



**FORMAN
CHRISTIAN
COLLEGE**
(A CHARTERED UNIVERSITY)

ORIC NEWS



**NEWSLETTER OF OFFICE OF RESEARCH, INNOVATION AND
COMMERCIALIZATION**

VOLUME: 3

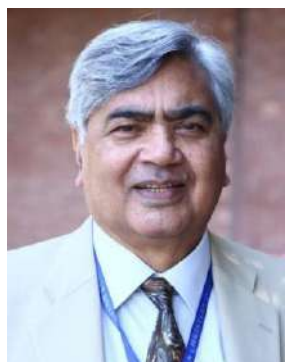




Rector's Message

Welcome to *Newsletter #3* produced by Forman's Office for Research, Innovation and Commercialization (ORIC). The pages that follow include a useful summary of numerous lectures, conferences, research projects, academic papers, international travel, poster board competitions and other achievements undertaken by members of the Forman community. The number of activities and the diversity of topics covered is especially impressive, underscoring the broad range of disciplines that are a hallmark of Forman as a liberal arts institution with a commitment to both teaching and research. The references to international linkages as well as commercial connections as reflected in the composition of ORIC's Steering Committee is indicative of an approach that also offers faculty and students opportunities that extend well beyond the four walls of the university. Although ORIC is still a relatively new unit within FCCU, it is already emerging as an effective catalyst for research and innovation, encouraging initiatives that can make a big difference, both in Pakistan and beyond.

***Dr. Jonathan Addleton,
PhD, MALD, BSc
Ambassador (Retired)
Rector,
Forman Christian College
(A Chartered University)
Lahore, Pakistan***



Message from the Director

We are happy to bring you an update on the activities of the Office of Research, Innovation, and Commercialization through this newsletter. ORIC is mandated to facilitate high-quality Research, Innovation activities, and Commercialization in the university over the past year. ORIC has facilitated the faculty and Researchers to channel research-led initiatives, innovation, commercialization, collaboration, and capacity building and facilitates researchers in the processing of grants. Also providing FCC's Internal Research Grants as seed funding for the faculty. We have also developed linkages with the Government organization and Industry and are consolidating them by means of formal MOUs. ORIC will serve FCCU as a bridge between university research and research user of industry and society. I thank the Rector, Faculty, and Staff for supporting the ORIC activities.

***Dr. Kauser A. Malik, H.I, S.I, T.I
Director Office of Research, Innovation and Commercialization (ORIC)
HEC Distinguished National Professor (Biotechnology)
Fellow Alexander von Humboldt Foundation
Fellow Pakistan Academy of Sciences
Fellow Third World Academy of Sciences***

Services provided by ORIC

- **Internal Research and Innovation Fund:** ORIC has a Revolving Seed Fund to support Faculty and Student Research.
- **Research Grants:** ORIC facilitates the application by the Faculty of Research Grants.
- **Research Publications Funding reimbursement:** ORIC supports faculty and students' Research Publications by fully or partially reimbursing article processing charges.
- **Lectures/ Seminars of Subjects Expert:** ORIC will facilitate any department in sponsoring and organizing Lectures/Seminars on a Particular Subject.
- **Capacity Building Initiatives for Faculty:** ORIC will arrange and facilitate Capacity Building initiatives for Faculty in areas related to Research, Technology, Innovation, and Academics.
- **ORIC Support for Domestic Travel:** ORIC provides grants for the expenses of Faculty and Students to participate in research conferences and seminars across Pakistan.
- **International Travel Grants:** Facilitates International Travel Grant applications to HEC & PHEC by Faculty & Ph.D. Scholars.
- **Research Expos:** ORIC will arrange and facilitate research display events, to encourage industry and market linkages.
- **Intellectual Property Management:** Facilitation in filing of Patents and copyrights.



We at ORIC strive to promote and facilitate Research, Innovation and Commercialization by supporting the University's strategic Research Direction.

For guidance, facilitation and information on any of ORIC's services, you may contact me at the details are given below.

