



**4<sup>th</sup> INTERNATIONAL CONFERENCE ON  
BIOLOGICAL RESEARCH & APPLIED SCIENCE**

**January 23-25, 2024**

**JINNAH UNIVERSITY FOR WOMEN  
KARACHI, PAKISTAN**



## ABOUT CONFERENCE

The Jinnah University for Women, Karachi, Pakistan hosts the International Conference on Biological Research and Applied Science (IBRAS), a distinguished event that features the latest developments and innovations in the field of Biological, Chemical and Physical Sciences. The 4<sup>th</sup> IBRAS will be held in January 23-25, 2024 at Jinnah University for Women, Karachi, Pakistan in hybrid mode, which allows both online and on-campus participation, to accommodate the researchers and to ensure maximum participation. The conference will offer various technical tracks in the domains of Botany, Biochemistry, Biotechnology, Chemistry, Computer Science, Food Science, Microbiology and Zoology. The conference will feature keynote speeches, invited talks, oral presentations, poster presentation, workshop and tutorial. The conference series has successfully completed its first, second and third editions in 2021, 2022 and 2023 attracting an average of 2000 attendees, featuring distinguished international keynote speakers, and presenting over 100 oral papers. Conference proceedings and glimpses are available at the website <https://ibras.juw.edu.pk/>.

### RELEVANCE AND SCIENTIFIC SIGNIFICANCE

This three-day international conference aims to provide a platform for researchers, academicians, students and industry professionals to exchange ideas, share knowledge, and foster collaborations. This can lead to the more effective results in terms of development of a scientist's consortium working on new discoveries for regional development. The conference enables students and young researchers to gain valuable insights from the leading professionals, which can inspire them to achieve personal and professional growth.

### CONFERENCE TRACKS

IBRAS-2024 will offer a unique opportunity for researchers to share and discuss their latest findings, trends, and challenges in oral and/or poster sessions. The conference welcomes original, unpublished, and scientific papers in the form of extended abstracts on any topic related to Biological and Applied Sciences, including:

**1. Research and Innovation in Biotechnology**

Bioinformatics and Biocomputing, Stem cells and cancer research, Tissue engineering, Protein Engineering, Nanobiotechnology, Biofuels and Bio-refineries, Bioremediation, Transgenic technology, Cell signaling technology

**2. Systems Biology and Metabolomics**

Personalized medicine, Precision Nutrition, Biomarker discovery, novel methods for metabolite profiling, Genomics, Transcriptomics, Proteomics, Lipidomics, Enzyme kinetics, Modelling and Synthetic Biology

**3. Microbiome in Sustainable Development**

Molecular basis of infectious disease progression, Microbiome in Agriculture & livestock, Bioinformatics and Artificial Intelligence Simulations, Synbiotics, Antimicrobial resistance

**4. Innovation in Chemical Sciences**

Nanotechnology and Forensic Sciences, Recent advances in thermodynamics, Environmental sustainability, Catalyst and synthesis, Waste water treatment, computational chemistry, Natural products and medicinal Chemistry.

**5. Impact of climate change on agriculture production and its sustainable solutions**

Climate variability and Yield reduction, Adaptation, Climate and Crop Modeling, Sustainable Agriculture Production, Climate-Smart Agriculture

**6. Recent Trends in Sustainable Food Processing & Food Security**

Post-Harvest handling in cereal based foods, food processing, preservation and packaging techniques, food safety and quality management systems, food fortification and supplementation, sustainable food products, Nutraceuticals

**7. Environmental Biology: Developing the possibilities**

Wildlife, Marine Environment, Urban Environment

**8. Emerging Trends In Computing**

Data Science, Blockchain Technology, Smart cities, Human-centered Computing, Computer Vision, Augmented Reality, Natural Language Processing, Deep Learning, Cyber-physical Systems.

## **Tutorials and Workshop:**

The IBRAS-2024 program comprises several key components. One tutorial is dedicated to Artificial Intelligence, focusing on fundamental AI concepts and tools essential in the Healthcare sector. Another tutorial delves into the intersection of Mathematics and Data Science, specifically highlighting the practical application of Physics-Informed Neural Networks (PINNs), bridging theoretical foundations with real-world cases. Additionally, a hands-on Bioinformatics workshop is designed to offer practical exposure to utilizing bioinformatics tools and techniques for analyzing diverse biological data types—such as DNA, RNA, proteins, and metabolites. These innovative, interdisciplinary domains present numerous applications and challenges within biological research and applied science.

