

OFFICE OF RESEARCH, INNOVATION & COMMERCIALIZATION

ANNUAL NEWSLETTER
Volume 6
June 2026



2025-2026 Highlights

- 36 research projects.
- Active Collaborations with both International and National Organizations.
- Signed new MOUs and agreements.
- Marking a Dynamic Year of Academic engagement, collaboration and impact.
- The ORIC Business Incubation Center hosted its first startup cohort and is currently hosting its second cohort.



ORIC FCCU continues its excellence as it maintained HEC Annual Rankings and qualified for the 'X' category for another year.

Rector's Message

It is a privilege to reflect on another successful year for ORIC, one of FCCU's leading contributors to research, innovation, and academic excellence. Through its efforts in fostering a culture of inquiry, supporting faculty research, promoting innovation, and strengthening industry-academia linkages, ORIC continues to play a vital role in advancing the University's mission. The office has further expanded opportunities for research through collaborations with national and international partners and through initiatives such as the Internal Research and Innovation Fund (IRIF). Workshops, training sessions, strategic partnerships, and Memorandums of Understanding have enhanced engagement between academia and industry while creating new avenues for growth and impact. I extend my sincere appreciation to ORIC Director Dr. Kauser Abdullah Malik, Senior Manager Haroon Samson, their dedicated team, and all our valued partners for their contributions to another productive and successful year.



Dr. Johnathan Addleton

Rector FCCU

PhD, MALD,

BSc

Ambassador (Retired)

Director's Message



Dr. Kauser Abdullah Malik^{H.I., S.I., T.I}

**Director Office of Research Innovation
and Commercialization - ORIC**

HEC Distinguished Professor
(Biotechnology)

Fellow Alexander von Humboldt
Foundation

Fellow Pakistan Academy of Sciences

Fellow Third World Academy of Sciences.

As we reflect on the achievements of 2025–26, I am proud to share that ORIC maintained its **HEC's X** ranking, reaffirming our commitment to excellence in research, innovation, and institutional growth. This milestone reflects the collective efforts of the ORIC team, faculty members, and university leadership, whose dedication continues to strengthen FCCU's research ecosystem. Throughout the year, ORIC played a key role in supporting researchers in securing and managing grants, fostering collaborations with government and industry partners, and encouraging innovation through intellectual property and commercialization initiatives. As a bridge between academia, industry, and society, ORIC remains committed to creating opportunities that translate research into meaningful impact. I extend my sincere gratitude to Dr. Jonathan S. Addleton, the ORIC Steering Committee, our stakeholders, and supporters for their continued guidance and encouragement. Their contributions have been invaluable to our success, and I look forward to building on these achievements in the years ahead.



Haroon Samson
Senior Manager
Research &
Development

The Office of Research, Innovation, and Commercialization (ORIC) continues to foster a culture of research excellence, innovation, and industry collaboration. Through ongoing initiatives, faculty and students are encouraged to engage in impactful research that addresses real-world challenges. ORIC remains committed to strengthening partnerships, enhancing research capacity, and promoting knowledge commercialization. Together, we are advancing academic excellence and contributing to sustainable national development.

FORMAN DIGITAL REPOSITORY

Forman Digital Repository currently hosts **1820** publications, freely accessible for content information.

To access the full text of a research article under the ORIC community, please email your request to oric@fccollege.edu.pk. The requested article will be sent to you upon approval.



**33 new Research articles were made part
of the Forman Digital Repository
published by faculty members of Forman
Christian College (A Chartered
University) during the year 2025–2026.**

