



Capital University of Science and Technology

Islamabad Expressway, Kahuta Road, Zone-V, Islamabad

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13th Meeting of the ORIC Steering Committee

Minutes of the Meeting held on June 3rd, 2025

- The 13th meeting of the ORIC Steering Committee was held in hybrid mode on Tuesday, June 3rd, 2025, at 11:00 am in the Workshop Room, B-Block, CUST.
- Dr. Muhammad Mansoor Ahmed, Chairperson of the ORIC Steering Committee and Vice Chancellor CUST, presided over the meeting.
- The following members were present in the meeting physically:

• Dr. Nayyer Masood	Dean, ORIC	Member
• Dr. Muzaffar Abbas	Dean, Faculty of Pharmacy	Member
• Dr. Majid Ali	HOD, CE	Member
• Dr. Sahar Fazal	Dean, FHLS	By Invitation
• Dr. Muhammad Furqan	Assistant Professor, SE	By Invitation
• Mr. Temour Abbas	Associate Lecturer, SE	By Invitation
• Ms. Anum Naseem	Lecturer, SE	By Invitation
• Ms. Sumaira Ambreen	Assistant Manager, ORIC	Secretary

- The following members attended the meeting online:
 - Mr. Tahir Mahmood Ch. CEO, Falcon Engineering Member
- The following could not attend the meeting due to other prior commitments:
 - Dr. Amir Qayyum Professor, CS Member
 - Mr. Abdul Qadeer Director, Berkeley Member
 - Mr. Raise Naqvi SEO, Electronic Interconnect Engineering (EIE) Member
 - Dr. Nadeem Anjum HOD, SE Member
 - Mr. Jaffar Safdar CEO, AQL Tech Solutions Member
 - Mr. Farrukh Mehmood CEO, 11 Values Member
 - Mr. Mahmood A. Warraich Director, Pre-Cast Products Member
 - Dr. Sohail Ahmed Jan Associate Professor, BI&BS Member
 - Mr. Bilal Farooq Founder, Consulting 360 Member
 - Dr. Ahsan M. Ahmed Assistant Professor, MS Member
- The chairperson welcomed all the members of the ORIC Steering Committee to its 13th meeting. The chairperson then invited Dr. Nayyer Masood, Dean ORIC, to commence the presentation.



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- Subsequently, the Committee deliberated upon the following agenda items at length and took the following decisions:

Item #1 Confirmation of the Previous Meeting Minutes

1.1 It was informed that no other observation on the decisions taken in 12th meeting of the ORIC- Steering Committee held on April 29th, 2025, already circulated amongst the members of the Committee was received. Therefore, the ORIC-Steering Committee confirmed the minutes of its 12th meeting.

Item#2 FYPs of Software Engineering Department with an IP Perspective

2.1 During the meeting the Dean ORIC invited Ms. Anum Naseem, Lecturer, Software Engineering Department, to present an overview of her proposed project, "**HealMyPet Companion**" to the committee. Ms. Anum Naseem outlined the key features and benefits of the project, highlighting its appointment booking system for effortless scheduling of vet visits and grooming to ensure timely pet care, a comprehensive medical records module for easy tracking of pet health history, vaccinations, and treatments, and a community channel designed to connect pet owners with veterinarians and fellow pet enthusiasts, facilitating the sharing of advice and instant assistance. The committee acknowledged the innovative approach and potential impact of the project in enhancing pet healthcare management.

2.2 Dean ORIC requested Mr. Temour Abbas, Associate Lecturer, Software Engineering Department, to present an overview of his proposed project, "**BuildSmart**" to the committee. Mr. Abbas detailed the project's key features and benefits which include access to pre-made 2D and 3D architectural designs, affordable design solutions, and extensive customization options to meet diverse client needs. He further emphasized that BuildSmart aims to minimize costly changes post-construction by providing clear and adaptable design plans while also streamlining communication between stakeholders throughout the architectural process. The committee recognized the project's potential to enhance efficiency and cost-effectiveness within the architectural design industry.

2.3 Dean ORIC then requested Dr. Muhammad Furqan, Assistant Professor in the Software Engineering Department, to present an overview of his proposed project, "**Alumni Connect**" to the committee. Dr. Furqan explained that the project consists of four integrated modules:

1. Mobile Application featuring user profiles, authentication, social interactions, connection requests, secure chatting, and announcements.



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2. Location-Based Networking module enabling geolocation discovery and display.
3. Support Feature providing a financial support portal and history tracking.
4. Content & Knowledge Sharing module offering a job board, career opportunities, and announcement notifications.

The committee appreciated the comprehensive design aimed at fostering engagement, networking, and support within the alumni community. The chair asked for a demo of this project.