Esteemed experts from Jinnah University for Women will lead the tutorial and workshop, sharing their profound insights and experiences. Participants will gain valuable skills, engage with both instructors and peers, and uncover the potential applications of artificial intelligence and bioinformatics within their respective research domains.

### **Tutorials:**

#### **1. “Artificial Intelligence in Healthcare: Applications and Challenges”**

Date: 19<sup>th</sup> January, 2024

Timings: 10:00 – 12:00 noon

Venue: B-17

Resource Person:

- Prof. Dr. Narmeen Zakaria Bawany (Dean, Faculty of Science, Department of Computer Science and Software Engineering, Jinnah University for Women, Karachi)
- Ms. Surraya Obaid (Department of Computer Science and Software Engineering, Jinnah University for Women, Karachi).

#### **2. “Physics-Informed Neural Networks (PINNs)”**

Date: 20<sup>th</sup> January, 2024

Timings: 10:00 – 2:00 pm

Venue: B-13

Resource Person: Dr. Muhammad Danish Khan (Department of Computer Science and Software Engineering, Jinnah University for Women, Karachi)

### **Workshop:**

#### **1. Hands-on workshop on “Bioinformatics: Tools and Techniques”**

Date: 20<sup>th</sup> January, 2024

Timings: 10:00 – 3:00 pm

Venue: B-17

Resource Person:

- Ms Ayisha Aman Ullah (Chairperson, Department of Biotechnology, Jinnah University for Women, Karachi)
- Dr. Arshia Tabassum (Assistant Professor, Department of Biochemistry, Jinnah University for Women, Karachi)

## CONFERENCE PROGRAM

<b>DAY 1 (JANUARY 23, 2024)</b>	
<b>TIMINGS</b>	<b>SESSIONS</b>
<b>Muhammad Uzair Auditorium</b> 10:30 am	<b>INAUGURAL SESSION OF THE CONFERENCE</b>
10:30 am	<b>Arrival of Guests</b>
10:40 am - 10:50 am	<b>Tilawat-e-Quran</b> <b>National Anthem of Pakistan</b>
10:50 am - 11:00 am	<b>Welcome Address by Ms. Wania Wajeesh</b> Registrar, Jinnah University for Women, Karachi
11:00 am - 11:10 am	<b>Address by Mr. Wajeehuiddin Ahmed</b> Chancellor, Jinnah University for Women, Karachi
11:10 am - 11:30 am	<b>Keynote Lecture by Prof. Dr. Zareen Amtul</b> University of Windsor, Canada  “Deep Learning uses brain atrophy as cognitive fingerprint to diagnose Pre-clinical Alzheimer’s disease.”
11:30 am - 11:50 am	<b>Keynote Lecture by Dr. Fahd Haroon Haji</b> Medical Director Karachi X-Rays Diagnostic Centre, Karachi, Pakistan  “Importance of Multidisciplinary Meetings and Teamwork in saving lives of Cancer patients.”
11:50 am – 12:00 noon	<b>Address by Chief Guest:</b> <b>Prof. Dr. M. Iqbal Afridi</b> HEC DNP (Distinguished National Professor), JSMU/JPMC Dean, Faculty of Psychiatry, College of Physicians and Surgeons Karachi, PAKISTAN
12:00 noon – 12:10 pm	<b>Shields Distribution</b>
<b>Conference Room (B-17)</b>  <b>12:15 pm</b>	<b>SESSION I: IMPACT OF CLIMATE CHANGE ON AGRICULTURE PRODUCTION AND ITS SUSTAINABLE SOLUTIONS</b>  <i>Organized by Department of Botany</i>  <b>Chair: Prof. Dr. Abdul Matin</b> Dean Faculty of Natural Sciences University of Baltistan, Skardu  <b>Co-Chair : Dr. Kishwar Ali</b> University of Doha for Science and Technology, Qatar
12:15 pm – 12:25 pm	<b>Welcome Address by:</b> <b>Dr. Rabia Badar</b> Chairperson, Department of Botany, Jinnah University for Women
12:25 pm – 12:50 pm	<b>Keynote Speaker: Dr. Waseem Ashfaq</b> The University of Melbourne, Australia  “Impact of climate change on Agriculture production and its sustainable solutions”