Editor of ORIC NEWS

Haroon Samson

Senior Manager,

Research Development and Operations, ORIC

E-mail: haroonsamson@fccollege.edu.pk

Contact Details



fccu.oric



fccollege.edu.pk/office-of-research-innovation-and-commercialization-oric/

ORIC Forman Research Repository: <http://58.27.197.146:8080/jspui/>

ORIC Mailing Address: Office # 26, Armacost Science Building, Forman Christian College (A Chartered University), Ferozepur Road, Lahore – 54600. **Email:** oric@fccollege.edu.pk, **Phone:** 99231581-8. **Ext:** 531, 504.

NEWS & UPDATES

Events organized in collaboration & sponsorship with ORIC

Undergraduate Research POSTER COMPETITION
27th May, 2022

Office of Research Innovation and Commercialization (ORIC)
in collaboration with
Faculty of Natural Sciences

SHOWCASE YOUR RESEARCH FOR A CHANCE TO WIN
(Every department will win)

Important Dates
Abstracts Submission: 20th May, 2022
Printed Poster Submission: 24th May, 2022

For further information:
Contact with coordinators of Postgraduate program:
Dr. Laila Zafar (Physics)
Dr. Asma Maqbool (Biotechnology)
Dr. M. Bilal Sadiq (Food Safety and Quality Management)
Dr. Adnan Arshad (Molecular Pathology and Genomics)
Dr. Nadeem Asghar (Chemistry)
Ms. Silvia Machado (Environmental Sciences)
Dr. Khurum Rehman (Pharmacy)

Information: Mr. Haroon Samson, ORIC, S-26, Ext. 531
Mr. Steven Javed, S-404, Ext. 504

Prizes:
1 Rs: 5,000
2 Rs: 3,000



Natural Sciences & ORIC organize Undergraduate Poster Competition

ORIC and Faculty of Natural Sciences organized Undergraduate Research Poster Competition which was held on Friday, May 27th, 2022

Postgraduate Research POSTER COMPETITION
10th May, 2022

Office of Research Innovation and Commercialization (ORIC)
in collaboration with
Faculty of Natural Sciences

SHOWCASE YOUR RESEARCH FOR A CHANCE TO WIN

Important Dates
Abstracts Submission: 29th April, 2022
Printed Poster Submission: 9th May, 2022

For further information:
Contact with coordinators of Postgraduate program:
Dr. Sadia Zaher (Physics)
Dr. Asma Maqbool (Biotechnology)
Dr. M. Bilal Sadiq (Food Safety and Quality Management)
Dr. Adnan Arshad (Molecular Pathology and Genomics)
Dr. Nadeem Asghar (Chemistry)
Ms. Silvia Machado (Environmental Sciences)
Dr. Khurum Rehman (Pharmacy)

Information: Mr. Haroon Samson, ORIC, S-26, Ext. 531
Mr. Steven Javed, S-404, Ext. 504

Prizes:
1 Rs: 15,000
2 Rs: 10,000
3 Rs: 7,000



ORIC and Faculty of Natural Sciences (M.Phil.) Postgraduate Research Poster Competition 10 May 2022

Such events provide students a platform for presenting their work, and an opportunity for interactive discussions with experts. External and Internal evaluators from each department evaluated the posters. The first prize was awarded to **Ms. Mahnoor Syed** - Food Safety and Quality Management. The second prize was awarded to **Ms. Verda Saleem**, Environment Sciences Department, The third prize was awarded to **Ms. Arooj Asif** - Chemistry Department



ORIC in collaboration with the Faculty of Humanities organized an **International workshop on Science Journalism on How to communicate a Science Story.**

International Workshop on SCIENCE JOURNALISM
HOW TO COMMUNICATE A SCIENCE STORY
 11-12, January 2023

Jointly organized by Faculty of Humanities and KAM-SLS
 in collaboration with
 Pakistan Academy of Sciences

Aspects of Science Communication to be covered

- Scientific Storytelling
- Social Media Tools
- Data Visualization
- (Un) Controversial Science
- Science Podcasts

Venue: Forman Christian College University, Lahore, Pakistan



The Population Research Center-PRC Essay Competition was held on 9th January 2023. The overall theme of the competition was "2022 Floods in Pakistan, ensuing challenges and possible solutions".

The prize winners were First prize winner was **Ms. Mahnoor Butt**, second prize winner was **Mr. Muhammad Afiq** and the third prize went to **Ms. Umm-e-Abeh**.

