesium Oxide (MgO) by Co-precipitation Method and Its Study for Photocatalytic Activity. Completed. IUB.

1883) Hira Sehar (2021–2023): Green Synthesis of Turmeric Nickel Nanoparticles and Their Uses as Antibacterial and Dye Degradation Agents. Completed. IUB.

1884) Maria Saddique (2021–2023): Structural and Dielectric Properties of Iron Doped ZnO Nanoparticles by Sol-gel Method. Completed. IUB.

1885) Safia Tariq Tahira (2021–2023): Synthesis and Characterizations of Yttrium Doped Strontium Titanate. Completed. IUB.

1886) Ishrat Fatime (2021–2023): Photodegradation of Cadmium Telluride for Solar Application. Completed. IUB.

1887) Mudasir Hussain (2022–2024): Structural and Analytical Analysis of Silver Doped FeO Prepared by Sol-gel Method. Completed. IUB.

1888) Hafiz Muhammad Khursheed (2022–2024): Structural and Optical Properties of SnO_2 Thin Film Prepared by PVD Technique. Completed. IUB.

1889) Asmat Ullah (2022–2024): Photocatalytic Activity of Vanadium Doped Magnesium Oxide Prepared by Sol-gel Method. Completed. IUB.

1890) Hafsa Ilyas (2023–2025): Tuning the Optical Properties of CdS Synthesized via Wet Chemical Route for Photo-

catalytic Degradation of Environmental Pollutants. Thesis Submitted. IUB.

1891) Saba Tayyab (2023–2025): Synthesis and Characterization of Doped and Undoped CuS for Removal of Textile Dyes Present in Industrial Waste Water. Thesis Submitted. IUB.

18.3.21 Dr. Maria Atiq

1892) Maira Younas (Session 2021–2022): Supervised. IUB.

1893) Sana Idrees (Session 2021–2022): Supervised. IUB.

1894) Muhammad Ahmad Iqbal (Session 2021–2022): Supervised. IUB.

1895) Sana Mahrooz (Session 2022–2023): Supervised. IUB.

1896) Sana Azhar (Session 2022–2023): Supervised. IUB.

1897) Maria Nasrullah Khan (Session 2022–2023): Supervised. IUB.

1898) Anesa Nawaz (Session 2022–2023): Supervised. IUB.

1899) Esha Tul Razia (Session 2023–2024): Supervised. IUB.

1900) Rabia Rizwan (Session 2023–2024): Supervised. IUB.

1901) Waqar Saeed (Session 2023–2024): Supervised. IUB.

1902) Muhammad Hafeez Ullah (Session 2023–2024): Supervised. IUB.

1903) Muhammad Uzair Ahmed (Session 2023–2024): Supervised. IUB.

1904) Safdar Hussain (Session 2023–2024): Supervised. IUB.

18.4 MPhil/MS Theses: Department of Physics: Rahim Yar Khan Campus

18.4.1 Dr. Muhammad Isa Khan

1905) Areeba Mehmood (F23RPHYS3E01001): DFT Study on the Electronic and Magnetic Properties of 3d Transition Metal-Doped Bi_2Se_3 Monolayers for Spintronic Applications. Defense: 27-08-2025. IUB.

1906) Niaz Ahmad (F23RPHYS3E010013): A DFT Study on Adsorption of Toxic Gases on Pure and Ag-decorated Tungsten Ditelluride. Defense: 27-08-2025. IUB.

1907) Munaza Faiz (F23RPHYS3E01009): Exploring the Adsorption Behavior of Volatile Organic Compounds on Molybdenum Ditelluride: A DFT Analysis. Defense: 27-08-2025. IUB.

1908) Muhammad Zamin (F23RPHYS3E01008): DFT Study of Tin Germanide as a Potential Anode Material for High-Performance Alkali-metal Ion Batteries. Defense: 27-08-2025. IUB.

1909) Ayesha Shahid (F23RPHYS3E01015): A DFT Study of Alkali-Metal Decorated Tin Germanide for Hydrogen Storage Applications. Defense: 27-08-2025. IUB.

1910) Zunaira Saleem (F23RPHYS3E01017): Gas Sensing Properties of Pristine and Li-decorated Titanium Disulfide Monolayer: A DFT Study. Defense: 27-08-2025. IUB.

1911) Muhammad Akbar (S23RPHYS3E01012): A DFT Study of Magnesium Acetylide Monolayer as Anode Material for Alkali Metals Ion Batteries. Defense: 25-04-2025. IUB.

1912) Muhammad Shafique Danish (S23RPHYS3E01013): DFT Investigation of Silicon Diboride Monolayer as Anode Material for Alkali Metals Batteries. Defense: 25-04-2025. IUB.

1913) Rimsha Zulfiqar (S23RPHYS3E01007): A DFT Study of Alkali Metals Decorated Molybdenum Boride for Hydrogen Storage Applications. Defense: 25-04-2025. IUB.

1914) Ukkasha Iqrar (S23RPHYS3E01001): Application of Alkali Metals Decorated Titanium Disulfide for Hydrogen Storage: A DFT Study. Defense: 25-04-2025. IUB.

1915) Muhammad Usama Islam (F22RPHYS3E01012): Tungsten Ditelluride as a Promising Biosensor for Exhaled Breath Analysis: A DFT Study. Defense: 22-11-2024. IUB.

1916) Muhammad Tariq (F22RPHYS3E01016): A DFT Study of Au/Ag Decorated Hexagonal Tungsten Ditelluride for Hydrogen Storage Applications. Defense: 22-11-2024. IUB.

1917) Asma Kiran (F22RPHYS3E01003): First Principles Study of Alkali Metal Decorated Bismuth Selenide for Hydrogen Storage Applications. Defense: 22-11-2024. IUB.

1918) Afifa Rizwan (F22RPHYS3E01007): Computational Investigation of Pure Antimonene and Antimonene/Bismuthene Heterostructure for Detection of Thermal Runaway Gases. Defense: 22-11-2024. IUB.