12:50 pm – 1:15 pm	<p align="center"><b>Invited Speaker: Prof. Dr. Hassan Sher</b></p> <p align="center">Vice Chancellor University of Swat Pakistan Khyber Pakhtunkhwa, Pakistan</p> <p align="center">“Maximizing Livelihood Opportunities through Introduction of High Value Medicinal Plants in District Swat, Pakistan; Study for Sustainable Development and to meet SDGs”</p>
1:15 pm – 1:30 pm	<p align="center"><b>Mr. Muhammad Mahran Aslam</b></p> <p align="center">Nuclear Institute of Agriculture (NIA), Tandojam-Sindh, Pakistan</p> <p align="center">“Climate-Smart Brassica Cultivar Development through Molecular Marker-Based Selection for Enhanced Food Security”</p>
1:30 pm – 1:45 pm	<p align="center"><b>Mr. Solevo Martin</b></p> <p align="center">SIBI Planning and Environment Company, Landscaping department, Cotonou, Benin</p> <p align="center">“Floristic potentials and their roles in the municipality of Bohicon, Benin”</p>
1:45 pm – 2:00 pm	<p align="center"><b>Mr. Sohail Ahmed</b></p> <p align="center">Dr. A. Q. Khan Institute of Biotechnology and Genetic Engineering (KIBGE)</p> <p align="center">“Investigating the Role of Rhizosphere Chemistry in Wheat Drought Stress: A Metabolomics Study”</p>
2:00 pm – 2:30 pm	<b>Break</b>
2:40 pm – 2:55 pm	<p align="center"><b>Ms. Manahil Saleem</b></p> <p align="center">Department of Botany, Jinnah University for Women, Karachi, Pakistan</p> <p align="center">“The impact of salinity on the phytoplankton community of mangrove forest at Sandspit, Karachi”</p>
2:55 pm – 3:10 pm	<b>Q/A Session</b>
<p align="center"><b>New Council Room</b></p> <p align="center"><b>12:15 pm</b></p>	<p align="center"><b>SESSION II: INNOVATION IN CHEMICAL SCIENCES</b></p> <p align="center"><i>Organized by Department of Chemistry</i></p> <p align="center"><b>Chair: Dr. Haider A. Khwaja</b> Wadsworth Center, Department of Environmental Health Sciences, School of Public Health, University of Albany, New York, USA</p> <p align="center"><b>Co-Chair : Prof. Dr. Rubeena Saleem</b> Department of Chemistry, Jinnah University for Women, Karachi</p>
12:15 pm - 12:25 pm	<p align="center"><b>Welcome Address by:</b></p> <p align="center"><b>Dr. Najma Rasool</b> Chairperson, Department of Chemistry, Jinnah University for Women</p>
12:25 pm – 12:50 pm	<p align="center"><b>Keynote Speaker: Prof. Dr. Jiri Berek</b> Charles University, Prague, Czech Republic</p> <p align="center">“Batch Injection Analysis with Novel Electrode Materials Possibilities and Limitations”</p>
12:50 pm – 1:15 pm	<p align="center"><b>Keynote Speaker: Dr. Hajira Tahir</b> Department of Chemistry, University of Karachi, Pakistan</p> <p align="center">“Synthesis of Nanocomposites coupled with Activated Carbon and their application for the removal of Dyes by ultra-sonicated Adsorption Process using Response Surface Methodology”</p>
1:15 pm – 1:40 pm	<p align="center"><b>Keynote Speaker: Prof. Dr. Zaheer -ul-Haq</b> Dr. Panjwani Center for Molecular Medicine and Drug Research, ICCBS, University of Karachi.</p> <p align="center">“In Silico Drug Discovery using Natural Products”</p>