NATIONAL & INTERNATIONAL RESEARCH PROJECTS CURRENTLY BEING FACILITATED BY ORIC FCCU

Sr	Researcher	Department	Project Title	Funding Agency	Status
1	Dr. Kauser Abdulla Malik & Dr. Samina Mehnaz	Kauser Abdulla Malik School of Sciences	Use of Biofertilizers to improve soil health, fertility and crop yield in Rice-Wheat Cropping System	International Centre for Agriculture Research in Dry Areas (ICARDA)	On-Going
2	Dr. Kauser Abdulla Malik & Dr. Muhammad Bilal Sadiq	Kauser Abdulla Malik School of Sciences	Combines Effect of osmotic, pretreatment and low temperature tray to improve the sensory and quality attributes of dehydrated seasonal fruits	Pakistan Academy of Sciences (PAS)	On-Going
3	Dr. Kauser Abdulla Malik	Kauser Abdulla Malik School of Sciences	Exploring the metagenome of Hudiera drain for potential bioremediation and to determine antibiotic resistant genes along with multidrug-resistant pathogenic bacteria	Pakistan Academy of Sciences (PAS)	On-Going
4	Dr. Hamid Latif	Physics	Fabrication of a novel carbon nano-material based Perovskite Solar Cells and its stability enhancement by self-Assembled Monolayers	National Research Program for Universities-HEC	On-Going
5	Dr. Hamid Latif	Physics	Energy Storing, Lighter and Stronger Textile based on $\text{Li}_{1.2}\text{Mn}_{0.54}\text{Ni}_{0.13}\text{Co}_{0.13}\text{O}_2/\text{C}/\text{CAG}$ Coated Yarn (Cathode) and rGO/Unzipped MWCNTs Yarn (Anode)	TUBITAK-PSF, 2020, Pakistan Science Foundation (PSF)	On-Going
6	Dr. Muhammad Imran	Kauser Abdulla Malik School of Sciences	Isolation, Identification and Characterization of Novel Microbial S-Triazine and dicamba degrading proteins	National Research Program for Universities-HEC	On-Going
7	Dr. Muhammad Irfan	Kauser Abdulla Malik School of Sciences	Enhancement of Omega-3 Fatty Acids in Maize	National Research Program for Universities-HEC	Completed
8	Dr. Syed Farhat Ali	Kauser Abdulla Malik School of Sciences	Production enhancement and PCR application of an archaeal DNA polymerase – an important diagnostic enzyme	National Research Program for Universities-HEC	Completed
9	Dr. Shaiza Ilyas	Environmental Sciences	Development of Nanofiltration (NF) membranes with surface-enhanced antifouling properties for "Development of Nanofiltration (NF) membranes with surface-enhanced antifouling properties for water application"	National Research Program for Universities-HEC	Completed
10	Dr. Sara Rizvi Jafree	Sociology	Evidence-based Intervention to Improve Social Policy for Maternal and Child Health Using a Pre-Post Test Design	National Research Program for Universities-HEC	Completed

11	Dr. Shakila Bashir	Statistics	A new Family of Distributions to estimate the survivorship functions with an application to the survival times of chronic kidney disease patients	National Research Program for Universities-HEC	On-Going
12	Dr. Firasat Jabeen	Mass Communication	National Policies and Medica Development	National Research Program for Universities-HEC	Completed
13	Dr. Kauser Abdulla Malik	Kauser Abdulla Malik School of Sciences	Microbiome profiling of Cotton Plant under cotton Lead Curl	Pakistan Academy of Sciences Research Grant - PAS	Completed
14	Dr. Kauser Abdulla Malik	Kauser Abdulla Malik School of Sciences	Exploring the Metagenome of Hudiara Drain for the Potential of Bioremeditaion	Pakistan Academy of Sciences Research Grant - PAS	On-Going
15	Dr. Muhammad Irfan	Kauser Abdulla Malik School of Sciences	Development of climate-smart cotton by editing Arginase (GhArg) genes using genome editing (CRISPR/Cas) tools	LocalChallenge Fund (LCF) - Higher Education Commission (HEC)	Completed
16	Dr. Aftab Bashir	Kauser Abdulla Malik School of Sciences	CRISPR-CAS mediated targeted mutagenesis of wheat TCP gene family for developing climate smart non-transgenic wheat ... CS0927	Agricultural Linkages Program - PARC	On-Going
17	Dr. Humna Ahsan	Economics	Empowering Girls, Engaging Boy; Reducing Gender-Based violence in Pakistan Through School-Level Interventions	Abdul Latif Jameel Poverty Action Lab	On-Going
18	Ms. Maryam Khan	School of Management	Feminisim, Women Empowerment and Participation in Economic Activity	FAME – South Asian Women Development Forum	On-Going
19	Ms. Zaneera Azam	Religious Studies	Determinants of Political Participation among Pakistani Youth: Comparative Study of Madrasa and University Students	Peace and Education Foundation (PEF) & National Endowment for Democracy (NED)	On-Going
20	Dr. Kauser Abdulla Malik	Kauser Abdulla Malik School of Sciences	Lignocellulolytic Fungal Enzymesas Biocatalysts for Sustainable Bioprocessing of Agri-Residues	Pakistan Academy of Sciences	On-Going
21	Dr. Ashar Johnson Khokhar	Education	Learning to Live: A Community Health Education Study on Non-Communicable Disease Awareness Among Housewives and Working Women in Low-Income Urban Communities	Spencer Foundation	On-Going
22	Dr. Kauser Abdulla Malik	Kauser Abdulla Malik School of Sciences	Biological Solubilization of Zinc from Industrial Zinc Ash using effective Microbial Stains	Engro Fertilizers	On-Going
23	Dr. Muhammad Irfan	Kauser Abdulla Malik School of Sciences	Development and Field trial of Microbial Syncom against CLCuv	Guard Group	On-Going