1919) Mahnaz Khurshid (F22RPHYS3E01015): A DFT Study of Bismuthene as Anode Material for Mg/Zn Ion Batteries. Defense: 22-11-2024. IUB.

1920) Kinza Saleem (F22RPHYS3E01013): Dissolved Gas Analysis in Transformer Oil Using Pure, Li/Ag Modified Borophene: A DFT Study. Defense: 22-11-2024. IUB.

1921) Usman Masood (F22RPHYS3E01014): Adsorption Behavior of Different Cresols on Bismuthene: A DFT Study. Defense: 22-11-2024. IUB.

1922) Gul Saira (F22BPHYS3E01160): Computational Study of Be/Mg Decorated Hexagonal Chromium Ditelluride for Hydrogen Storage Applications. Defense: 18-10-2024. IUB.

1923) Janeeta Hafeez (F22BPHYS3E01158): Computational Study to Detect the Lung Cancer Biomarker Volatiles Using Silver Decorated Tungsten Ditelluride. Defense: 18-10-2024. IUB.

1924) Rabia Gillani (F22BPHYS3E01154): A Comparative DFT Investigation of Industry Affiliated Gases Adsorbed on Pristine Molybdenum Diboride and Molybdenum Tetraboride for Gas Sensing Applications. Defense: 18-10-2024. IUB.

1925) Sawera Ramzan (F22BPHYS3E01166): Novel Antimonene and Bismuthene as Cisplatin Anticancer Drug Delivery Carrier: Insight from Theoretical Perspective. Defense: 18-10-2024. IUB.

1926) Muhammad Usman Amin (S22RPHYS3E01025): Computational Study of Fe-decorated Boron Nitride for Hydrogen Storage Applications. Defense: 08-05-2024. IUB.

1927) Mamoona Durrani (S22RPHYS3E01016): First-principles Investigation of Lithium Intercalation into Antimonene / Bismuthene Heterostructure for Li-ion Batteries. Defense: 23-05-2024. IUB.

1928) Fatima Iram (S22RPHYS3E01028): Adsorption of Lomustine Anticancer Drug on Functionalized Silicon Nanotube as Drug Delivery Vehicle: A DFT Study. Defense: 08-05-2024. IUB.

1929) Iram Ibrahiem (S22RPHYS3E01004): Computational Study of Copper Decorated Aluminene for Gas Sensing Applications. Defense: 08-05-2024. IUB.

1930) Ume Kalsoom (S22RPHYS3E01030): Adsorption of Gemcitabine Anticancer Drug on Functionalized Silicon Nanotube as Drug Delivery Vehicle: A DFT Study. Defense: 23-05-2024. IUB.

1931) Iqra Umer (S22RPHYS3E01012): Structural, Electronic, and Magnetic Properties of 4d Transition Metal Adsorbed B_4C_3 for Spintronic Applications. Defense: 08-05-2024. IUB.

1932) Maida Anwar (19011710-018): A DFT Study of Lithium Metal Adsorption on S-Borophene for Application as Anode Material. Defense: 06-12-2021. IUB.

1933) Syeda Masooma Zaigham (19011710-001): A DFT Study of Bismuthene for Hydrogen Storage Applications. Defense: 18-11-2021. IUB.

1934) Momina Ashfaq (19011710-021): Adsorption of Industrial Affiliated Gases on Buckled Aluminene: A DFT Study. Defense: 17-11-2021. IUB.

1935) Sana Hamid Aziz (18151710-026): A DFT Study of Borophene/Boron Nitride Interface for Gas Sensing Applications. Defense: 14-12-2020. IUB.

1936) Ghazal Nadeem (18151710-016): A DFT Study of Alkali Metals Adsorption on Bismuthene for Use as Anode Material. Defense: 11-12-2020. IUB.

1937) Iqra Nadeem (18141710-001): Adsorption of Palbociclib Drug on 2D Material: A DFT Study. Defense: 20-09-2020. IUB.

1938) Muhammad Masood Nawaz (16101710-016): Synthesis and Characterization of NiO Nanoparticles and Their Antibacterial Activity Against Pathogens. Defense: 04-10-2019. IUB.

1939) Anzal Raz Naureen (16111710-007): Synthesis of Molybdenum Oxide Nanoparticles and Their Antimicrobial Activities. Defense: 04-10-2019. IUB.

1940) Salma Gulzar (17131710-025): Computational Study of Intercalation of Streptozotocin (STZ) into DNA as Anticancer Drug. Defense: 06-09-2019. IUB.

1941) Wahid Ullah Khan (17131710-013): Computational Study of Magnetic Properties of Transition Metals Doped Titanium Dioxide Photocatalyst in Photocatalytic Water Splitting. Defense: 06-09-2019. IUB.

1942) Naveed Ashraf (17131710-022): A DFT Study of Electronic Properties of Borophene/Boron Nitride Interface for Applications as an Electrode. Defense: 23-07-2019. IUB.

1943) Muhammad Naseem Akhter (16111710-020): Green Synthesis and Characterization of MgO Nanoparticles and Their Antibacterial Activities. Defense: 19-02-2019. IUB.

1944) Noor Fatima (16101710-015): Synthesis and Characterization of Ni-doped ZnO Nanoparticles for Antimicrobial Activities. Defense: 10-12-2018. IUB.

1945) Aliza Zahoor (15081710-019): Quality Assurance of IMRT Planning for Cancer Treatment by Using Radiochromic Film. Defense: 07-12-2017. IUB.

1946) Sabiha Zulfiqar (15081710-021): Dosimetric Evaluation of Different Photon Beam Energies Using Gafchromic EBT Film. Defense: 07-12-2017. IUB.

18.4.2 Dr. Muhammad Junaid

1947) Aliza Zahoor (18026110-005): Structural, Electronic and Optical Properties of Alkaline Earth Metal Doped $LaAlO_3$ Perovskite. Defense: 02-08-2024. IUB.

