

# 4th

## INTERNATIONAL CONFERENCE OF SCIENCES



**PATRON IN CHIEF**

**PROF. DR. ANILA KAMAL**  
Vice Chancellor

# REVAMPED SCIENTIFIC OUTLOOK OF 21<sup>ST</sup> CENTURY, 2025

(12<sup>th</sup> November, 2025)

**ORGANIZER** Prof. Dr. Muhammad Zaman Ashraf  
(Chairperson, Department of Chemistry)

### CO-ORGANIZERS

Prof. Dr. Saima Mustafa  
(Chairperson, Department of Mathematics)

Dr. Irfan Qasim  
(Chairperson, Department of Physics)

Dr. Samina Qamer  
(Chairperson, Department of Zoology)

Dr. Yamin Bibi  
(Chairperson, Department of Botany)

Dr. Saba Riaz  
(Head, Department of Statistics)

Dr. Amber Sarwar  
(Head, Department of Computer Sciences)

Dr. Muhammad Bilal  
(Head, Department of Information Technology)

### FOCAL PERSONS

Dr. Deeba Afzal, Mathematics

Dr. Bushra Parveen, Physics

Dr. Shazia Shamas, Zoology

Dr. Banzeer Abbasi, Botany

Dr. Musarrat Ijaz, Statistics

Dr. Amber Sarwar, Computer Sciences

Dr. Adnan Mustafa, Information Technology

Dr. Tunzeel Iqbal, Chemistry

### THEMES OF SCIENCES

#### DEPARTMENT OF BOTANY

1. Plant Biodiversity and Conservation
2. Plant Physiology and Climate Resilience
3. Sustainable Agriculture and Environmental Stewardship
4. Ethnobotany and Herbal Remedies
5. Entrepreneurship in Botany
6. Green Energy
7. Harnessing Biotechnology and AI in Botany

#### DEPARTMENT OF CHEMISTRY

1. Functional Materials & Polymers
2. Smart Materials for Energy Solutions
3. Bioorganic & Medicinal Chemistry
4. Green and Clean Technologies
5. Chemical Engineering & Sensors
6. Environmental Challenges & Solutions
7. Chemistry in the Digital Age
8. Water Treatment & Conservation

#### DEPARTMENT OF COMPUTER SCIENCE

1. AI solutions for Social Good
2. Climate Conscious for Sustainable and Green Computing
3. Cyber Resilience and Digital Trust
4. Inclusive Digital Transformation
5. Emotion and Empathy-Aware HCI
6. UX/UI for Accessibility and Inclusion
7. Metaverse and XR Technologies
8. Next-Gen Connectivity and Edge Computing

### KEYNOTE SPEAKERS

#### DEPARTMENT OF BOTANY

Prof. Erdogan E Hakkı (University of Selçuk, Campus, Konya Türkiye)  
Prof. Dr. Hassan Sher, Vice Chancellor, (The University of Swat)  
Prof. Dr. Hamayun Shaheen, (The University of Azad Jammu & Kashmir)  
Prof. Dr. Rehmat Ullah Qureshi, (Arid Agriculture University Rawalpindi)  
Prof. Dr. Tariq Mahmood, (Quaid-i-Azam University Islamabad)  
Prof. Dr. Muhammad Naveed, (University of Central Punjab)

### KEYNOTE SPEAKERS

#### DEPARTMENT OF CHEMISTRY

Prof. Dr. Marlisz Mojzych, Collegium Medicum, The Mazovian Academy in Plock, Poland  
Dr. Jalifah Latip, Associate Professor, Universiti Kebangsaan Malaysia  
Dr. Jamal Rafique, Federal University of Mato Grosso do Sul, Brazil  
Dr. Sumbal Saba, Federal University of Goiás, Brazil  
Prof. Dr. Manzar Sohail, (SNS NUST)  
Dr. Muhammad Naeem Ahmed, (UAJ & K)  
Dr. Sajjad Hussain Sumra, (University of Gujrat)