RESEARCH PROJECTS FUNDED BY INTERNAL RESEARCH AND INNOVATION FUND (IRIF) FCCU

In the year 2025–2026, the Office of Research, Innovation and Commercialization (ORIC) provided funding of PKR **3,650,000/-** for 13 Internal Research and Innovation Fund (IRIF) projects to encourage and foster a culture of research and innovation at Forman Christian College (A Chartered University).

Sr	Researcher	Department	Project Title	Amount	Status
1	Dr. Khurram Muaz, Assistant Professor	Biological Sciences	Encapsulation of Lactobacillus acidophillus using alginate and modified potato starch and its food application	300,000	On-Going
2	Dr. Adnan Arshad, Assistant Professor	KAM-SLS	Plasma Delivered Epigenetic Signatures as Novel Liquid Biopsy Biomarkers for Early Glioblastma Diagnosis and Monitoring	300,000	On-Going
3	Dr. Hafiz Muhammad Mazhar Asjad, Associate Professor	Pharmacy	Anxiolytic and Sedative Efficacy of Acacia Modesta Wall Lead Extract: A preclinical Study	300,000	On-Going
4	Dr. Ambreen Khursheed, Assistant Professor	School of Management	Tech Intelligence in Woman Lead Startups: Pakistan's Rural vs Urban Comparions using Neural Networks & fuzzy Logic	300,000	On-Going
5	Prof. Dr. Hassan Amir Shah, Dean	Natural Sciences	Nonlinear Wave Propagation & Non Linear Dynamics in Dense Degenerate Plasmas.	200,000	On-Going
6	Dr. Sikandar Hayat, Professor	Centre for public policy and governance	Research Essay Competition "Data and its role in social development"	300,000	On-Going
7	Dr. Sara Rizvi Jafree, Associate Professor	Sociology	Research on Child Protection in Pakistan: Closing Policy Gaps in Infrastructure, Implementation, and Institutional Will. This would be written in a Book Form	150,000	Completed
8	Dr. Mariam Rao, Assistant Professor	School of Management	AI-Enabled Green Fintech and Renewable Energy Efficiency in Lahore Industrial Corridor: A Threshold Regression Analysis of Financial Inclusion and Governance Quality	300,000	On-Going