1948) Adnan Mahmood (Spring 2021–2023): Structural, Spectral, and Dielectric Properties of Sm^{3+} Substituted Copper Nanoferrites. IUB.

1949) Muhammad Sajid (Spring 2021–2023): Effects of Sm^{3+} on the Structural and Dielectric Properties of Ni-Co-Fe-O System. IUB.

1950) Muhammad Sana Ullah (Spring 2021–2023): Impact of Dy^{3+} Concentration on Physical Properties of Zn-Co Based Spinel Ferrites. IUB.

1951) Muhammad Yasir Arfat (Spring 2021–2023): Structural, Electronic and Physical Properties of ABO_3 Perovskites (A = Gd, Ho; B = Cr, Al): A First Principles Study. IUB.

1952) Shams Bilal (Spring 2021–2023): Investigation of Structural and Dielectric Response of $Cu_{0.3}Co_{0.7}Nd_xFe_{2-x}O_4$ Nanoferrites. IUB.

1953) Monam Maryam (Spring 2021–2023): Enhancement of Structural, Spectral and Dielectric Properties of Dysprosium Substituted Magnesium Cobalt Ferrites Synthesized by Sol-gel Auto Combustion Route. IUB.

1954) Muhammad Arsalan Riaz (Spring 2021–2023): Synthesis and Characterization of $CuYb_xFe_{2-x}O_4$ Nanoferrites for High Frequency Applications. IUB.

1955) Iqra Mehmood (Fall 2022–2024): A DFT Study of Chromium Ditelluride as Anode Material for Li/K Ion Batteries. IUB.

1956) Muhammad Amir (Spring 2023–2025): A DFT Analysis of Silicon Diboride for Gas Sensing Properties. IUB.

1957) Nadeem Aslam (Fall 2023–2025): A DFT Study of Pure and Au/Ag Magnesium Diboride for Adsorbing and Sensing Thermal Runaway Gases in Lithium-ion Batteries. IUB.

1958) Khadija Shabir (Fall 2022–2024): Structural and Dielectric Properties of Yb^{3+} Substituted Zinc Nanoferrites. IUB.

1959) Rashid Mehmood (Fall 2022–2024): Influence of Nd^{3+} Substitution on Structural, Spectral and Dielectric Properties of $Zn_{0.5}Co_{0.5}Fe_2O_4$ Spinel Ferrites. IUB.

1960) Asad Nadeem (Fall 2022–2024): Investigations of Structure and Tunable Dielectric Properties of Dy^{3+} Substituted Manganese Oxide Nanoparticles. IUB.

1961) Muhammad Kashif (Fall 2022–2024): Study of La^{3+} Substitution on Structural and Physical Properties of $Mn_4Fe_2O_7$ Nanomaterials. IUB.

1962) Muhammad Saqib Mumtaz (Spring 2023–2025): Impact of Trivalent Dy Substitution on Structural, Spectral and Dielectric Properties of Ni-Zn Nanoferrites. IUB.

1963) Munaza Hussain (Spring 2023–2025): Optimization of Structural, Dielectric and Elemental Properties of Dy^{3+} and Gd^{3+} Substituted Nickel Ceramics. IUB.

18.5 MPhil/MS Theses: Department of Physics: Bahawalnagar Campus

18.5.1 Dr. Muhammad Nasir Rasul

1964) Sajid Mehmood (2022): A Comparative Study of $Sr_3In_2As_4$ and $Eu_3In_2As_4$ Orthorhombic Phases: DFT Approach. IUB.

1965) Javaria Saeed (2022): Ab-initio Study of Structural, Electronic and Magnetic Properties of Rhenium Based Ternary $XCRh_3$ (X = Cr, Nb, Mo) Compounds. IUB.

1966) M. Numan Sharif (2022): Elastic, Thermodynamic and Effective Charge Computations of Rhenium Based Ternary Carbides $XCRh_3$ (X = Cr, Nb, Mo). IUB.

1967) Qaisar Abbas (2022): First-Principles Based Structural, Electronic and Magnetic Properties of $XCRh_3$ (X = Ni, Cu, Zn) Inverse Perovskites. IUB.

1968) Muhammad Asghar (2022): Investigation on Mechanical, Thermodynamic and Charge Transfer Properties of Rh_3CX (X = Ni, Cu, Zn) Anti-Perovskites. IUB.

1969) Anam Habib Gull (2022): Insights of Structural, Electronic, Magnetic, Thermodynamic and Optical Properties of Ternary LiXMg (X = As, Sb, Bi) Half-Heusler Compounds. IUB.

1970) Iqra Rasheed (2022): Physical Properties of Eight Electron LiYZ (Y = N, P; Z = Be, Mg) Heusler Compounds: An Ab-initio Approach. IUB.

1971) Ghulam Ali (2022): Mechanical and Optical Properties of $X_3In_2As_4$ (X = Sr, Eu) Compounds via First Principles Computation. IUB.

1972) Iqra Qasim (2023, Published): Effects of Substitution of N by P on Electronic and Optical Properties of LiNMg Half-Heusler Compound. IUB.

1973) Rafia Habib (2023): Ab-initio Study of Structural, Electronic and Magnetic Properties of FeCrTiAl. IUB.

1974) Umme Aeymen (2026, Submitted): Comprehensive First-Principles Analysis of Cs_2CuAsX_6 (X = Cl, Br, I) Double Perovskite Compounds. IUB.

1975) Hafiz Muhammad Azam (2026): Electronic Structure Evolution in $Sr_2Cd_2Pn_3$ (Pn = P, As, Sb, Bi) Zintl Phases: Prospective Materials for Thermoelectric and Electronic Applications. IUB.

18.5.2 Dr. Abdul Majeed

1976) Muhammad Tasneem Shahzad: Structural and Dielectric Properties of In-doped Lithium Iron-based Oxides. IUB.