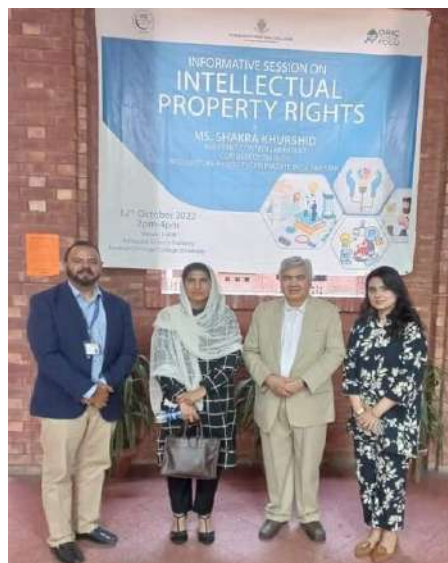


The **Faculty of Humanities, Department of English, and Faculty of Social Sciences, Department of Sociology** in collaboration with ORIC organized a **Research Poster Exhibition, "From Reflection to Reification"**. The award for the best Research Poster from the Department of Sociology was given to **Ms. Rahma Faisal** and the award for best Research Poster from the Department of English was given to two students, **Ms. Adana Paul** and **Mr. Saifullah Hafeez**.

ORIC Sponsored the Computer Science Senior Projects Poster Exhibition



The Department of Computer Science successfully organized and hosted its annual prestigious event COMPSPEX 2022 on Wednesday 22nd June 2022. In the exhibition, there were about 25 highly innovative software projects supervised by various faculty members of FCCU. **Mr. Aamir Chaudhary, Head of Business Improvement department from NETSOL Technologies** was invited as the guest of honor to grace the event with his presence.



Information Session on Intellectual Property Rights

ORIC organized an Information Session on Intellectual Property Rights by **Ms. Shakra Khurshid, Assistant Controller Patents, Commerce Division, Intellectual Property Organization- IPO Pakistan**, on Wednesday 12th October 2022. Faculty and Postgraduate students attended the event.






Faculty of Natural Sciences
Ph.D. RESEARCH POSTER COMPETITION 2022

26th OCTOBER 2022
 09:00AM-05:00PM
 S-OCTA

Office of Research, Innovation and Commercialization (ORIC) encourages all Ph.D. scholars to participate in this competition as this will be a great opportunity to showcase your work and recognize excellence in research.

3 Best Posters will be awarded Rs.10,000 each

Abstract Submission Deadline: 19th October 2022
 Poster Submission Deadline: 24th October 2022

For Poster submission email to your coordinator
 KAM-School of Life Sciences: anamahqbal@fcccollege.edu.pk
 Department of Physics: ammaraswar@fcccollege.edu.pk
 Department of Chemistry: nadeemasghar@fcccollege.edu.pk



ORIC sponsored the Faculty of Natural Sciences Ph.D. Poster Competition for the Ph.D. Scholars of Natural Sciences on Wednesday, October 26, from 9:30 am to 3:00 pm in the S-block. The Rector, Dr. Jonathan Addleton, and the Vice-Rector Dr. Douglas Trimble graced the event and presented the awards to the winners. A total of **40** Ph.D. Scholars participated, winners were, **Ms. Saba Javed**, Department of Physics **Mr. Zohab Asif**, KAM-School of Life Sciences, **Mr. Rashid Masih**, Department of Chemistry




ORIC collaborated with the English Department and supported to arrange the “2nd International Conference on Inter/Dis-connections of the Prefix ‘Post’ in Contemporary Literary, Linguistic and Cultural Studies” (19-20 October, 2022)” at Forman Christian College (A Chartered University), an international peer-reviewed scholarly event and the first of its kind to explore the rich legacy of the ‘post’ in our contemporary aesthetics and culture.



ORIC collaborated with the Education Department and supported the International Education Conference “Lessons & Legacies of the Pandemic in Education: The Future of Research Trends, Pedagogical Approaches, and Leadership Challenges”. Prof. Dr. Shahid Munir, Chairperson, Punjab Higher Education Commission was the chief guest. The conference brought together the scholars and practitioners to share their past and ongoing research associated with online, hybrid, on-site, and off-site teaching and learning, digital educational tools and platforms contributing to the effectiveness of classroom teaching, assessment, social-emotional well-being of teachers and students and other areas.

