

Message from Director Office of Research, Innovation and Commercialization (ORIC)

At FAST-NUCES, the Office of Research, Innovation & Commercialization (ORIC) drives our commitment to research excellence, innovation, and impactful change. In a swiftly advancing world, we believe in the transformative power of research-driven solutions, industry collaborations, and knowledge that addresses real-world challenges. ORIC is more than an office – it is a dynamic ecosystem that inspires faculty, students, and industry partners to dream big, search the unknown, and turn creative ideas into existence.

Our focus is threefold: to increase research quality, encourage a culture of innovation, and create pathways for commercialization. Over the years, ORIC has cultivated a thriving environment of interdisciplinary collaboration, bringing together diverse minds to tackle intricate challenges and develop progress across fields of science, technology, engineering, management, social sciences, and humanities.

What sets ORIC apart is its ability to link academia and industry. We take pride in our collaborations with leading industries, global institutions, and research organizations, enabling a continuous exchange of knowledge, resources, and opportunities. Through these collaborations, we equip our researchers and students with the tools and mentorship needed to thrive in a competitive, innovation-driven world.

ORIC's impact extends beyond research and innovation. It's about building a legacy of excellence, where ideas are encouraged to their fullest potential. It's about empowering the next generation of thinkers, creators, and leaders who will shape the future of Pakistan and beyond. It's about

adopting a culture where novelty is honoured, tasks are supported, and collaboration is at the heart of everything we do.

As we look ahead, ORIC remains persistent in its dedication to steering innovation, research excellence, and societal impact. We invite you to join us on this stimulating journey – a journey where ideas come to life, innovation knows no bounds, and the future is shaped by passionate individuals. Together, let's unlock the vast potential within our community and pave the way for a brighter, more innovative future.

Dr Muhammad Asif Naeem Director

Office of Research, Innovation and Commercialization

Overview

The University, true to the innovative spirit of its founders, is alive to the cause of research and development. The breadth, depth and assortment of research activities in the university have contributed to the national socio - economic stream through technological pursuits.

ORIC is established to channelize research and innovation led initiatives. It offers services connected to research and development, innovation, commercialization, collaboration, capacity building and facilitates researchers in the processing of project/research grants.

Vision

The vision of ORIC is to promote research and innovation in the local context.

Mission

To take Pakistan forward by continuously improving quality of

research, building partnerships with the industry, and being able to capitalize on outcomes that result from research and development activities.

Functions

- Encourage pragmatic research in the context of Pakistan's socio-economic needs
- Identify and inform the faculty members about research opportunities
- Facilitate joint research ventures and academic collaborations
- Promote publication of research work being conducted in the University
- Assist faculty in acquiring funds from international and national funding agencies
- Promote entrepreneurship, technology - transfer and commercialization activities that support both local and national economies
- Commercialize research in collaboration with industry
- Arrange awareness seminars, symposia and workshops for the benefit of faculty and students
- Introducing a Research Excellence Award
- Processing and grading of Research Publications for reward

Services

- Educate faculty about university research policy and process grant requests
- Develop, maintain, and communicate pre and post-award administrative procedures for externally sponsored projects
- Support faculty regarding contracts, progress reports, and other sponsor grants actions
- Connect faculty and students with prospective industrial partners
- Assist students, faculty and alumnus in pursuit of

technological or social innovations

- Mentor the promising start-ups during the initial period when they are most susceptible
- Assist in patent filing and licensing
- Keep web and social media presence to share the latest research, scholarship, and entrepreneurial opportunities



ORIC Team

Name	Designation	Campus/Location
Dr. Muhammad Asif Naeem	Director	NUCES-HQ
Mr. Muhammad Aatif Saif Khan	Manager Research Management	NUCES-HQ
Mr. Rana Muhammad Ayaz Yousaf	Manager Innovation and Commercialization	NUCES-HQ
Sayeda Sadia Batool	Grants Management Officer	NUCES-HQ
Ms. Maryam Mehtab	Research Officer	NUCES-HQ
Mr. Bashir Muhammad	Coordinator	Lahore
Ms. Zain Ullah Khattak	Coordinator	Islamabad
Ms. Nooria Fatima	Coordinator	Chiniot-Faisalabad
Ms. Tooba	Coordinator	Karachi
Mr. Riaz Nawab	Coordinator	Peshawar

Accomplishments

Noteworthy achievements of our department include:

- ORIC is duly recognized by HEC.
- To achieve the HEC's accreditation and ranking, policies were framed to streamline processes for the smooth execution of the Extramural Funding, Research Rewards, Research Ethics, Intramural Research Funding for the fresh and experienced researchers (Faculty Research Support Grant), International and Inland Travel Grants, In-kind Research Support, Technical Entrepreneurship for Faculty, FYPs, Plagiarism, etc. to improve pedestal of research and development. These policies collectively contributed to improving the research and development landscape, promoting transparency, accountability, and excellence in all aspects of research activities within the university.