1977) Fiaz Ahmad: Investigation of Ba-Cd-Li-Fe-O Oxide Synthesized via Sol-gel Route. IUB.

1978) Ayesha Ayyub: Impact of Al-substitution on Properties of Li-Fe-O Complex System. IUB.

1979) Hafiz Muhammad Faisal: Synthesis and Characterization of Indium Substituted Li-Fe-O Metal Oxides. IUB.

18.6 MPhil/MS Theses: Department of Mathematics: Bahawalnagar Campus

18.6.1 Dr. Sidra Razaq

1980) Amber Parveen D/O Muhammad Rasheed (Roll No. S21NMATH3E01015): "A 5-Point Ternary Shape Parameter Subdivision Scheme and Its Analysis." MPhil, Session Spring 2021–2023, IUB Bahawalnagar Campus.

1981) Aqsa Akram D/O Muhammad Akram (Roll No. S21NMATH3E01009): "Curve Modeling Using 4-Point Ternary Approximating Subdivision Scheme." MPhil, Session Spring 2021–2023, IUB Bahawalnagar Campus.

1982) Muhammad Usman S/O Muhammad (Roll No. S21NMATH3E01006): "A 3-Point Quaternary Subdivision Scheme with Shape Control Parameter." MPhil, Session Spring 2021–2023, IUB Bahawalnagar Campus.

1983) Muhammad Mustansar Akbar S/O Muhammad Akbar (Roll No. S21NMATH3E01028): "A 4-Point Quaternary Subdivision Scheme and Its Analysis." MPhil, Session Spring 2021–2023, IUB Bahawalnagar Campus.

1984) Muhammad Idrees S/O Nazeer Ahmad (Roll No. F21NMATH3E01002): "Construction of a 7-Point Binary Subdivision Scheme and the Evaluation of Its Sub-Scheme." MPhil, Session Fall 2021–2023, IUB Bahawalnagar Campus.

1985) Muhammad Idrees S/O Nazeer Ahmad (Roll No. F21NMATH3E01038): "A Dynamic Design Control 5-Point Approximating Binary Subdivision for Enhanced Curve Modeling." MPhil, Session Fall 2021–2023, IUB Bahawalnagar Campus.

18.6.2 Dr. Muzammil Mukhtar

1986) Iram Shabbir (Spring 2021–2023): Hermite-Hadamard Fractional Integral Inequalities for Composite Convex Functions. Defense: 12-05-2023. IUB.

1987) Muhammad Yaqoob (Spring 2021–2023): Novel Mean-type Inequalities via Generalized Riemann-type Fractional Integral for Composite Convex Functions. Defense: 12-05-2023. IUB.

1988) Muhammad Anees (Spring 2021–2023): Distance Based Topological Indices of Benes Network and Derived Families with Applications. Defense: 12-05-2023. IUB.

1989) Amir Shahzad (Spring 2021–2023): Study of Interconnection Networks via Distance Dependent Entropies. Defense: 03-06-2023. IUB.

1990) Ali Raza (Spring 2021–2023): Degree-Based Entropy Measures of Certain Family of Networks. Defense: 03-06-2023. IUB.

1991) Sadia Liaquat (Fall 2021–2023): Banhatti Indices of Certain Family of Networks via M-Polynomials. Defense: 15-11-2023. IUB.

1992) Muhammad Abdullah (Fall 2021–2023): On Some Topological Indices through M-Polynomials of Benes Network and Derived Families. Defense: 15-11-2023. IUB.

1993) Muhammad Mahboob Alam (Fall 2021–2023): Fractional Integral Inequalities via Trigonometrically Convex Functions. Defense: 15-11-2023. IUB.

1994) Shair Ali (Spring 2022–2024): Generalization of Exponential-Trigonometric Convex Functions and Its Impact on Hermite-Hadamard-Type Inequalities. Defense: 02-03-2024. IUB.

1995) Sania Faisal (Spring 2022–2024): Neighborhood Degree-Sum Based Topological Indices via NM-Polynomial of Butterfly and Benes Networks. Defense: 02-03-2024. IUB.

1996) Bushra Ayoub (Spring 2022–2024): Study of Neighborhood Topological Indices through NM-Polynomial for Novel Classes of Benes Network. Defense: 03-05-2024. IUB.

1997) Iram Abbas (Fall 2022–2024): Exploring Degree-Dependent Graph Invariants for Backbone DNA Networks: Direct Calculations and M-Polynomial Formulations. Defense: 24-10-2024. IUB.

1998) Ayesha Ramzan (Fall 2022–2024): Computation of Neighborhood Indices for Backbone DNA Networks through NM-Polynomials. Defense: 24-10-2024. IUB.

1999) Nimra Aslam (Fall 2022–2024): Advancements in Mathematical Inequalities: Establishing Hermite-Hadamard Type Inequalities Involving (α, s, m)-Convexity and Fractional Integrals. Defense: 24-10-2024. IUB.

2000) Maira Jaffar (Fall 2022–2024): A Mathematical Insight into Backbone DNA Networks: Zagreb Indices via Direct and M-Polynomial Techniques. Defense: 24-10-2024. IUB.

2001) Bushra Mumtaz (Fall 2022–2024): Novel Refinements of Hermite-Hadamard Type Inequalities for (s, m)-Convex Functions with Generalized Fractional Operators. Defense: 24-10-2024. IUB.

2002) Hina Kanwal (Fall 2022–2024): New Insights into Hermite-Hadamard Type Inequalities via Fractional Integration of (α, s)-Convex Functions. Defense: 19-11-2024. IUB.

2003) Arooj Fatima (Fall 2022–2024): Exploring Hermite-Hadamard Type Inequalities via Riemann-Liouville Fractional Operators and m-Convex Functions. Defense: 19-11-2024. IUB.