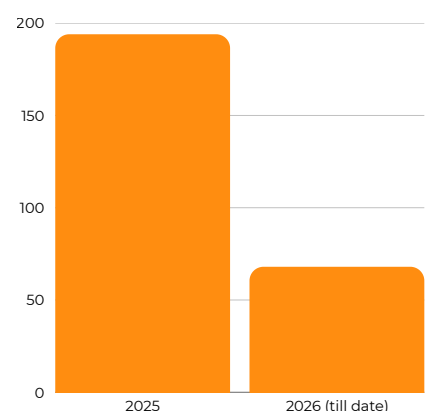
9	Dr. Ashar J. Khokhar, Professor/ Chairperson	Education	HER HEALTH, HER POWER: A Health & Lifestyle Awareness Initiative for Working Women in Low- Socioeconomic Communities	300,000	On-Going
10	Dr. Rabia Chaudhary, Assistant Professor	Centre for Public Policy and Governance	Beyond Climate Migration (Im)Mobility, Adaptation, and Flooding in Per-Urban Lahore	300,000	On-Going
11	Dr. Sadia Zaheer, Chairperson and Professor	Physics	Predictive Modelling of Plasma Perturbations and Spacecraft Charging by using ML/DL: An integrated Theoretical/Observational approach.	300,000	On-Going
12	Ms. Rimesha Farooq, Lecturer	Education	Perceived Organizational Support and Psychological Distress among Public and Private University Service Staff: The Mediating Role of Burnout	300,000	On-Going
13	Dr. Muhammad Arslan, Research Professor	KAM-SLS	Analysis of Growth Hormone Dynamics in Severely Obese Children and Adolescents using Multi-Biomarkers	300,000	On-Going

ORIC - INSTITUTIONAL REVIEW BOARD

The Institutional Review Board (IRB) at FCCU, under ORIC, reviewed a total of **262** research proposals during the period 2025–2026:

- **194** proposals in 2025
- **68** proposals in 2026 (till date)

Led by **Dr. Sharoon Hanook** (Convener) and Mr. **Haroon Samson** (Secretary), the IRB ensures compliance with ethical standards in human and animal research. Guided by the Belmont Report and federal regulations, the board plays a vital role in safeguarding participants and strengthening FCCU's research integrity and culture.



LIST OF ARTICLE PROCESSING CHARGES FUNDED BY ORIC DURING YEAR 2025-2026

In the year 2025–2026, ORIC funded **PKR 185,000** in Article Processing Charges (APCs) for two articles published by the faculty members of Forman Christian College (A Chartered University).

Sr	Author	Journal Name	Title of Article	Amount funded by ORIC
1	Dr. Samina Mehnaz, <i>Professor, KAM-SLS</i>	Springer Nature - BMS Genomics	Comparative genome analysis of Pseudomonas chlororaphis strains reveals biosynthetic diversity underlying plant growth promotion and soil health improvement	PKR 100,000 /-
2	Dr. Syed Farhat Ali <i>Assistant Professor, KAM-SLS</i>	PLoS One	In silico structural analysis of Oryza sativa RAD51 reveals key interactions for nucleoprotein filament assembly and regulation	PKR 85,000 /-

INTELLECTUAL PROPERTY AWARENESS

In the year 2025-2026, ORIC has focused on creating awareness among FCCU researchers regarding Intellectual property rights and the importance of acquiring them. For this purpose Director ORIC, Dr. Kauser Abdulla Malik conducted various one on one meetings with all faculties of Forman Christian College (A Chartered University).

Through ORIC FCCU, **02 patent** applications have been filed, with **05 trademark** applications and **41 copyrights** currently in progress.

International Conferences



ORIC facilitated Kauser Abdulla Malik School of Life Sciences in organizing the International Conference on Life Sciences for Resilient Systems and Sustainable Futures (LS-RSF 2026), from 21–23 April 2026. This was in collaboration with Pakistan Academy of Sciences, ICARDA, USDA and CropLife Pakistan. This conference provided a global platform to foster meaningful dialogue, promote interdisciplinary research, and showcase innovative scientific contributions. It brought together about 45 national and 12 international experts from across the globe to exchange knowledge, explore emerging trends, and develop actionable strategies for sustainable development.