PRC'S 1ST INTERNATIONAL VIRTUAL CONFERENCE ON POPULATION GROWTH

2ND DECEMBER, 2021



Population Research Center

"OPPORTUNITIES AND THREATS: POPULATION GROWTH AND THE WAY AHEAD"

FORMAN CHRISTIAN COLLEGE

IMPORTANT DATES

Event Date:
2nd December 2021

Abstract Submission Deadline:
1st September 2021

Full Paper Submission Deadline:
30th September 2021

Review Deadline:
30th October 2021

Decision on submission:
5th November 2021

CONTACT DETAILS

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Jawad Tariq - Coordinator PRC
j.tariq@fccc.edu.pk


Phone: 042 99251581-8; Ext: 864
E-mail: prc@fccc.edu.pk
Web: <http://www.fccc.edu.pk/population-research-center/>

ORIC supported the Population Research Center (PRC) in organizing a virtual Panel Discussion/Academic Conference in collaboration with the Population Council (PC) Pakistan, UNFPA at Forman Christian College (A Chartered University), and the HEC. The event was held on the 02nd of December, 2021. Panel discussion was held, which included international and national experts in the field of demography and population studies. Panelists and Paper Presenters focused on the following themes in their presentation.

- Population explosion and other relevant issues
- Gender and vulnerable populations related issues
- Urbanization & migration
- Old age and genealogy
- Poverty
- Public health policy and disease control
- Resource Scarcity

CONSTITUTION OF PAKISTAN SEMINAR SERIES 2022
DEPARTMENT OF POLITICAL SCIENCE, FCCU





CONSTITUTIONAL FRAMEWORK FOR HUMAN RIGHTS

Saroop Ijaz
SENIOR COUNSEL, ASIA FOR HUMAN RIGHTS WATCH

DATE: Friday 25 Nov 2022
TIME: 1:00 - 2:00 PM
VENUE: E-137

FORMAN CHRISTIAN COLLEGE



ORIC sponsored Political Science Department seminar series on the **Constitutional Framework of Pakistan** Seminar Series. **Mr. Saroop Ijaz**, Senior Counsel, Asia for Human Rights Watch was invited at guest speaker at the first seminar. Mr. Saroop Ijaz is the Pakistan Researcher in the Asia division of the Human Rights Watch and the member of Human Rights Commission of Pakistan (HRCP).

Dr. Osama Siddiqui and Ms. Nighat Dad were the speakers for the upcoming talks on 7th & 14th December 2022.



ORIC Sponsored award winning students' entry to three Competitions.

- With sponsorship from ORIC Computer Sciences Students participated in the **Annual Computer Project Exhibition & Competition, COMPEC, 2022** which was held on 24-25th May at EME College, NUST, Rawalpindi.
- And the same team made us proud once more when they brought home the most prestigious **P@SHA ICT Award 2022** for the first time. Undergraduate students **Hassan Shakoor Rana, Ahmed Yasser, and Rifa Salman** transformed a thesis conducted by **Mr. Sharoon Nasim** into an android mobile application, that enables everyone to talk to our deaf community seamlessly.



Student group from CS department competed in **Asia Pacific ICT Alliance Awards - APICTA 2022** against 160 projects from 16 countries of the Asia Pacific region. APICTA was being hosted in Pakistan for the first time. I am proud and humbled to announce that the group bagged another **Gold Award** yesterday at the award ceremony. Their app "Sunno" was declared best in tertiary students in terms of uniqueness, quality, need, business perspective and growth modelling. Our students pitched their project in just 10 minutes and displayed sound knowledge of computer science, technical skill and business management.



ORIC Sponsored the Mathematics Department's team of senior BS Honor Mathematics students Lintha Nadeem, Sundus Rehman, Areesha Mahik, Husbana Ghafoor, who participated in the 7th CASPAM REGIONAL STUDENT OLYMPIAD OF MATHEMATICS (CRSOM-7) on 31st March 2022, organized by Center for Advanced Studies in Pure and Applied Mathematics (CASPAM) Bahauddin Zakariya University (BZU), MULTAN, PAKISTAN, the team was accompanied by Dr. Shabnam Malik, Associate Professor and Chairperson of the Department of Mathematics.