1:40 pm – 2:00 pm	<p align="center"><b>Invited Speaker: Dr. Haider A. Khwaja</b> School of Public Health, University of Albany, New York, USA</p> <p align="center">“The link between climate change and health: Air pollution”</p>
2:00 pm – 2:30 pm	<b>Break</b>
2:30 pm – 2:50 pm	<p align="center"><b>Invited Speaker: Dr. Shumaila Kiran</b> Department of Applied Chemistry, Government College University, Faisalabad, Pakistan</p> <p align="center">“Biogenic synthesis and characterization of ZnO nanoparticles for degradation of synthetic dyes: A sustainable environmental cleaner approach”</p>
2:50 pm – 3:10 pm	<p align="center"><b>Invited Speaker: Dr. M. Farooq Wahab</b> University of Texas at Arlington, Texas, USA.</p> <p align="center">“Analytical Chemistry and Sustainable Practices: Use of Sub/Supercritical Carbon Dioxide for Separations”</p>
3:10 pm – 3:25 pm	<p align="center"><b>Ms. Farozan Umer</b> Department of Chemistry, Jinnah University for Women</p> <p align="center">“Kinetics of Adsorption of Heavy Metal Cu(II) from Aqueous Phase on Modified Agricultural Waste”</p>
3:25 pm – 3:40 pm	<p align="center"><b>Ms. Urooj Shahid</b> Dow University of Health Sciences, Pakistan</p> <p align="center">“Sustainable Synthesis of Silver Nanoparticles Using Aloe Vera Gel: Nature’s Antimicrobial Marvel”</p>
3:40 pm – 3:55 pm	<p align="center"><b>Mr. Muhammad Ishtiaq Jan</b> Kohat University of science and Technology, Kohat, Pakistan</p> <p align="center">“Synthesis of Carbon Dots from Momordica Charantia fruit as a platform for Cadmium (II) sensing and antibacterial activity”</p>
3:55 pm – 4:10 pm	<p align="center"><b>Ms. Saira Kanwal</b> U.S.-Pakistan Center for Advanced Studies in Energy USPCASE, National University of Sciences and Technology NUST, Islamabad, Pakistan</p> <p align="center">“Performance Enhancement of Microbial Fuel Cell by using Ceramic Membrane Separator as a Sustainable Solution for Power Production”</p>
4:10 pm – 4:25 pm	<b>Q/A Session</b>
<b>Audio Visual Room (A-6)</b>  <b>12:15 pm</b>	<p><b>SESSION III: RECENT TRENDS IN SUSTAINABLE FOOD PROCESSING &amp; FOOD SECURITY</b></p> <p><i>Organized by Department of Food Science and Technology</i></p> <p><b>Chair: Dr. Muhammad Sohaib</b> <b>Co-Chair: Obaid ul Hassan</b></p>
12:15 pm - 12:25 pm	<p align="center"><b>Welcome Address by:</b> <b>Ms Anum Liquat</b> Chairperson, Department of Food Science and Technology Jinnah University for Women</p>
12:25 pm – 12:50 pm	<p align="center"><b>Keynote Speaker: Dr. Juveria Siddiqui</b> Research Associate, Department of Chemical Engineering and Applied Chemistry, University of Toronto, Canada</p> <p align="center">“Enhancing Public Health: Iron and Micronutrients Fortification of Salt - A Promising Strategy for Nutritional Improvement”</p>
12:50 pm – 1:15 pm	<p align="center"><b>Invited Speaker: Dr. Iahisham-Ul-Haq</b> Assistant Professor, Kauser Abdulla Malik School of Life Sciences, Forman Christian College, Lahore, Pakistan</p> <p align="center">“Evidence based prebiotic effect of jellies enriched with oligosaccharides obtained from orange peels”</p>