Item # 3 Research Groups of the Faculty of Health & Life Sciences (FHLS)

3.1 Dr. Sahar Fazal, Dean of FHLS, presented a comprehensive overview of the department's active research groups, emphasizing the faculty members involved, their research interests, ongoing projects, and student engagement. The following research groups were detailed:

- The **Integrative Biosciences** group, led by Prof. Dr. Sahar Fazal and Ms. Shah Gul, focuses on drug resistance, gut microbiota associations, energy-producing microbes, optimization and cultivation of edible mushrooms, vector-borne diseases, and bioinformatics and computational biology.
- The **Cancer Cytogenetics** group, under Prof. Dr. Shaukat Iqbal Malik, specializes in characterization of chromosomal rearrangements, genomic alterations in cancer, cell models of protein structure, gene expression analysis in cancers, molecular docking, and cytogenetic techniques for determining carcinogenicity.
- The **Genetic and Molecular Epidemiology** group, headed by Dr. S. Marriam Bakhtiar and Mr. Irfan Zafar, is engaged in genetics and genomics, bioinformatics, molecular diagnostics of inherited diseases, and AI-based prediction models for disease prognosis.
- The **Green Biotechnology** group, comprising Dr. Erum Dilshad, Dr. Sohail Ahmad Jan, Dr. Sania Riaz, and Dr. M. Asad Anwar, conducts research in genetic engineering, plant tissue culturing, plant transformation, phytochemistry, bioassays, and nanobiotechnology. The Industrial and Environmental Microbiology group, led by Dr. Arshia Amin Butt, focuses on bacterial taxonomy, biodegradation and bioremediation, clinical and medical biofilms, probiotics, and postbiotics.
- The **Food Engineering and Biotechnology** group, under Dr. Rizwan-Ur-



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Rehman, investigates food processing and preservation, bioavailability, bioaccessibility, and biomagnification of nutrients, isolation and identification of plant therapeutics, microbial genomics, proteomics and transcriptomics, protein and lipid profile analysis, food valorization, sensory and textural profile analysis, and bioactive compounds for food product development and function.

- Lastly, the **Plant Biochemistry & Molecular Biology** group, led by Dr. Sami Ullah Jan, specializes in genome-wide analysis, phylogenetic analysis, phytoremediation, plant-environment interactions, and precision agriculture.

The Dean highlighted the dynamic research environment fostered by these groups and encouraged continued collaboration and student participation. The committee and chairperson commended the Faculty of Health & Life Sciences (FHLS) dedication to advancing cutting-edge research and fostering student engagement in high-impact projects. The chair suggested that the research group should comprise multiple members and should be generalized covering multiple interests of faculty members. The chair also asked Dean FHLS to propose a research lab in the department that, on one side, meets the academic requirements of the programs in the department, and on the other hand could be used for commercial purposes.

Item # 4 **ORIC Activities Brief (March – April, 2025)**

4.1 Dean ORIC briefed the house about ORIC Activities from the efforts made in the Industrial Outreach and Linkages domain including the following:

- **University Industrial Outreach Committee (UIOC):** The Dean ORIC updated the committee on the Industrial Outreach activities conducted between March and April 2025, highlighting several key engagements aimed at fostering collaboration and advancing research initiatives. These included attendance at the NIC Annual Aftaar Dinner and the organization of a talk session for Psychology Department students on "AI and the Future of Mental Healthcare: Challenges and Opportunities," delivered by the Chairman & CEO of Safe Care Trust International. Further a meeting on April 28, 2025, between representatives of the Computer Science and Software Engineering Departments and a representative from 3G Technologies, an IT company. The outreach efforts also involved contacting several companies, including the Ministry of Petroleum, Telecom Consultancy, and the Oil and Gas Development Company, to explore collaborative possibilities.
- The committee was informed that six Final Year Projects (FYPs) have been shortlisted for funding and placement in the **CUST Incubation Center (CIC)**.



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Preparations are underway for the development of the website layout for Takhleeq@CUST to enhance project visibility and engagement. Additionally, the launch of the COHORT 5 FYPs Funding Program was announced, aimed at supporting innovative student projects through structured funding and incubation support.

- The committee was updated on several ongoing activities, including the commercial testing of CE samples, which were forwarded to the CE department with subsequent reports shared with the respective companies. The 7th meeting of the **Institutional Ethical Review Board (IERB)** was conducted on March 21, 2025. Regarding the Samsung Innovation Campus (SIC), certificates for the AI course were issued following successful completion. The Dean ORIC delivered a talk on “AI in Education” at a seminar organized by Allied School Systems on April 16, 2025. Additionally, the committee was informed about the patent filing for Dr. Arshia’s LCF project, marking progress in intellectual property protection.
- DEAN ORIC informed the committee about the **Capacity Building Inventor Assistance Program (IAP)** organized by the World Intellectual Property Organization (WIPO) in collaboration with the Intellectual Property Organization (IPO) Pakistan, held at NUST Islamabad. Coordination efforts for research and development were underway with the Heads of Departments of Computer Science, Software Engineering, and Electrical and Computer Engineering regarding the upcoming NUMLogic 2025 event. Preparations were also in progress for a half-day seminar focused on the NRPU project led by Dr. Majid Ali.

Respecting time constraints, the meeting was adjourned with sincere appreciation expressed to all participants for their valuable contributions and active engagement.

Prepared by:

Sumaira Ambreen

Secretary ORIC Steering Committee

Endorsed by:

Dr. Nayyer Masood
Dean ORIC

Approved by:

Dr. Muhammad Mansoor Ahmed

Vice Chancellor CUST

Chairperson ORIC Steering Committee