ACADEMIC & INDUSTRIAL LINKAGES



ORIC collaborated with **CropLife Pakistan** in organizing the National Dialogue on Biotechnology at Pakistan Academy of Sciences, Islamabad on 7th April 2026. This dialogue brought together government leaders, scientists, industry experts, and policy stakeholders to discuss the role of biotechnology in addressing Pakistan's climate and food security challenges.

Research collaboration between Guard Group and Forman Christian College University



Guard Group has signed an MoU with FCCU to fund a PhD Research Associate for the Development of Microbial Consortia and has further established a PKR 10 million endowment fund to support research and innovation.

FALLING WALLS 2026 at Forman Christian College University

**FALLING WALLS LAB
IS COMING TO
LAHORE,
PAKISTAN**

Which wall will your research break? Pitch your innovative idea in just 3 minutes, showcasing a breakthrough that creates a positive impact on science and society.

FALLING WALLS LAB

Center for Public Policy and Governance

Forman Christian College University

University of Management Sciences

WHO
Students, entrepreneurs, early-career researchers, & academics of all disciplines

WHAT
Convince a jury of your idea - in 3 minutes!

WHY
Join the growing Falling Walls community of emerging innovators & win your spot in the global Falling Walls Lab finale!

WHERE
Forman Christian College (a Chartered University), Lahore

QUESTIONS
contact@fallingwalls.com

APPLY HERE
fallingwalls.com/lab/apply
Deadline: 9 June 2026

FCCU remains committed to fostering impactful research and promoting its commercialization through global initiatives. Hosting Falling Walls Lab Lahore 2026 provides a platform for researchers across Pakistan to showcase breakthrough ideas and connect with the international innovation ecosystem.

Forman Christian College University has joined as a **Vision Partner** of the **Arfa Karim Fellowship Program**.

Forman Christian College University has signed an **MoU** with **Engro Fertilizers** for collaborative research on the Biological Solubilization of Zinc from Industrial Zinc Ash using effective Microbial Stains.



MOU between **Youth Development Foundation (YDF)** and Forman Christian College (A Chartered University).



MOU between the **Christian Businessmen Fellowship Pakistan (CBFP)** and Forman Christian College (A Chartered University).

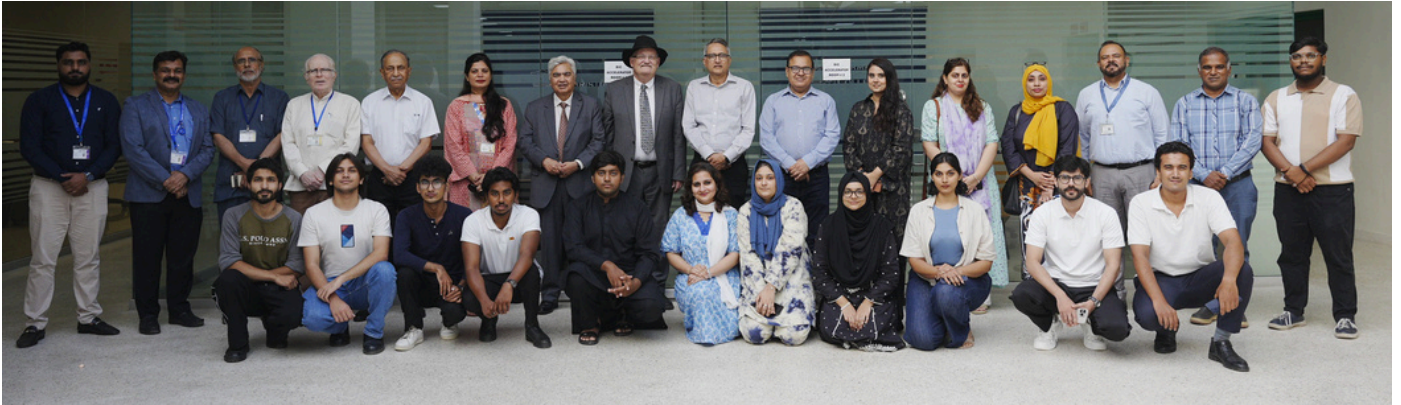


MOU between **Bayan Innovation Group** and Forman Christian College (A Chartered University) for Exploring Partnership Opportunities to Advance Grassroots Entrepreneurship.