2004) Saba Mehboob (Fall 2022–2024): Comparative Study of Direct and M-Polynomial Methods for Computing Banhatti Indices of Backbone DNA Networks. Defense: 19-11-2024. IUB.

2005) Maheen Khaliq (Fall 2022–2024): Neighborhood Zagreb Indices and Other Graph Invariants of Backbone DNA Networks: An NM-Polynomial Approach. Defense: 19-11-2024. IUB.

2006) Ayesha Firdous (Fall 2022–2024): New Developments in Fractional Hermite-Hadamard Type Inequalities through (α, m)-Convex Functions. Defense: 19-11-2024. IUB.

2007) Muhammad Aqib Khan (Spring 2023–2025): Entropy Measures of Backbone DNA Networks Using Degree-Based Indices. Defense: 18-04-2025. IUB.

2008) Muqadas Liaqat (Spring 2023–2025): Advanced Refinements of Hermite-Hadamard-Type Inequalities via Generalized Convexity. Defense: 18-04-2025. IUB.

18.6.3 Dr. Khawar Rehan

2009) M. Sarfaraz (Spring 2021–2023, Batch 1): On the Spectrum of Identity Graphs. IUB.

2010) Sehrish Said (Spring 2021–2023, Batch 1): On the Spectrum of Non-Identity Graphs. IUB.

2011) Abid Javid (Spring 2021–2023, Batch 1): Degree Spectrum of Some Important Families of Graphs. IUB.

2012) M. Haris Idrees (Spring 2021–2023): On the Spectrum of Power Graphs. IUB.

2013) H. M. Shoaib Jamil (Fall 2021–2023, Batch 2): On the Spectrum of Identity Graphs Associated with Finite Groups. IUB.

2014) Muhammad Waqas (Fall 2021–2023, Batch 2): On the Topological Indices of Non-Conjugate Graphs. IUB.

2015) Saima Sadaf (Spring 2022–2024, Batch 3): On the Eccentricity-Based Topological Indices of Harary Graph. IUB.

2016) Muhammad Asif (Spring 2022–2024): On the Edge and Degree-Based Topological Indices of Harary Graph. IUB.

2017) Mughees Ghalib (Spring 2022–2024, Batch 3): On the Metric Dimension, Local Metric Dimension and Edge Metric Dimension of Non-Conjugate Graphs. IUB.

2018) M. Maqsood Ahmad (Spring 2022–2024): On the Metric Dimension, Local Metric Dimension and Edge Dimension of Non-Commuting Graphs. IUB.

18.6.4 Dr. Muhammad Naeem Azhar

2019) Anees Raza Qadri (2022): Edge and Mixed Partition Dimension of Bi-Circulant Graphs. IUB.

2020) Danish Maqsood (2022): Edge Metric Basis in Bi-Circulant Networks. IUB.

2021) Zunaira Azhar (2022): Edge Resolvability in the Cartesian Product of Commuting and Cayley Graphs of Dihedral Groups. IUB.

2022) Zainub Mukhtar (2022): Locating the Edges in Cartesian Product of Cayley Graphs of Dihedral Groups. IUB.

2023) Nashima Akram (2022): Mixed Metric Generators of Double Circulant Graphs $DC(n, k)$. IUB.

2024) Mubashir Saleem Faizi (2023): Edge Partition Dimension of Connected Graphs. IUB.

2025) Maryam Majeed (2023): Fault-Tolerant Edge Resolvability in a Family of Generalized Petersen Graphs. IUB.

2026) Javaria Hanif (2023): Computing the Edge Metric Generators of Generalized Petersen Graphs $GP(3r, r-1)$. IUB.

2027) Ume Ruman Watto (2023): Mixed Resolvability in Certain Families of Generalized Petersen Graphs. IUB.

2028) Muhammad Usman (2024): Study of Artificial Neural Networks Using Graph Theory. IUB.

2029) Khalil Ahmad (2024): Edge and Mixed Metric Generators in Polythiophene Network and Backbone DNA Network. IUB.

2030) Maryam Rubab (2024): Resolvability of Cartesian Product of Two Connected Graphs. IUB.

2031) Humera Jabeen (2024): Fault Tolerance in Some Classes of Regular Graphs. IUB.

2032) Nimra Amin (2024): Local Resolvability in the Cocktail Party Graphs. IUB.

2033) Aysha Rasti (2024): Characterization of Graphs Using Some Resolvability Parameters. IUB.

2034) Zunaira Shah (2024): Distinguishing Parameters in Connected Graphs. IUB.

18.6.5 Mr. Samar Javed

2035) Abid Javid (Roll No. S21NMATH3E01049, 17-06-2023): Degree Spectrum of Some Graphs. IUB.

2036) Muhammad Sohail Manzoor (Roll No. F21NMATH3E01033, 16-12-2023): Some New Hadamard Type Inequalities for Strongly Modified h-Convex Functions. IUB.

2037) Arshad Ali (Roll No. F21NMATH3E01029, 16-12-2023): Integral Inequalities of Hadamard and Fejér-Hadamard Type via New Generalized Riemann–Liouville Fractional Integral Versions. IUB.

2038) Ammara Sarwar (Roll No. S22NMATH3E01051, 10-08-2024): New Results for Hadamard Type and Fejér Type Inequalities for Generalized Strongly Modified h-Convex Functions. IUB.

2039) Abeerah Kanwal (Roll No. S22NMATH3E01031, 10-08-2024): Degree Spectrum of Sum of Petersen Graph with the Family of Path, Cycle and Star Graphs. IUB.

2040) Faisal Noor (Roll No. F23NMATH3E01009, 15-11-2025): Jensen Inequality-Based Fractional Hermite–Hadamard Inequality for Eta Convex Functions. IUB.

2041) Aafia Azeem (Roll No. F23NMATH3E01019, 15-11-2025): Novel Results of Boole's Rule with Riemann–Liouville Fractional Integral Inequalities via Strong Convexity. IUB.