### KEYNOTE SPEAKERS

#### DEPARTMENT OF COMPUTER SCIENCE

Dr. M. Aqeel Iqbal, Department of IT, Buraimi University College, Oman  
Dr. Mamoon Humayun, School of Arts, Humanities and Social Sciences, University of Roehampton, London, SW15 5PJ, United Kingdom  
Dr. Nasir Mehmood Minhas, Research Advisor Blekinge Institute of Technology, Sweden  
Prof. Dr. Yaser Hafeez, (UIIT- ARID)  
Prof. Dr. Mudassar Raza, (Namal University, Mianwali)

#### DEPARTMENT OF INFORMATION TECHNOLOGY

1. Cybersecurity & Privacy
2. Artificial Intelligence & Machine Learning
3. Cloud Computing & Edge Computing
4. Human-Computer Interaction (HCI)
5. Internet of Things (IoT)
6. Data Science & Big Data Analytics
7. Blockchain & Decentralized Applications
8. Robotics & Automation

#### DEPARTMENT OF MATHEMATICS

1. Applied and Pure Mathematics for Sustainable Development
2. Mathematical Analysis
3. Computational Mathematics
4. Mathematical Modeling and Simulations for Global Health
5. Theoretical and Computational Fluid Dynamics
6. Relativistic, Astrophysics, Gravitation and Cosmology

#### DEPARTMENT OF PHYSICS

1. Condensed Matter Physics
2. Nano Science and Technology
3. Optoelectronics
4. Medical Physics
5. Laser and Spectroscopy
6. High Energy Physics
7. Renewable Energy
8. Health and Radiation Physics

### KEYNOTE SPEAKERS

#### INFORMATION TECHNOLOGY

Dr. Junaid Rashid, (Sejong University, Republic of Korea)  
Dr. Rizwan Ali Naqvi, (Sejong University, Seoul, South Korea)  
Dr. Amjid Rehman, (Prince Sultan University, Saudi Arabia)  
Prof. Dr. Saud Altam, (National Skill University, Islamabad)  
Prof. Dr. Wazir Zada Khan, (University of Wah, Rawalpindi)  
Dr. Hassan Dawood, (University of Engineering & Technology, Taxila)  
Dr. Ali Javed, (University of Engineering and Technology, Taxila)

### KEYNOTE SPEAKERS

#### DEPARTMENT OF MATHEMATICS

Prof. Dr. Azad Siddiqui, (NUST, University Islamabad)  
Prof. Dr. Khuram Shabbir, (Government College University, Lahore)  
Professor Cemil Tunç, Van Yuzuncu Yil, Turkey University  
Dr. Norma Alias, (UTM, Malaysia)

### KEYNOTE SPEAKERS

#### DEPARTMENT OF PHYSICS

Prof. Dr. Ilang He, Nanjiang University China  
Prof. Dr. Saif Ullah Awan, NUST, Islamabad  
Prof. Dr. Muhammad Sultan Satti, VC (Kohsar University, Murree)  
Prof. Dr. Syed Zafar Ilyas – VC, Kohat University of Science & Technology

#### DEPARTMENT OF STATISTICS

1. Design of Experiments
2. Multivariate Analysis
3. Survey Sampling
4. Data Science/Machine Learning
5. Bayesian Statistics/ Probability Theory
6. Time Series Analysis / Econometrics
7. Spatial Statistics
8. Applied Statistics

#### DEPARTMENT OF ZOOLOGY

1. Biodiversity Conservation and Ecosystem Sustainability
2. Aquatic Zoology
3. Animal Physiology and Reproduction
4. Role of AI in Zoology
5. One Health and Applied Microbiology
6. Insect Biodiversity and Pollinator Economics
7. Neuroendocrine Networks Regulating Reproduction