Punjab Agriculture, Food and Drug Authority (PAFDA) and Forman Christian College (A Chartered University) join hands for Scientific Innovation and Research Excellence.

ORIC ANNUAL STEERING COMMITTEE MEETING



The 4th Annual Steering Committee Meeting of ORIC was held on 28th August 2025 under the chairmanship of Dr. Jonathan S. Addleton, Rector FCCU, with Dr. Kauser Malik, Director ORIC, and distinguished representatives from academia and industry. The meeting reviewed ORIC's achievements in research promotion, industry engagement, entrepreneurship development, and knowledge transfer. Committee members appreciated ORIC's progress and provided strategic recommendations to strengthen industry-academia collaboration, support intellectual property management, enhance innovation and entrepreneurship capacity building, and improve startup funding linkages. Members also emphasized the importance of interdisciplinary collaboration across academic departments. Following the meeting, the committee visited the Business Incubation Center (BIC), where incubated startups presented their innovative ventures. The members praised the quality of startup ideas and acknowledged ORIC's role in fostering entrepreneurship through mentorship and institutional support.

BIC 1st Annual Steering Committee Meeting



The 1st Steering Committee Meeting of the Business Incubation Center (BIC), ORIC-FCCU, was held under the supervision of Dr. Kauser Abdulla Malik and chaired by Dr. Jonathan S. Addleton. The meeting brought together industry leaders and university representatives to discuss entrepreneurship and innovation initiatives. The BIC team presented its Five-Year Strategic Plan and Business Incubation Policy, which were reviewed and approved by the Steering Committee. Members provided valuable feedback to strengthen the Center's future direction. The meeting marked a significant step in institutionalizing entrepreneurship support and advancing FCCU's innovation ecosystem.

ORIC - Business Incubation Center

Cohort 1



PRERA (The PR Era) helps startups and businesses enhance their visibility through strategic, newsworthy content and public relations solutions. The platform is currently focused on customer acquisition and strengthening brand communication.



The **Jewelography** is an e-commerce platform that connects women artisans from rural Pakistan with global customers by selling authentic cultural jewelry. It empowers female entrepreneurs, supports sustainable livelihoods, and helps preserve cultural heritage through digital market access.



Naya Khawab provides mental health support through Green Zone Therapy, integrating clinical care with nature-based wellness for holistic healing. Backed by Canadian angel investors and partnerships with NGOs and educational institutions, it aims to expand access to mental resilience and well-being.



Genesis Horizon turns a regular water bottle into a smart health-monitoring device that tracks five vital signs using built-in thumb sensors. It leverages AI-powered insights to help users monitor hydration and overall wellness, enabling informed lifestyle and health decisions.



Digital Parchi is a digital bookkeeping solution that helps small vendors replace manual record-keeping with an easy transaction management system. It automates accounting processes, reduces errors, and improves financial organization to support business growth.



Qanoon-e-Nisa is an AI-powered legal platform that helps women in Pakistan access legal support more easily. It provides instant legal guidance through AI and connects users with qualified female lawyers. The platform has been recognized by She Accelerate and aims to make legal assistance accessible with just a click.

In **Cohort 2**, we proudly selected 8 outstanding teams:

- **Onebuck AI**
- **Marbiwaz**
- **Nexus**
- **Cutylitics AI**
- **Beyond Landfill**
- **Eldera Link**
- **Lapware**
- **Sahary**

each bringing unique ideas and innovation across diverse problem areas. This session marks another step forward in building impactful, solution-driven startups with strong potential for real-world change.

Training Sessions and Workshops organized by ORIC-BIC



The Business Incubation Center (BIC) at ORIC, Forman Christian College hosted an orientation session for **PAIDAR** Program startups.