1:15 pm – 1:30 pm	<p align="center"><b>Dr. Abeera Moin</b> Department of Food Science and Technology, University of Karachi, Karachi</p> <p align="center">“Innovation in By-Product Processing: A Comparative Study of Chemically Modified Starches from Two Pakistani Rice Varieties”</p>
1:30 pm – 1:45 pm	<p align="center"><b>Ms. Qandeel Ansar</b> Department of Food Science and Technology, Jinnah University for Women, Karachi</p> <p align="center">“Development of Nutraceutical Mouthwash by the incorporation of Extract from organic commodities for combatting oral hygiene and mouth care”</p>
1:45 pm – 2:00 pm	<p align="center"><b>Ms. Meshal Anwer</b> Department of Food Science and Technology, Jinnah University for Women, Karachi</p> <p align="center">“Innovation to Formation: Development of Organic edible Tape from waste utilization”</p>
2:00 pm – 2:10 pm	<b>Q/A Session</b>
<b>DAY 2 (JANUARY 24, 2024)</b>	
<p align="center"><b>Conference Room (B-17)</b>  <b>10:00 am</b></p>	<p align="center"><b>SESSION IV: EMERGING TRENDS IN COMPUTING</b>  <i>Organized by Department of Computer Science and Software Engineering</i></p> <p align="center"><b>Chair: Dr. Farah Lakhani</b> Lecturer Queen Mary University of London, London, England, United Kingdom</p> <p align="center"><b>Co-Chair: Dr. Syed Zaffar Qasim</b> Assistant Professor Department of Computer and Information Systems Engineering NED University of Engineering &amp; Technology Karachi, Pakistan</p>
10:00 am – 10:10 am	<p align="center"><b>Welcome Address by:</b> <b>Prof. Dr. Narmeen Zakaria Bawany</b> Department of Computer Science and Software Engineering Jinnah University for Women</p>
10:10 am to 10:40 am	<p align="center"><b>Keynote Speaker: Dr. Ahmed Baha</b> Microsoft Regional Director, Technical consultant in an Egyptian Microsoft Gold Partner (Compu Pharaohs), Vice Dean of Faculty of Computer and AI, Beni-Suef University. ISO Advisory Committee Member for ISO JTC1</p> <p align="center">“The Age of AI v Next: Navigating the Quantum Frontier”</p>
10:40 am - 10:55 am	<p align="center"><b>Ms. Marium Mateen</b> Department of Computer Science and Software Engineering, Jinnah University for Women, Karachi, Pakistan</p> <p align="center">“AdventureFit Explorer - Revolutionizing Children's Fitness using Augmented Reality”</p>
10:55 am - 11:10 am	<p align="center"><b>Ms. Saboohi Naeem Ahmed</b> Graduate School of Engineering and Information Technology, Hamdard University, Karachi</p> <p align="center">“Studying the convergence behavior and global exploration capabilities of Sailfish Optimizer Algorithm”</p>
11:10 am - 11:25 am	<p align="center"><b>Ms. Anum Ilyas</b> Center for Computing Research Department of Computer Science and Software Engineering, Jinnah University for Women, Karachi, Pakistan</p>

	“Ensemble approach for Complaint Classification”
11:25 am - 11:40 am	<b>Q/A Session</b>
<b>New Council Room</b>  <b>10:00 am</b>	<p style="text-align: center;"><b>SESSION V: SYSTEMS BIOLOGY AND METABOLOMICS</b></p> <p style="text-align: center;"><i>Organized by Department of Biochemistry</i></p> <p style="text-align: center;"><b>Chair: Dr. Balakrishnan Nair</b> National Institute for Stroke and Applied Neurosciences University of Technology, Auckland, New Zealand</p> <p style="text-align: center;"><b>Co-Chair: Prof. Dr. Farah Jabeen</b> Department of Biochemistry, Jinnah University for Women, Karachi, Pakistan</p>
10:00 am - 10:10 am	<p style="text-align: center;"><b>Welcome Address by:</b> <b>Dr. Aliya Riaz</b> Chairperson, Department of Biochemistry, Jinnah University for Women, Karachi, Pakistan</p>
10:10 am - 10:40 am	<p style="text-align: center;"><b>Keynote Speaker: Dr. Benjawan Yanwisetpakdee</b> Faculty of Science and Technology, Songkhla Rajabhat University, Thailand</p> <p style="text-align: center;">“The significance of metabolomics in systems biology and its application for improving the quality of life”</p>
10:40 am - 11:10 am	<p style="text-align: center;"><b>Keynote Speaker: Dr. Imran Ali</b> Southwest University of Science and Technology, Mianyang, China</p> <p style="text-align: center;">“Harnessing Halophilic Fungi for Sustainable Removal and Disposal of Heavy Metals and Radionuclides: A Promising Solution”</p>
11:10 am - 11:30 am	<p style="text-align: center;"><b>Invited Speaker: Dr. Saima Jalil Imran</b> Department of Cardiac Thoracic and Vascular Sciences and Public Health, University of Padua Medical School, Italy</p> <p style="text-align: center;">“Human induced stem cells (hiPSCs)-derived motor neurons model applied for the study of the aryl hydrocarbon receptor mediated signaling by the induction of environmental pollutant”</p>
11:30 am - 11:50 am	<p style="text-align: center;"><b>Invited Speaker: Prof. Dr. Kamran Azim</b> Department of Bioscience, Mohammad Ali Jinnah University, Karachi, Pakistan</p> <p style="text-align: center;">“Exploring the Oral microbiomes in Health and Disease”</p>
11:50 am - 12:05 pm	<p style="text-align: center;"><b>Dr. Kashif Ali</b> Associate Professor, SZABIST University, Karachi, Pakistan</p> <p style="text-align: center;">“Polyphenol identification and characterization of Palatinate German wines according to variety and vintage using NMR spectroscopy and multivariate data analysis”</p>
12:05 pm - 12:20 pm	<p style="text-align: center;"><b>Ms. Areeba Khaleeq</b> Agha Khan University, Karachi, Pakistan</p> <p style="text-align: center;">“Unrevealing nutrition-gut interaction: Integrated human gut organoids with organ on a chip technology”</p>
12:20 pm - 12:35 pm	<p style="text-align: center;"><b>Ms. Saba Jamshed</b> Dow University of Health Science, Karachi, Pakistan</p> <p style="text-align: center;">“Honey mediated green synthesis of silver nanoparticles to combat against pathogenic bacteria”</p>
12:35 pm - 12:50 pm	<p style="text-align: center;"><b>Ms. Aisha Bibi</b> Department of Biochemistry, Jinnah University for Women, Karachi, Pakistan</p>