- Identified avenues of research fund raising, mobilized faculty, partnered with the business community and industry for research commercialization.
- Incessantly educated faculty about emerging research avenues that resulted in over 250 research proposals submissions for external research funding in the period 2018 - 2025.
- Competitive research grants over Rs. 500 million were secured in the period 2018 - 2025.
- Designed and launched the Impact Factor Publication Reward (IFPR) module, an innovative digital platform that automates and simplifies the process of rewarding faculty for high-impact research publications. The module streamlined submission and verification by integrating with journal databases and utilized multiple metrics for transparent reward calculations, including Eigenfactor Score (EGF),

- Article Influence Score (AIF), and Impact Factor (IF) from Web of Science (WoS), as well as H-index (HI), Citation Distribution (CD2), and SNIP (Source Normalized Impact per Paper) from SCImago Journal Rank (SJR) and SNIP CWTD. Featuring a user-friendly interface, real-time tracking, and notifications, the system eliminates manual paperwork, reduces administrative workload, enhances accessibility, and ensures transparency through seamless digital documentation and reporting.
- To incentivize and acknowledge outstanding research publications, faculty received research rewards exceeding Rs. 61 million from 2021 -2025. This program has demonstrably led to an increase in the number of high-quality faculty impact factor publications during the reported period.
- Our campuses hosted a wide

range of training workshops, conferences, seminars, and symposiums. Faculty and staff members actively participated in these events, along with conferences and seminars organized by other universities and industry partners. These engagements provided valuable professional development and networking opportunities, enriching the expertise of our team.

- The portfolio of ORIC extramural funding expands to have a lab affiliated with each of the four National Centers in Emerging Technologies funded by the Public Sector Development Program (PSDP): National Center of Artificial Intelligence, National Center of Big Data & Cloud Computing, National Center of Robotics & Automation, and National Center of Cyber Security. These projects have developed prototypes that are being pitched to the investors for product licensing and commercialization.
- The NUCES encourages international collaborative research. The faculty researchers have executed European Union's ERASMUS projects.
- A host of research projects with defence and commercial verticals are also being executed.
- The University announced the Research Excellence Awards 2024 to recognize exceptional research contributions by faculty, reflecting its commitment to fostering a culture of collaborative and applied research. In the inaugural cycle, **Dr. Jawwad Ahmed Shamsi** was declared the **Best Researcher** through a meticulously evolved competitive rubric. His dedication to collaborative and applied research exemplifies the spirit of excellence the award seeks to recognize, showcasing the success of the university's research-enhancing initiatives.
- National Grassroots ICT Research Initiative (NGIRI) program under Ignite aims to assist final year undergraduate students of ICT related disciplines by providing them financial assistance for developing prototypes / working models of their Final Year Projects (FYP) to increase creativity, innovation, and hands on engineering and development skills. The University has been participating in this programme and won over 200 projects from 2014-2025.
- In 2024-2025, under the ORIC umbrella, NUCES successfully organized three prestigious international conferences: the International Conference on IT and Industrial Technologies (ICIT24) at the Chiniot-Faisalabad campus, the International Conference on Emerging Trends in Smart Technologies (ICETST24) at the Karachi campus, and the 1st International Conference on AI & CALL: Reshaping Applied Linguistics (AICRAL25) at the Lahore campus. These events highlighted NUCES's commitment to fostering global collaboration, innovation, and cutting-edge research across diverse fields.
- We maintain a strong and consistent social media presence, actively sharing a wide range of national and international research project opportunities, international scholarships, and HEC rules and opportunities for our faculty and students. Through our Facebook page (<https://www.facebook.com/FASTNUORIC/>), we efficiently disseminate this information, ensuring our audience stays well-informed and connected to valuable academic and research prospects with just a click.
- Facilitate to increase academia-industry collaborations through meetings, MOUs and consultancy agreements aimed to address industry challenges. To date, (2018-2025) our institution has secured over 71.23 million rupees in consultancy projects from various organizations.
- In an effort to increase the research capabilities of faculty members, ORIC has initiated intramural funding through the Faculty Research Support Grant (FRSG) program. To date approximately Rs. 118 million has been funded across all five campuses of the university. Under the recent FRSG call (Fall 2024), the university has funded 28 projects each of worth Rs 1.5 million.
- Till now our department has signed 201 Memorandums of Understanding (MoUs) with a diverse range of national and international universities, as well as industrial organizations. These MoUs were strategically crafted to foster collaborations between academia and industry, aiming to promote knowledge exchange, joint research initiatives, and mutually beneficial partnerships. Through these collaborative efforts, we have been able to bridge the gap between theoretical knowledge and practical application, facilitating innovation and creating avenues for impactful research outcomes.
- As part of our commitment to foster an entrepreneurial culture within the university, faculty members are actively encouraged to establish research labs. To date, we have successfully commercialized 42 research labs across various campuses of NUCES. Further details regarding the projects and achievements of

these research labs can be accessed through our official ORIC website at <https://www.nu.edu.pk/Oric/OricResearchLabs>. This platform serves as a gateway for national and international organizations to connect with relevant research labs for collaborative research and development initiatives. Such collaborations ultimately prove beneficial for the university and its stakeholders

- A new Chip design centre has been established at Islamabad campus with the collaboration of GS Microelectronics US Inc. The centre, named GF-Metric, focuses primarily on Integrated Circuit (IC)

design, research, training, and fostering innovation and commercialization, leveraging the partnership with GSME.

- An Incubation Centre is operational at Peshawar campus for students. It is networked with entrepreneurial hub for mentoring the incubates. Additionally, a MOU has been signed with National Incubation Centre (NIC), Islamabad to help NUCES Students in the process of their Start-ups.
- ORIC is supporting its faculty members and researchers in establishing their technical start-ups, including providing support throughout the trademark and

patent filing processes. Notably, recently a new Start up (iParahi) has achieved success in trademark registration. Additionally, the founder is actively engaged in the process of filing a patent application for his forthcoming product.

- ORIC consistently disseminates information regarding exchange programs and international internship opportunities for students. Both students and faculty members have been actively utilizing these opportunities to enhance their academic and professional pursuits.