2042) Wirda Rehman (Roll No. F23NMATH3E01004, 15-11-2025): Novel Results for Bullen-Type Inequalities via s-Convex Functions in 3rd and 4th Sense. IUB.

2043) Ifrah Mubeen (Roll No. F23NMATH3E01010, 15-11-2025): Estimates for Hermite–Hadamard–Jensen–Mercer Type Integral Inequalities for h-Convex Functions. IUB.

2044) Ifra Iqbal (Roll No. F23NMATH3E01013, 15-11-2025): Bullen-Type Inequalities for Generalized Fractional Integrals via η-Convex Function. IUB.

2045) Sana Khalid (Roll No. F23NMATH3E01016, 08-05-2026): Refinements of Perturbed Hermite–Hadamard Type Inequalities via Strong Convexity and Related Function Classes. IUB.

2046) Zoha Bilal (Roll No. S24NMATH3E01017, 08-05-2026): Tempered Fractional Trapezoid-Type Inequalities via Generalized Convexity Classes. IUB.

18.6.6 Dr. Abdul Wahab

2047) Muhammad Ahsan S/O Hafiz Allah Yar (Roll No. S22NMATH3E01040, Session 2022–2024, Degree Completed 2024): Manifold Learning Techniques for Dynamically Chemical Reaction. IUB.

2048) Intesar Ur Rahman Muavia S/O Malik Aziz Ur Rahman (Roll No. S22NMATH3E01017, Session 2022–2024, Degree Completed 2024): Applications of Manifold Dimensionality Reduction in Kinetics Reaction. IUB.

2049) Sajid Mehmood S/O Muhammad Yaqoob (Roll No. S22NMATH3E01021, Session 2022–2024, Degree Completed 2024): Effectiveness of Low-Dimensional Manifolds in Chemical Kinetics Modeling. IUB.

2050) Muhammad Akram S/O Mumtaz Ahmad (Roll No. S22NMATH3E01003, Session 2022–2024, Degree Completed 2024): Comparative Analysis of Low-Dimensional Manifolds in Chemical Kinetics. IUB.

2051) Rao Umer Tariq S/O Tariq Parveez (Roll No. S22NMATH3E01013, Session 2022–2024, Degree Completed 2024): Manifold-Based Approaches for Analyzing Reaction Mechanisms in Chemical Kinetics. IUB.

2052) Nadia Wajid D/O Wajid Ali (Roll No. F23NMATH3E01015, Session 2023–2025, Degree Completed Feb 2026): Fixed Point Theorems of Berinde Contraction in Graphical Extended b-Metric Space. IUB.

2053) Rida Akhtar D/O Akhtar Mahmood (Roll No. F23NMATH3E01018, Session 2023–2025, Degree Completed Feb 2026): Semi Open and Semi Closed Sets in Soft Primal Topological Space. IUB.

18.6.7 Mr. Qamar Abbas

2054) Umme Aeman (15-06-2023): Theoretical Investigation of Anti-Vague, Anti-Spherical and Picture Fuzzy Graphs. IUB.

2055) Maheen Mustafa (15-06-2023): Bipolar Picture and Anti-Spherical Fuzzy Graphs: A Theoretical Contribution. IUB.

2056) Hassan Raza (15-06-2023): Bipolar Spherical Fuzzy Graph Structure. IUB.

2057) Muhammad Ahmad (07-12-2023): Degrees of All Neighbors of a Vertex in Vague and Intuitionistic Fuzzy Graphs. IUB.

2058) Sehrish Mubeen (07-12-2023): Second Zagreb Index for Vague and Intuitionistic Fuzzy Graphs. IUB.

2059) Tanvir Hassan Anjum (12-07-2023): Anti-Picture Fuzzy Graph and Its Classes. IUB.

2060) Laiba Shahid (03-10-2024): Energy of Bipolar and Complex Spherical Fuzzy Graphs. IUB.

2061) Ayesha Noor ul Huda (03-10-2024): Interval-Valued Pythagorean and Picture Fuzzy Graphs. IUB.

2062) Sabahat Mehboob (03-10-2024): Weiner Index for Pythagorean and Picture Fuzzy Graphs. IUB.

2063) Tehreem Fatima (30-05-2025): Topological Indices for Intuitionistic and Picture Fuzzy Graphs. IUB.

2064) Sania Aziz (30-05-2025): Indices of Spherical and T-Spherical Fuzzy Graphs. IUB.

2065) Farhat Nazli (30-05-2025): Pythagorean and q-Rung Linear Diophantine Fuzzy Graphs. IUB.

2066) Aqsa Aslam (30-05-2025): Randic Index of Pythagorean and Spherical Fuzzy Graphs. IUB.

2067) Nizam-U-Din (16-01-2025): Edge F-Index on Pythagorean and Spherical Fuzzy Graphs. IUB.

2068) Abdul Hanan Anwar (16-01-2025): Randic Index of Intuitionistic and Picture Fuzzy Graphs. IUB.

2069) Robia Latif (16-01-2025): Neighborhood Inverse Sum Indeg Index of q-Rung Orthopair and T-Spherical Fuzzy Graphs. IUB.

2070) Muhammad Altaf Moneer (16-01-2025): Second Zagreb Index of Pythagorean and Fermatean Fuzzy Graphs. IUB.

18.7 MPhil/MS Theses: Department of Mathematics: Rahim Yar Khan Campus

18.7.1 Dr. Naeem Shafqat

2071) Ayaz Mehmood (Roll No. S21RMATH3E01013): Random Fixed Point Results in b-Metric Like Spaces. IUB.

2072) Muhammad Ibrahim (Roll No. S21RMATH3E01023): Fixed Point Results in Intuitionistic and Neutrosophic b-Metric Space. IUB.

2073) Tufail Nadeem (Roll No. S21RMATH3E01028): Common Fixed Point Results in b-Metric Like Spaces. IUB.