	“Sustainable Bioplastic Manufacturing: Unleashing Microbial Metabolites using Agricultural waste”
12:50 pm – 1:05 pm	<b>Q/A Session</b>
<b>Audio Visual Room (A-6)</b>  <b>10:00 am</b>	<p><b>SESSION VI: RESEARCH AND INNOVATION IN BIOTECHNOLOGY</b> <i>Organized by Department of Biotechnology</i></p> <p><b>Chair: Prof. Dr. Afsheen Aman</b> Dr. A. Q. Khan Institute of Biotechnology and Genetic Engineering (KIBGE), University of Karachi, PAKISTAN</p> <p><b>Co-Chair: Dr. Rukhsana Nawaz</b> Department of Clinical Psychology, College of Medicine and Health Sciences, United Arab Emirates University, UAE</p>
10:00 am - 10:10 am	<p><b>Welcome Address by:</b> <b>Ms. Ayisha Aman Ullah</b> Chairperson, Department of Biotechnology, Jinnah University for Women</p>
10:10 am - 10:40 am	<p><b>Keynote Speaker: Dr. Mariusz Mojzych</b> Siedlce University of Natural Sciences and Humanities, Poland</p> <p>“Synthesis of pyrazolo[4,3-e][1,2,4]triazine sulfonamides, novel Sildenafil analogues with tyrosinase inhibitory activity”</p>
10:40 am - 11:00 am	<p><b>Invited Speaker: Dr. Katarzyna Monika Kotwica-Mojzych</b> Medical University of Lublin, Poland</p> <p>“Expression of Surface Molecules in Hematological Malignancies”</p>
11:00 am - 11:20 am	<p><b>Invited Speaker: Dr. Muhammad Ismail</b> Chief Scientific Officer, Institute of Biomedical and Genetic Engineering (IBGE), Islamabad</p> <p>“Nanomedicine : Simple Scraps to High Throughput Medical Therapy”</p>
11:20 am – 11:35 am	<p><b>Dr. Urooj Javed</b> Dow College of Biotechnology, Dow University of Health and Sciences</p> <p>“Green synthesis of silver nanoparticles from bitter gourd peels waste: an ecofriendly approach to utilize food waste”</p>
11:35 am - 11:50 am	<p><b>Ms. Arifa Latif</b> Dr. A. Q. Khan Institute of Biotechnology and Genetic Engineering (KIBGE), University of Karachi</p> <p>“Carbonic Anhydrase IX Gene Polymorphism Association with Susceptibility to Gastric Cancer”</p>
11:50 am - 12:05 pm	<p><b>Ms. Summayya Asghar</b> Department of Biochemistry, Shaheed Benazir Bhutto Women University (SBBWU), Peshawar, Pakistan.</p> <p>“Optimization of production conditions for <math>\alpha</math>-amylase as an important biodesizing agent”</p>
12:05 pm - 12:20 pm	<p><b>Ms. Misbah Habib</b> Department of Biotechnology, University of Karachi, Pakistan.</p> <p>“Production and optimization of lipase enzyme through solid State fermentation, by brown molds, using cotton seed cake.”</p>
12:20 pm - 12:35 pm	<b>Q/A Session</b>
<b>DAY 3 (JANUARY 25, 2024)</b>	