ORIC sponsored five students from the Department of Physics to attend the **Workshop on Theoretical Physics (TPD) at CoE Physics, NCP, Islamabad**. The workshop covers basic aspects of plasma physics with gradual concept building in mathematical modeling, computational plasma physics, simulation, and experimental techniques in fusion plasma physics.



ORIC and Center for Language Engineering (CLE), Al-Khawarizmi Institute of Computer Science (KICS), University of Engineering and Technology (UET), signed an agreement to provide access to Urdu Plagiarism software **Parakh**. Parakh is an Urdu Plagiarism Detection System <https://parakh.cle.org.pk>, developed by CLE, Lahore, in collaboration with Higher Education Commission (HEC) funded project.







Mr. Haroon Samson from ORIC is the focal person for National Idea Bank – NIB for Lahore region, participating and representing all students who are participating in the NIB from Lahore Region. ORIC has organized awareness campaign and FCCU faculty are serving as judges in the competition. ORIC hosts online city-wide events for all sectors of the NIB competition 2022.

ORIC'S FIRST STEERING COMMITTEE MEETING



In accordance with HEC policies, the first meeting of the Office of Research Innovation and Commercialization – ORIC Steering Committee chaired by the Rector was held on Tuesday, June 28, 2022. The meeting was attended by **Dr. Jonatthan Addleton, Rector, chair of the Committee, Dr. Kauser Abdulla Malik, Director ORIC, Engineer Javed Qureshi, President, Pakistan Engineering Council, Chief Executive 4B Group of Companies, Dr. Musaddiq Asif, Director National Feeds Pvt. Ltd. Mr. Aezaz Hussain, Chairman, Systems Ltd. Mr. Muhammad Idrees, Chief Executive officer, NovaMed Pharmaceuticals Mr. Muhammad Saif Rasheed, Associate Director, Quality Operations Mr. Nadeem Khalid, Chief Executive, Herbion Pakistan (Pvt) Ltd. Dr. Hassan Amir Shah S.I. Dean of Natural Sciences, Dr. Rao Raza Hashim, Dean of Business,**

AWARDEES OF NATIONAL RESEARCH PROGRAM FOR UNIVERSITIES- NRPU - 2022

		Research Projects
	Dr. Samina Mehnaz, Chairperson KAM – School of Life Sciences	Environmentally safe polyhydroxy butyrate (PHB) based biodegradable packaging film as an alternative to conventional plastic
	Dr. Muhammad Imran, Associate Professor KAM – School of Life Sciences	Isolation, identification and characterization of novel microbial s-triazine and dicamba degrading proteins
	Dr. Syed Farhat Ali, Associate Professor KAM – School of Life Sciences	Production enhancement and PCR application of an archaeal DNA polymerase - an important diagnostic enzyme
	Dr. Muhammad Irfan, Professor KAM-School of Life Sciences	Enhancement of Omega-3 Fatty Acids in Maize

	Dr. Muhammad Nadeem Asghar, Professor Department of Chemistry	Green surface-Active Ionic Liquid-based Drug Delivery Systems
	Dr. Shazia Ilyas, Assistant Professor Department of Environmental Sciences	Development of Nanofiltration (NF) membranes with surface-enhanced antifouling properties for water applications.
	Dr. Muhamamd Shahbaz Akhtar, Associate Professor Department of Environmental Sciences	Nanoremediation of arsenic-contaminated waters and soils by new-generation graphine-based materials
	Dr. Hamid Latif, Associate Professor Department of Physics	Fabrication of a novel carbon nanomaterial-based Perovskite Solar Cells and its Stability Enhancement by Self-assembled Monolayers.
	Dr. Sara Rizvi Jafree Chairperson Department of Sociology	Evidence-based Intervention to Improve Social Policy for Maternal and Child Health using a Pre-Post Test Design
	Dr. Shakila Bashir, Associate Professor Department of Statistics	A New Family of Distributions to estimate the survivorship functions with an application to the survival times of chronic kidney disease patients
	Dr. Firasat Jabeen, Chairperson Department of Mass Communication	National Policies and Media Development (NPMD)