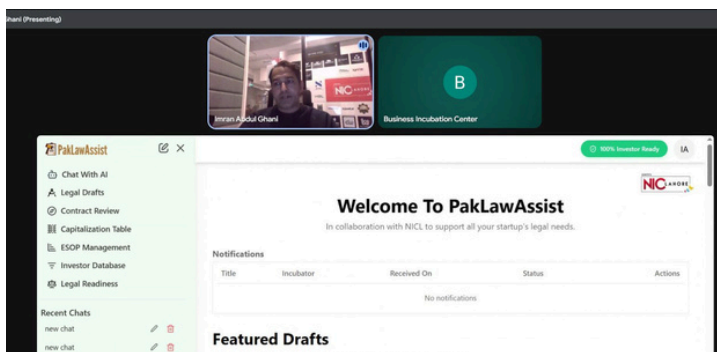
The second training session for Cohort 2 focused on **"Understanding the Problem and Problem Analysis."**



The Business Incubation Center (BIC) at Forman Christian College organized a mentoring session on the **legal aspects of entrepreneurship** for startup teams.



The Business Incubation Center (ORIC) at FCCU welcomed **Shahid Rehmat** and **Amber Bajwa** for a collaborative meeting.



Mr. Imran Abdul Ghani, presented his solution "**Pak Law Assist**", an AI Based legal help platform for startups, to Business Incubation Center and possible collaboration.



Imran Abdul Ghani presented Pak Law Assist, an AI-based legal assistance platform for startups, to FCCU's Business Incubation Center and explored potential collaboration opportunities.



The session, facilitated by **Saima Mujtaba Rana** of LUMS, focused on practical business model development and startup planning.



FCCU's Business Incubation Center (BIC) conducted a session on **"Knowing Your Customers and Developing Customer Personas"** for Cohort 1 startups.



FCCU's Business Incubation Center (BIC) organized a training session on **"Defining the Value Proposition for Startups"** for Cohort 1 participants.



FCCU's Business Incubation Center (BIC) conducted a hands-on training session on **"Understanding and Analyzing the Problem"** for Cohort 1 startups.



FCCU's Business Incubation Center (BIC) organized a mentoring session on **"Understanding Market Dynamics & Go-to-Market Strategies"** for startups.



Dr. Romel John conducted a mentoring session on the Business Model Canvas for Cohort 2 startups at FCCU.



The School of Management and ORIC Business Incubation Center at FCCU jointly organized a training workshop for **women entrepreneurs** from the Lahore Women Chamber of Commerce and Industry during the Entrepreneurial Fiesta.

BIC Advisory Board/Startup Review Committee Meetings



The Advisory Board/Startup Review Committee held a series of consultative meetings to evaluate and provide input on the Business Incubation Policy and the Strategic Plan of the Business Incubation Center. The committee's constructive feedback and expert recommendations significantly contributed to the refinement and successful finalization of these key institutional documents.

ORIC Partnership for Innovation



We are proud to announce that the Global Innovation Institute (GII) has authorized ORIC-FCCU as an official training partner for innovation and entrepreneurship education. Mr. Haroon Samson, Senior Manager, ORIC, and Mr. Syed Muhammad Waqar Azeem, Manager, Business Incubation Center, are the only authorized GII trainers with the mandate to deliver GII's globally recognized innovation certification programs, which are

- Certified Innovation Professional
- Certified Design Thinking Professional
- Certified Innovation Strategist
- Certified Chief Innovation Officer
- Authorized Innovation Assessor
- Certified Innovation Associate
- Authorized Innovation Growth Assessor
- Certified Future Shaping Professional

ORIC Team



**Dr. Kauser Abdulla
Malik**
Director ORIC



Haroon John Samson
Senior Manager
Research and
Development



**Syed Muhammad
Waqar Azeem**
Manager BIC



Ayesha Aslam
Manager Innovation
and Commercialization



Daniyal Riaz
ORIC Officer



Steven Javed
Administrative
Assistant



Suleman Shakeel
Student Worker (WSP)



Haroon Asif
Student Worker (WSP)

Connect with us



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