<p><b>Audio Visual Room (A-6)</b></p> <p><b>10:00 am</b></p>	<p style="text-align: center;"><b>SESSION VII: ENVIRONMENTAL BIOLOGY: DEVELOPING THE POSSIBILITIES</b></p> <p style="text-align: center;"><i>Organized by Department of Zoology</i></p> <p style="text-align: center;"><b>Chair: Dr. Muhammad Ismail</b> Chief Scientific Officer Institute of Biomedical and Genetic Engineering (IBGE)</p> <p style="text-align: center;"><b>Co-Chair: Prof. Dr. Rana Hadi</b> Chairperson Department of Zoology Jinnah University for Women</p>
<p>10:00 am - 10:10 am</p>	<p style="text-align: center;"><b>Welcome Address by:</b> <b>Prof. Dr. Rana Hadi</b> Chairperson, Department of Zoology, Jinnah University for Women</p>
<p>10:10 am - 10:40 am</p>	<p style="text-align: center;"><b>Keynote Speaker: Prof. Dr. Tooraj Valinassab</b> Director General, Academic Relations and International Affairs Agriculture Research, Education and Extension Organization, Iran</p> <p style="text-align: center;">“The marine Ecosystem of the Persian Gulf is undercritical environmental condition and destruction”</p>
<p>10:40 am - 10:55 am</p>	<p style="text-align: center;"><b>Ms. Faiza Zubair</b> Department of Zoology, University of Sargodha, Punjab, Pakistan</p> <p style="text-align: center;">“Anti-bacterial efficacy of <i>Cinnamomum Cassia &amp; Moringa Oleifera</i>”</p>
<p>10:55 am - 11:10 am</p>	<p style="text-align: center;"><b>Mr. Mazahir Hussain</b> PCSIR Laboratories Complex, Karachi, Pakistan</p> <p style="text-align: center;">“<i>Trichoderma asperellum</i> MMR-01: A Novel Marine Isolate Combating Fusarium Wilt in Banana Plants”</p>
<p>11:10 am - 11:25 am</p>	<p style="text-align: center;"><b>Ms. Abraira</b> Centre of Excellence in Marine Biology, University of Karachi</p> <p style="text-align: center;">“Biochemical Characterization of some Marine Biomaterials: Unlocking the Potential of Shrimp Shells, and Fish Scales for Sustainable Applications”</p>
<p>11:25 am – 11:40 am</p>	<p style="text-align: center;"><b>Ms. Noor us Sehar</b> Centre of Excellence in Marine Biology, University of Karachi</p> <p style="text-align: center;">“Distribution and diversity of diatoms with relation to the type of microplastics in sonmiani bay waters, Pakistan”</p>
<p>11:40 am – 11:55 am</p>	<p style="text-align: center;"><b>Ms. Najam us Saher</b> Centre of Excellence in Marine Biology, University of Karachi</p> <p style="text-align: center;">“Assessment of Fish export's impact on economic growth:(A comparison between Pakistan and Balgladesh)”</p>
<p>11:55 am – 12:10 pm</p>	<p style="text-align: center;"><b>Ms. Sana Baloch</b> Centre of Excellence in Marine Biology, University of Karachi</p> <p style="text-align: center;">“Morphological comparison of otolith of two species of family Platycephalidae”</p>
<p>12:10 pm – 12:25 pm</p>	<p style="text-align: center;"><b>Mr. Muhammad Tabish</b> Centre of Excellence in Marine Biology, University of Karachi</p> <p style="text-align: center;">“Seasonal Quantification of Protein in <i>Nematalosa nasus</i> (Clupeidae) in Coastal Waters of Pakistan”</p>
<p>12:25 pm – 12:40 pm</p>	<p style="text-align: center;"><b>Ms. Rabiya Nasir</b> Centre of Excellence in Marine Biology, University of Karachi</p> <p style="text-align: center;">“Elasmobranch species recorded at Karachi Fish harbor during the baseline surveys (2014-2023); a review of several biological elements with a few public attribute trends”</p>
<p>12:40 pm – 12:55 pm</p>	<p style="text-align: center;"><b>Mr. Abdul Hameed</b> Centre of Excellence in Marine Biology, University of Karachi</p>