2074) Tahira Rafiq (Roll No. S21RMATH3E01030): Random Best Proximity Point Results in Complete Metric Spaces. IUB.

2075) Muhammad Kashif Ishaq (Roll No. S21RMATH3E01041): Fixed Point Results in Parametric b-Metric Spaces. IUB.

2076) Muhammad Danish (Roll No. S21RMATH3E01042): Fixed Point Results in Extended b-Metric Spaces. IUB.

2077) Muhammad Naveed (Roll No. S21RMATH3E01044): Tripled Best Proximity Point Results for Cyclic Contractions. IUB.

2078) Zubair Anees (Roll No. S21RMATH3E01049): Coupled Fixed and Best Proximity Points in Generalized Contractions. IUB.

2079) Sara Sharif (Roll No. S22RMATH3E01001): Fixed Point Results with Generalized Contractive Conditions in Complete Metric Spaces. IUB.

2080) Muhammad Moeen (Roll No. S22RMATH3E01008): Fixed Point Results in E-Metric Spaces with Application to First-Order Periodic Boundary Problem. IUB.

2081) Ambreen Sarwar (Roll No. S22RMATH3E01011): Coupled Fixed Point Results in b-Metric Spaces with Applications. IUB.

2082) Afnan Arshad (Roll No. S22RMATH3E01031): Fixed Point Results in Orthogonal b-Metric Space. IUB.

2083) Maryam Bibi (Roll No. F22RMATH3E01007): Fixed Point Results on Istrăţescu-Type Contractions in Orthogonal Metric Spaces. IUB.

2084) Ayesha Shafiq (Roll No. F22RMATH3E01013): Coincidence Fixed Points for Boyd–Wong Type Contraction Mappings. IUB.

2085) Maria Shafiq (Roll No. F22RMATH3E01019): Weak Stability and Data Dependence Results for Contraction Mappings. IUB.

2086) Hafiz Muhammad Hammad (Roll No. F22RMATH3E01020): Fixed Point Iterative Schemes with Strong Convergence and Their Applications. IUB.

2087) Zahra Hussain (Roll No. F22RMATH3E01030): Fixed Point Results for Quasi-Contraction Mappings on φ–ψ Metric Spaces. IUB.

2088) Hafsa Noor (Roll No. F22RMATH3E01033): Estimation of Newly Established Iterative Scheme for Generalized α-Nonexpansive Mappings. IUB.

2089) Muhammad Usman (Roll No. S23RMATH3E01002): Common Fixed Points in Modular Spaces via α-Admissible Mappings and Simulation Functions. IUB.

2090) Munnaza Abbas (Roll No. F23RMATH3E01001): Common Fixed Point Results in m-Metric Spaces. IUB.

2091) Iqra Irshad (Roll No. F23RMATH3E01013): Fixed Point Results in s-Metric Space with Applications. IUB.

18.7.2 Dr. Shahbaz Ali

2092) Qamar Bin Shaheen (Spring 2021–2023): Molecular Descriptors of Layer Structure for Subdivision of Benzenoid Networks. IUB.

2093) Rizwan Ali (Spring 2021–2023): Several Neighborhood Degree-Based Topological Indices and Polynomials for Toeplitz Graphs. IUB.

2094) Muhammad Waseem (Spring 2021–2023): Several Topological Indices and Polynomials for Various Families of Toeplitz Graphs. IUB.

2095) Musharaf Ali (Spring 2021–2023): Upper Bound Sequences of Local Fractional Metric Dimension of mK Graphs. IUB.

2096) Muhammad Adnan (Spring 2021–2023): Upper Bounds of Local Fractional Metric Dimension for Certain Families of Toeplitz Graphs. IUB.

2097) Ghulam Muhammad (Spring 2021–2023): Doubly Metric Dimension of Certain Families of Toeplitz Graphs. IUB.

2098) Abdul Manan (Spring 2021–2023): Numerous Aspects of Entropies for Unit Graphs. IUB.

2099) Muhammad Arshad (Fall 2022–2024): Upper Bounds of Zagreb Indices for k-Cyclic Graphs with Domination Number. IUB.

2100) Omema Ashfaq (Fall 2022–2024): Topological Indices and Entropies for Chordal Ring Networks. IUB.

2101) Sehrish Talib (Fall 2022–2024): Molecular Descriptors and Entropies for Alkanes Chemical Structures. IUB.

2102) Saba Arshad (Fall 2022–2024): Family of Graphs Based on Conjugacy Relation and Their Topological Invariants. IUB.

2103) Natasha Kanwal (Fall 2022–2024): Molecular Descriptors and Entropies Associated with General Alkene Structures. IUB.

2104) Arooj Fatima (Fall 2022–2024): General Alkyne Chemical Structures and Their Molecular Descriptors. IUB.

2105) Muhammad Suffiyan (Spring 2022–2024): Characterizations of Neighbourhood-Based Topological Indices and Entropies for Convex Polytopes Networks. IUB.

2106) Tayaiba Akram (Spring 2022–2024): Topological Characterizations and Entropies for Algebraic Structure Graphs over Dihedral Groups. IUB

2107) Sobia Ghaffar (Spring 2022–2024): Topological Invariants and Entropies over Commutative Graphs over Quaternion Groups. IUB.

2108) Muhammad Hassan Rasheed (Spring 2022–2024): Characterizations of Topological Invariants and Entropies for Subdivision of Certain Families of Convex Polytopes Networks. IUB.

2109) Muhammad Abdullah Afzal (Spring 2023–2025): Upper Bounds of Local Fractional Metric Dimension for Certain Families of Chemical Structures. IUB.

2110) Muhammad Jamshaid (Spring 2023–2025): Extremal Values for Atom-Bond Sum Connectivity Index in Tri-Cyclic Graphs. IUB.

2111) Arooj Fatima (Spring 2023–2025): Complement of Zero Divisor Graph in Quadratic Congruence. IUB.