### KEYNOTE SPEAKERS

#### DEPARTMENT OF STATISTICS

Prof. Dr. Tahir Mehmood, NUST Islamabad  
Prof. Dr. Muhammad Aslam, BZU, Multan

### KEYNOTE SPEAKERS

#### DEPARTMENT OF ZOOLOGY

Prof. Dr. Zeliha Selamoglu, (Ömer Halisdemir University, TURKEY)  
Prof. Dr. Muhammad Jawad Hassan, (Shifa Tameer e Millat University)  
Dr. Sajid Malik, (Quaid-i-Azam University, Islamabad)  
Dr. Haroon Ahmed, (COMSATS University, Islamabad)  
Dr. Sara Mumtaz, (National University of Medical Sciences, Rawalpindi)

### IMPORTANT DATES

Call For Abstract:

**15<sup>th</sup> July. 2025**

Abstract Submission Deadline:

**15<sup>th</sup> Aug. 2025**

Abstract Decision:

**1<sup>st</sup> – 10<sup>th</sup> Sept. 2025**

Early Bird Registration Deadline:

**25<sup>th</sup> Sept. 2025**

### REGISTRATION FEE

CATEGORY	Early Bird	Normal
RWU Students	1700 PKR	2200 PKR
Other than RWU Students	2000 PKR	2500 PKR
RWU Faculty	2500 PKR	3000 PKR
Other than RWU Faculty	3000 PKR	3500 PKR
International Participants (Students)	50\$	50\$
International Participants (Professionals)	75\$	75\$



SCAN HERE

**REGISTRATION LINK:**

<https://tinyurl.com/64usfrnw>

**ALLIED BANK ACCOUNT NUMBER**

**IBAN NO: PK45ABPA0020094166980020**

**CONTACT**

**Dr. Sumuya Munib**

Assistant Professor  
(Computer Science)

**DR. MOTSIM BILLAL**

Conference Secretary  
(Director ORIC)

**0334-8555084**

**0334-5554979**

# RAWALPINDI WOMEN UNIVERSITY

6<sup>th</sup> ROAD, SATELLITE TOWN, RAWALPINDI, PAKISTAN, (Ph: 051-9291648)

## ABOUT CONFERENCE

Rawalpindi Women University proudly announces the 4th International Conference on Sciences, RSO-21st Century, to address global challenges such as infectious diseases, climate change, and sustainable development. The conference, which includes fields like Botany, Chemistry, Zoology, Physics, Mathematics, Statistics, and Computer Science & Information Technology, focuses on cutting-edge research and practical applications in sustainable development. The conference aligns with the United Nations Sustainable Development Goals (SDGs), highlighting the role of science in addressing global issues. Participants are invited to engage in thought-provoking discussions, share groundbreaking research, and forge collaborations across disciplinary boundaries. The aim is to pioneer new scientific frontiers, empower future scientists, and catalyze innovations that address pressing global needs. Join us at Rawalpindi Women University for the 4th International Conference on Sciences, where ideas converge, knowledge flourishes, and collective efforts pave the way for a brighter and more sustainable future.

## SCIENTIFIC COMMITTEE

### DEPARTMENT OF BOTANY

1. Syeda Anber Zahra, Institute of Biomaterial and Biomedical, Shanghai Zhongqiao Vocational and Technical University, Shanghai, China
2. Dr. Samar Fatima, University of Gujrat
3. Dr. Ibrar Shinwari, Islamic International University, Islamabad
4. Dr. Syed Aneel Gillani, Associate Curator at Pakistan Museum of Natural History
5. Dr. Sumaira Iqbal, Lahore College Women University, Lahore
6. Dr. Kausar Hussain Shah, Bahauddin Zakariya University, Multan
7. Dr. Zahid Ullah, University of Swat
8. Dr. Tabassum Yaseen, Bacha Khan University, Charsadda
9. Dr. Riffat Batool, Kohsar University Murree
10. Dr. Ansa Rukya Saleem, Bahria University, Islamabad (arukya.buic@bahria.edu.pk)
11. Dr. Noshin Ilyas, PMAS-Arid Agriculture University Rawalpindi, Rawalpindi
12. Prof. Dr. Abdul Samad Mumtaz, Quaid-i-Azam University, Islamabad
13. Dr. Sobia Nisa, University of Haripur
14. Dr. Naila Safdar, Fatima Jinnah Women University