On-going and recently completed Research Projects

	<ul style="list-style-type: none"> • Dr. Kauser A. Malik, Director of ORIC completed a Project Microbiome Profiling of The Cotton Plant Under Cotton Leaf Curl Disease Attack by the Pakistan Academy of Sciences – PAS. • Whole-genome sequences analysis of halophilic archaea and identification of gene encoding for Plant growth-promoting traits and osmoregulation, funded by PAS-Research Grant. • Microbiome Profiling of the Cotton plant under cotton leaf curl Disease attack funded by Alexander Von Humboldt Foundation, Germany.
	<p>Dr. Muhammad Arsalan, Distinguished Research Professor, KAM School of Life Sciences completed a Project Oxidative Stress in Severely Obese Children and its Impact on Metabolic Dysfunction funded by the Pakistan Academy of Sciences – PAS.</p>
	<p>Muhammad Irfan, Professor, KAM-School of Life Sciences, Project “Development of climate-smart cotton by editing Arginase (GhArg) genes using genome editing (CRISPR/Cas) tools, Cotton crop improvement against abiotic stresses”. (Local Challenge Fund – LCF).</p>
	<p>Dr. Shinho Chung, Associate Professor, the Department of Environmental Sciences, was awarded a Research Project on the Scientific and Sustainable Application of Groundwater Treatment Technology for Safe Drinking Water Supply in Punjab, Pakistan funded by the Korean Overseas Development Agency – ODA.</p>
	<p>Dr. Rabia Chaudhry Researcher at the Center for Public Policy and Governance & Dr. Saeed Shafqat, Director Center of Public Policy and Governance are awarded the project Juvenile Justice Act of Pakistan 2018: Assessment, Analysis, and Capacity Building funded by the United States Institute of Peace – USIP.</p>
	<ul style="list-style-type: none"> • Saba Shahid and Bushra Arfeen, March 2021. Bridging the Gender and Digital Divide in Post COVID-19 Pakistan: Empowering Women through ICT. Lahore: Centre for Public Policy and Governance, FC College (A Chartered University). • Haider Waseem Anwar and Saba Shahid. December 2021. Hospital Waste Management and Environmental Disaster Risk: A Case Study of Lahore. Centre for Public Policy and Governance, FC College (A Chartered University).
	<p>Dr. Tanvir Ahmed Professor, Department of Economics, Project title: Crop Waste Management And Sustainable Agriculture, Thematic Research Grants Program – TRGP, Higher Education Commission – HEC.</p>
	<ul style="list-style-type: none"> • Dr. Sara Rizvi Jafree, Chairperson Department of Sociology completed research projects on Identifying the Social Determinants of Health for Patients with Chronic Liver Disease. • The challenges facing Shia Hazara Minority Population pertaining to Ethnicity, Health, and Social Integration.

Internal Research and Innovation Fund – IRIF, FCCU

Name of Faculty & Department	Title of Research Project Funded
Dr. Nadeem Asghar, Associate Professor, Department of Chemistry	Surface-Active Ionic Liquid as drug Carriers and Pseudo-Membrane Models: A Physico-Chemical Study
Dr. Seemal Jelani, Associate Professor Department of Chemistry	Synthesis and Characterization of Fluorescent Schiff bases for Organic Light emitting diodes.
Dr. Hassan. A. Shah (S.I), Dean of Natural Sciences	Onlinear Wave Propagation & Non-Linearnamics in Dense Degenerate Plasmas.
Dr. Imdad Hussain, Associate Professor, CPPG	Vegetable and Fruit Markets, Agriculture Supply Chains, and Food Security in Lahore

APC – (Partial Reimbursements of Research Articles Publication charges)

Name of Faculty & Department	Title of Research Publication Funded
Dr. Sidra Minhas , Assistant Professor, Department of Computer Sciences & Mr Adeem Akhtar , MS Graduate of Computer Science	Comparative Analysis of Pakistan's Urdu and English Newspaper Coverage in the context of the Establishment's Role during Regime Change Episode
Dr. Shinho Chung , Associate Professor, Department of Environmental Sciences	Effect of Aeration Intensity on Performance of Lab-Scale Quorum-Quenching Membrane Bioreactor
Mr. Safeer Khan , Lecturer, Department of Pharmacy	A case report of unexplained persistent conjugated hyerbilirubinemia with normal liver transmainases over 23 years: Remember Dubin Johnson Syndrome.