2112) Maryam Ali (Fall 2023–2025): Study of Temperature-Based Topological Indices for Certain Families of Chemical Structures. IUB.

2113) Anisha Amjed (Fall 2023–2025): Vertex-Edge Weighted Molecular Graphs and Their Temperature-Based Topological Indices. IUB.

18.7.3 Mr. Haq Nawaz Khan

2114) Shahid Mahmood (Spring 2023–2025): Molecular Descriptors and Entropies for Certain Chemical Networks. IUB.

2115) Shehla Yaseen (Spring 2023–2025): Topological Indices and Entropies for Metronidazole Chemical Structure. IUB.

18.7.4 Dr. Shehraz Akhtar

2116) Sania Jabbar: Flow in a Rotating Channel of Couple Stress Fluids with a Time-Fractional Derivative. IUB.

2117) Khush Bakht: Influence of Time-Fractional Derivatives on Couple Stress Fluids Flow Over a Rotating Frame. IUB.

2118) Sana Ashraf: Quantitative Analysis of a Predator-Prey System with Additive Allee Effect. IUB.

2119) Hina Farooq: Analysis of Newtonian Heating and Heat Generation on Viscous Fluids with Anti-Symmetric Shear Stress. IUB.

2120) Sufyan Shoukat: Study of the Effects of Heat Generation with Time-Fractional Fourier Thermal Law on Viscous Fluid. IUB.

2121) Muhammad Junaid Munir: Analysis of Couple Stress Fluid with Prabhakar Fractional Approach Based on the Fourier Law. IUB.

2122) Ujala Farooq: Complex Dynamic Analysis of a Discrete-Time Predator-Prey Interaction with Additive Allee Effect. IUB.

2123) Farah Yousaf: Analysis of Covid-19 and Hepatitis B Viruses with Co-interaction Effects. IUB.

2124) Muhammad Faizan Zafar: Several Topological Indices for Certain Families of Unit Graphs on $\mathbb{Z}_n$. IUB.

2125) Usama Manzoor: Analysis of Covid-19 Transmission in Portugal Using Fractional Operator. IUB.

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18.7.5 Mr. Muhammad Azhar

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2150) Muhammad Munawar (03-03-2026, almost): Properties of Various Topological Indices for Fumonisin and Cefriaxone Chemical Structures. Supervisor: Mr. M. Azhar. IUB.

2151) Saad Mumtaz (Continue): Weighted Topological Indices-Based QSPR Modeling for Predicting Physicochemical and Biological Properties of Breast Cancer Therapeutics. Supervisor: Mr. M. Azhar. IUB.

2152) Laiba Jabeen (Continue): Temperature-Based Topological Indices in QSPR Modeling for Predicting Physicochemical Properties and Antiviral Drug Development Against Lumpy Skin Disease. Supervisor: Mr. M. Azhar. IUB.

18.7.6 Dr. Itrat Abbas Mirza

2153) Asif Rasheed (June 2023): A Maximal Product of Fuzzy Graph with Applications. IUB Rahim Yar Khan Campus.

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2161) Iqra Nasim (May 2024): Existence and Uniqueness of Solution of Fractional Differential Equations. IUB Rahim Yar Khan Campus.

2162) Hina Rehman (December 2024): Maxwell Fluids in Cylindrical Domain Using Fractional Calculus. IUB Rahim Yar Khan Campus.

2163) Farah Manzoor (December 2024): Exploring Numerical Radius Inequalities on Hilbert Space Operators. IUB Rahim Yar Khan Campus.

2164) Muqaddas Nazir (December 2024): Laplace Operator Using Fractional Calculus with Respect to Another Function. IUB Rahim Yar Khan Campus.

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18.7.7 Mr. Asad Ullah

2169) Afia Kousar (Roll No. S23RMATH3E01016, Session 2023–2025): A New Family of Graphs Based on Idempotent Elements and Their Characterizations. IUB.

18.7.8 Dr. Sabeeh Khaliq

2170) Shahzad Qadir (17-11-2023): Coating of Hybrid Nanofluid Through Roll-Over-Web Coating Process. IUB.

2171) Mariyam Fazal (17-11-2023): Mathematical Modelling of Oscillatory Viscous Fluid Flow Inside Porous Walls. IUB.

2172) Rajesh Ram (17-11-2023): Numerical Insight of Oldroyd 4-Constant Fluid During Blade Coating Phenomena. IUB.

2173) Saif Din (17-11-2023): Non-Isothermal Calendering Process of Hybrid Nanofluid Under Lubrication Theory. IUB.

2174) Shifa Mariyam (31-05-2024): Perturbative Study of Reverse Roll Coating Technique of Non-Newtonian Fluid. IUB.

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2177) Muhammad Amjad (31-05-2024): Peristaltic Analysis of Non-Newtonian Fluid in Divergent Channel. IUB.

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2187) Saima Rafique (23-01-2026): Blade Coating of Non-Newtonian Nanofluid Polymer with Variable Thermophysical Properties. IUB.

18.8 Editorial Note

Due to constraints on the total number of pages, several achievements of the faculty could not be included in this edition. We deeply appreciate the many accomplishments of our faculty members that could not be accommodated within its scope, and we hope to include a more complete record in future editions:
Dr. Faisal Iqbal, Associate Professor at the Institute of Physics, has supervised 52 M.Phil. scholars; Dr. Hafiz Naeem-ur-Rehman Khan, Assistant Professor at the Institute of Physics, has completed supervision of 47 M.Phil./MS theses and 2 Ph.D. theses; Dr. Muhammad Shakil, Associate Professor at the Institute of Physics, has completed supervision of 1 Ph.D. student and 32 M.Phil. students; Dr. Zahida Batool, Associate Professor at the Institute of Physics, has supervised 5 Ph.D. students and 50 M.Phil. students; Dr. Saba Saeed, Assistant Professor at the Institute of Physics, has supervised 14 M.Phil. students.

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