### DEPARTMENT OF CHEMISTRY

1. Prof. Dr. Aamer Saeed Bhatti, Professor, Quaid-i-Azam University, Islamabad
2. Prof. Dr. Abid Zia, Professor/Principal, University of Education Attock campus
3. Prof. Dr. Shahid Iqbal, Professor/Principal, University of Education, Faisalabad campus
4. Dr. Jamal Rafique, Associate Professor, Federal University of Mato Grosso do Sul, Brazil
5. Dr. Saleha Suleman Khan, Assistant Professor, SBKWU Quetta
7. Dr. Abid Ali, Assistant Professor, University of Lahore, Lahore
8. Dr. Aiman Sadaf, Assistant Professor, NUST Islamabad
9. Dr. Yasir Altaf, Assistant Professor, University of Education, Jauharabad campus
10. Dr. Fozia Batool, Assistant Professor, University of Sargodha, Sargodha
11. Dr. Erum Jabeen, Lecturer Department of Chemistry Allama Iqbal Open University, Islamabad
12. Dr. Salma Aftab, Postdoc Fellow, School of Automation Engineering, China
13. Dr. Safia Khan, Postdoc Fellow, Shandong University, Jinan, China
14. Dr. Nudrat Mubarik, Sustainable Research Officer, University College London
15. Dr. Umair Shamraiz Research Associate, Shenzhen University, China

### DEPARTMENT OF COMPUTER SCIENCE

1. Dr. Mussarat Yasmeen, Associate professor, COMSATS
2. Dr. Asim Munir, Islamic International University, Islamabad
3. Dr. Saud Altaf, National Skill University
4. Dr. Shariq Hussain, Foundation University
5. Dr. Azhar Imran, Air University

### DEPARTMENT OF INFORMATION TECHNOLOGY

1. Prof. Dr. Saud Altaf, National Skill University, Islamabad
2. Prof. Dr. Wazir Zada Khan, University of Wah, Rawalpindi
3. Dr. Rehman Mehmood Yousaf, PMAS-Arid Agriculture University Rawalpindi
4. Dr. Bilal Bajwa, National Skill University, Islamabad
5. Dr. Hassan Dawood, University of Engineering and Technology, Taxila
6. Dr. Ali Javed, University of Engineering and Technology, Taxila
7. Dr. Sohaila Ahmad, HITEC University Taxila