International Travel Grants Facilitated by ORIC

Name & Department	Funding Agency	Name of The Conference	Title of the Research Article
Ms. Roohia Khanam Ph.D. Scholar, KAM - SLS	Higher Education Commission - HEC	Global summit on public health and preventive medicine (GSPHPM2022), Munich/ Germany	Inflammatory and Stress response consequent to monogenic obesity in children.
Ms. Asma Basharat Lecturer, Computer Science	Higher Education Commission -HEC	4 th International Conference on Smart Sensors And Application 2022, Kuala Lumpur/ Malaysia	1. Machine Learning Techniques for Intrusion Detection In Smart Healthcare System: A Comparative Analysis 2. Security Challenges and Solutions of Internet of Things in Smart Agriculture: A Review.
Dr. Fatima Syeda Professor & Chairman, Department of English	Punjab Higher Education Commission - PHEC	NeMLA's 54 th Annual Convention. New York/ United State of America	Stories of Honor, Heroism & Martyrdom: Representation of Women in Partition Narratives.
Dr. Muhammad Imran Associate Professor, KAM School of Life Sciences	Higher Education Commission -HEC & Punjab-HEC	International Conference and Exhibition for Science (ICES 2023). Riyadh/ Saudi Arabia	Cloning, Expression, and Characterization of Helicoverpa armigera Sterol Carrier Protein -2 as Novel insecticide novel
Dr. Samina Mehnaz Chairperson, KAM School of Life Sciences	Punjab Higher Education Commission - PHEC	The 7 th Asian PGPR International Conference for Sustainable Agriculture, Putrajaya/ Malaysia	Innoculation effect of Pseudomonas spp. strains on the growth of tomato plants under controlled climate conditions.

ORIC Research Facilitation Activities at a Glance

50	25	19
Competitive Research Grant Opportunities were identified and shared with the faculty.	Projects submitted to HEC and Non-HEC organizing for Research grants.	Research Projects submitted with a total worth of Rs. 208 million to National and International Funding agencies for Funding.
06	12	05
Research Projects worth Rs. 15.6 million were completed this year.	Research Projects worth Rs. 62 million Approved	NRPU Projects were completed this Year.
16	37	16
NRPU Projects submitted to HEC.	Research Projects were reviewed by International Review Board (IRB).	Research Projects with a volume of Rs. 86 million funding secured from National and International organizations in the last 2 years
08		
NRPU Projects were approved		
40	17	09
Research Links established with other HEIs, Corporate organizations, or industries	Agreements signed for collaboration with Industry.	Civic engagement events/initiatives are arranged on issues of Public Concern.
04	04	900+
Research Publications Funded	Research Projects Funded through Internal Research and Innovation Fund - IRIF	Research articles in the Forman Research Repository

Academia-Industry-Government Linkage Portal

FCCU-ORIC is a member of the Academia-Industry-government Portal (<https://rfi.hec.gov.pk>). This portal is part of the overall Research, Innovation, and Commercialization Automation platform. the portal will also provide a unique platform to connect industrial, government, and societal professionals with the researchers, scientists, and academic fraternity of the universities across Pakistan to solve their problems. It will also provide an interactive environment for industries and government entities to offer projects, opportunities, and final-year projects to students (graduates and postgraduate level).



Mr. Haroon Samson, Senior Manager Research Development and Operations, ORIC

- **Presented his Research** Article on Student Diversity and Inclusion in Universities of Lahore in the **International Education Conference** held in FCCU.
- **Completed with Distinction a training course on Research Grants Management** by Coventry University in Collaboration with Higher Education Commission – HEC.
- **Completed the training course on Business Incubation Management** from **Aspire Pakistan**.



New Team Member

We welcome our new team member, **Ms. Ayesha Aslam**, who recently joined ORIC as Manager Innovation and Commercialization. Ayesha previously worked as Manager in Pakistan Biotechnology Information Center – PABIC where she interacted with industry for research commercialization. We welcome her to our team.

Upcoming ORIC Activities

- **National Ideas Bank – NIB City Event as ORIC as city host for Lahore.**
- **International Conference on Mitigation and Adaptation for Climate Change, Focus on Agriculture and Food Safety organized by KAM – School of Life Sciences. February 06 – 09, 2023 at FCCU, Lahore.**
- **Forman Research Review – First Research Publication of FCCU**