	“Seasonal variations in the biochemical composition of <i>Johnius Amblycephalus</i> (family: Scianidae) and implications for nutritional assessment and food preservation”
12:55 pm – 1:10 pm	<b>Q/A Session</b>
<b>New Council Room</b> <b>10:00 am</b>	<b>SESSION VIII: MICROBIOME IN SUSTAINABLE DEVELOPMENT</b>  <i>Organized by Department of Microbiology</i>  <b>Chair: Prof. Dr Ghulam Asghar Maka</b> Ex Director Institute of Microbiology, Sindh University Jamshoro, Pakistan  <b>Co-Chair: Prof. Dr Sayyada Ghufrana Nadeem</b> Department of Microbiology, Jinnah University for Women, Karachi, Pakistan
10:00 am - 10:10 am	<b>Welcome Address by:</b> <b>Prof. Dr. Mahmooda Kazmi</b> Chairperson, Department of Microbiology, Jinnah University for Women
10:10 am to 10:40 am	<b>Keynote Speaker: Prof. Dr. Aqeel Ahmad</b> Dean, Faculty of Science Salim Habib University, Karachi.  “Chronic Inflammation”
10:40 am - 11:00 am	<b>Keynote Speaker: Dr. Amber Farooqui</b> Lab Director, Omega Laboratories Inc. Canada  “Functional Impairments in Multiple Organ Systems in A Mouse Model of Severe Malnutrition”
11:00 am - 11:15 am	<b>Ms. Safia Nazir</b> Department of Microbiology, Jinnah University for Women, Karachi, Pakistan  “Targeting the MDR <i>P.aeruginosa</i> Biofilm Formation with Drug-Nanoparticle Conjugates; An Insight into Variation at Gene Level”
11:15 am - 11:30 am	<b>Ms. Mahvish Noorian</b> Department of Microbiology, University of Karachi, Pakistan  “Chilling Challenges: Unveiling Microbial Dynamics and Risk Profiling in Household Refrigerators”
11:30 am – 11:45 am	<b>Ms. Sania Taj</b> Dow University of Health Sciences, Karachi, Pakistan  “Banana Peel Waste Assisted Green Synthesis of Silver Nanoparticles For Their Antimicrobial Applications”
11:45 am – 12:00 noon	<b>Ms. Saba Nazeer</b> Department of Microbiology, Jinnah University for Women, Karachi, Pakistan  “Combination Therapy for MRSA Super Bugs: Biofilm Targeted Drug Loaded Nanoparticles as a New Approach for Difficult-to-Treat Infections”
12:00 noon – 12:15 pm	<b>Q/A Session</b>
<b>Muhammad Uzair Auditorium</b> <b>1:00 pm</b>	<b>CLOSING CEREMONY</b>
1:00 pm – 1:10 pm	<b>Welcome Address by:</b> <b>Ms. Waniya Wajeih</b> Registrar, Jinnah University for Women, Karachi
1:10 pm – 1:20 pm	<b>Address by Mr. Wajeihuddin Ahmed</b> Chancellor, Jinnah University for Women, Karachi

1:20 pm – 1:30 pm	<b>Address by Chief Guest:</b> <b>Prof. Dr. Farhan Essa Abdullah</b> Chief Executive Officer Dr. Essa Laboratory Karachi, PAKISTAN
1:30 pm – 1:40 pm	<b>Vote of Thanks by Conference Chair:</b> <b>Prof. Dr. Narmeen Zakaria Bawany</b> Dean, Faculty of Science Jinnah University for Women, Karachi, Pakistan
1:40 pm – 1:50 pm	<b>Shields Distribution</b>