### DEPARTMENT OF MATHEMATICS

1. Prof. Dr. Tasawar Hayat, Quaid-i-Azam University, Islamabad
2. Prof. Dr. Sohail Nadeem, Quaid-i-Azam University, Islamabad
3. Prof. Dr. Ghulam Mustafa, Islamic University of Bahawalpur, Bahawalpur
4. Prof. Dr. Muhammad Shabir, Quaid-i-Azam University, Islamabad
5. Prof. Dr. Aslam Malik, University of Punjab, Lahore
6. Prof. Dr. Saima Akram, Government College Women University Faisalabad, Faisalabad
7. Prof. Dr. Muhammad Riaz, University of Punjab, Lahore
8. Prof. Dr. Muhammad Abbas, University of Sargodha, Sargodha
9. Prof. Dr. Sadia Hina, Fatima Jinnah Women University, Rawalpindi
10. Prof. Dr. Imran Asjad, University of Management Technology, Lahore
11. Dr. Farkhanda Afzal, Military College of Signals, National University of Science & Technology, Islamabad
12. Dr. Nasir Rehman, Allama Iqbal Open University, Islamabad
13. Dr. Muhammad Imran, Government College University Faisalabad, Faisalabad
14. Dr. Yasir Ali, EME, NUST, Islamabad
15. Dr. Tahir Mehmood, International Islamic University, Islamabad
16. Dr. Muhammad Muddassar, UET Taxila, Taxila
17. Dr. Najma Abdul Rehman, COMSATS University Islamabad, Sahiwal Campus, Sahiwal
18. Dr. Chaus ur Rahman, University of Swat, Swat
19. Dr. Shahid Mubeen, Baba Guru Nanak University, Nankana Sahib
20. Dr. Naveed Ahmed, HITEC University, Taxila
21. Dr. Ifrat Zehra, Air University, Islamabad
22. Dr. Naveed Yaqoob, Riphah International University, Islamabad
23. Dr. Faiz Muhammad Khan, University of Swat, Swat
24. Dr. Saleem Ullah, Air University, Islamabad
25. Dr. Shamsa Kanwal, Fatima Jinnah Women University, Rawalpindi
26. Dr. Farayal Chaudhary, University of Lahore, Lahore
27. Dr. Zilli Shamas, The Women University Multan, Multan
28. Dr. Naila Rafiq, National University of Modern Languages, Islamabad
29. Dr. Bushra Majeed, CEME, NUST, Islamabad
30. Dr. Ambreen Ahmed, University of Narowal, Narowal
31. Dr. Sadia Midhat, PMAS, Arid Agriculture University, Rawalpindi
32. Dr. Waqas Yasin, University of Narowal, Narowal

### DEPARTMENT OF PHYSICS

1. Prof. Dr. Saif Ullah Awan, National University of Science and Technology, Islamabad
2. Dr. Mahmood Ul Hassan Department of Physics, University of the Punjab
3. Dr. Nida Iqbal Chairperson, Biomedical engineering department, UET, Lahore New campus
4. Dr. Nadir Ali Khan, University of Peshawar
5. Dr. Syed Raza Ali Raza, Allama Iqbal Open University, Islamabad
6. Dr. Shahzad Hussain, Comsats University Islamabad Campus
7. Dr. Muhammad Irfan, Mirpur University of Science and Technology, Mirpur AJK
8. Dr. Muhammad Imran, Comsats University Lahore Campus
9. Dr. Muhammad Imran Malik Associate Professor National University of Science & Technology, Islamabad
10. Dr. Rivenan Ahmed Principle Scientist National Centre for Physics, Islamabad
11. Dr. Sikander Azam, Riphah International University Islamabad
12. Dr. Saman Iqbal, Department of Physics, University of the Punjab
13. Dr. Muhammad Amin, Department of Physics, University of Lahore
14. Dr. Shabbir Hussain, Institute of Chemistry, KFUEIT
15. Dr. Syed Hamza Saif, Department of Physics, Quaid-i-Azam university, Islamabad
16. Dr. Faisal Munir Bhutta, School of Natural Sciences (SNS) NUST, Islamabad
17. Dr. Asad Iqbal, EME College NUST
18. Dr. Junaid Ali, Comsats University, Islamabad
19. Dr. Asghar Ali, Department of Physics, University of Lahore

### DEPARTMENT OF STATISTICS

1. Dr. Manzoor Khan, Quaid-i-Azam University Islamabad
2. Dr. Aamir Saghir, Mirpur University of Science and Technology, Mirpur, AJK
3. Dr. Amna Nazee, Comsat University Islamabad
4. Dr. Zaheer Khan, Federal Urdu University of Science and Technology, Islamabad
5. Dr. Syed Muhammad Muslim Raza, Virtual University of Pakistan 54-Lawrence Road, Lahore, Pakistan
6. Dr. Asma Gul, NUST, Islamabad
7. Dr. Shakeel Ahmed, NUST, Islamabad
8. Dr. Nadia Shabnam, National University of Medical Sciences, PWD, Islamabad
9. Dr. Ammara Nawaz Cheema, Air University Islamabad campus
10. Dr. Tahir Mehmood, NUST Islamabad
11. Dr. Nabeel Abbas, Govt Graduate College, Jhang, Pakistan
12. Dr. Sajid Ali, Quaid-i-Azam University Islamabad
13. Dr. Sadia Masood, PMAS-Arid Agriculture University, Rawalpindi
14. Dr. Mansoor Shaikat Khan, Comsat University Islamabad

### DEPARTMENT OF ZOOLOGY

1. Prof. Dr. Muhammad Ali (S, TI), University of the Punjab, Lahore
2. Prof. Dr. Muhammad Shahab, Shaheed Benazir Bhutto University, Sheringal, Dir
3. Prof. Dr. Naem Tariq, Narejo University of Baltistan, Skardu
4. Prof. Dr. Sarwat Jahan, Ex-Dean, Faculty of Biological Sciences, QAU, Islamabad
5. Dr. Muhammad Zahid, Islamia College University, Peshawar
6. Dr. Tariq Mahmood, Department of Zoology, Wildlife & Fisheries. Pir Mehr Ali Shah Arid Agriculture University, Rawalpindi
7. Dr. Zaib Un Nisa, Government College University, Faisalabad
8. Dr. Farkhanda Asad, Government College University Faisalabad (GCUF)
9. Dr. Ahmad Farooq, Islamabad Medical and Dental College, ANTH Islamabad
10. Dr. Zahida Nasreen, Department of Zoology, University of Mianwali
11. Dr. Rukia Mehmood Baig, Department of Zoology, Wildlife & Fisheries. Pir Mehr Ali Shah Arid Agriculture University, Rawalpindi
12. Dr. Asma ul Husna, Department of Zoology, University of Haripur
13. Dr. Salma Qadeer, Department of Zoology, University of Education, Jauharabad campus
14. Dr. Iram Maqsood, Shaheed Benazir Bhutto Women University Peshawar

### ADVISORY COMMITTEE

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Prof. Dr. Sobia Masood (Psychology)  
Prof. Dr. Rooh Ul Amin, (English)  
Dr. Huma Fawad (Additional Registrar)  
Mr. Muhammad Naveed Ashraf (Additional Treasurer)  
Dr. Baqir Hasnain (Director/QEC/EL)  
Mr. Farrukh Aftab (Project Director)  
Mr. Ali-Murtaza Turabi (Director Purchase & Store)  
Ms. Khadija Saeed (Additional Director Student A fairs)  
Mr. Yasir Mumtaz (Additional Director ITS)

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Dr. Benazeer Abbasi (Assistant Professor)  
Dr. Amber Sarwar (Assistant Professor)  
Dr. Musarrat Ijaz (Assistant Professor)  
Dr. Shazia Shamas (Assistant Professor)  
Dr. Adnan Mustafa (Assistant Professor)  
Dr. Tunzeel Iqbal (Lecturer)

### RECEPTION COMMITTEE

- Dr. Baqir Hasnain (Director/QEC/EL)  
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Dr. Noureen Khan (Associate Professor)  
Dr. Rehana Rahim (Assistant Professor)  
Dr. Ghulam Narjis (Lecturer)  
Dr. Huda Sarwar (Lecturer)  
Ms. Sidra Khudadad (Lecturer)

### ACCOMMODATION COMMITTEE

- Dr. Waqar Mehmood (0322-5167800)  
Ms. Sadaf Parveen (0347-9511547)  
Ms. Sanila Arshad (0324-9401735)  
Mr. Umair Jalal (0332-5351191)  
Mr. Ghulam Murtaza (0302-2012545)  
Mr. Muhammad Ishfaq (0314-9799745)

## PICTORIAL GLIMPSES OF 3<sup>rd</sup> INTERNATIONAL CONFERENCE, 2024



# RAWALPINDI WOMEN UNIVERSITY

6<sup>th</sup> ROAD, SATELLITE TOWN, RAWALPINDI, PAKISTAN, (Ph: 051-9291648)