
9
INDUSTRY, INNOVATION
AND INFRASTRUCTURE

GOAL 9

Industry, Innovation and Infrastructure

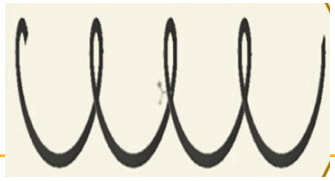
123	1548	175	02
Research Projects	Publications	Patents	Patents Licensed to Industry

Technology Licensed to Industry

In the absence of locally available quality fleshing and shaving blades, Pakistani leather manufacturers have to opt for imported ones. Under the licensing agreement, M/s SRC Lahore will now manufacture these blades locally, thus offering quality indigenous blades at a significantly reduced cost, leading to substantial savings in foreign exchange.

Impact:
- Cost-effective and locally developed
- 150x firms, an annual turnover of PKR 750 M

Industry: Shafi Reso Chemicals Pvt. Lt



Faculty Placement

In the year 2018, NUST initiated Faculty Placement Program which is the only Pakistani university to launch such an initiative, aiming to build industrial linkages to engage faculty in applied research. In the first batch, 13 faculty members from six schools of NUST were placed in four different industries for two weeks during the summer break of 2018. As a result, 27 projects were proposed out of which two projects received industrial funding. Reciprocating the trend, two industrial reps from each industry visited NUST that resulted in advancing further relationships with these industries.

Industry-Academia Linkages

At NUST, we strongly believe in knowledge transfer and open innovation to meet industrial needs. NUST has formulated an integrated, interdependent ecosystem that helps in establishing and consolidating industry-academia linkages and subsequently, in commercializing research. The parts of this eco-system are:

- Corporate Advisory Council (CAC)
- National Science & Technology Park (NSTP)
- Directorate of Research
- Intellectual Property Office (IPO)
- Technology Transfer Office (TTO)

- Professional Development Centre (PDC)
- Industrial Liaison Office (ILO)

All of the above organs play a key role in establishing collaborations with industry and bridging the gaps between industrial needs and academic research.

418 Industrial Partnerships, **7** Technologies licensed to Industry, **80+** Industrial Consultancies

29 Joint Research projects with Industry

National Center of Artificial Intelligence (NCAI)

NCAI is the latest technology initiative of the Government of Pakistan under the government's Vision 2025. The center is designed to become the leading hub of innovation, scientific research, knowledge transfer to the local economy, and training in the area of Artificial Intelligence (AI) and its closely affiliated fields. The aim is to facilitate the researchers in the field of AI; help them establish and grow the AI industry following international trends and seek solutions to the indigenous problems through AI.

Approved by the Government of Pakistan in January 2018, NCAI is designed on a consortium model where the most leading researchers in the field of AI are identified on competitive grounds and new state-of-the-art labs are established after a competitive evaluation and rigorous selection process carried out by Higher Education Commission (HEC) and Planning Commission of Pakistan.

National Center of Robotics & Automation (NCRA)

The National Center of Robotics and Automation is a consortium of 11 labs over 13 universities of Pakistan with its center headquarter at NUST College of E&ME. The center will serve as a leading technological hub within the domain of Robotics and Automation. The aim of NCRA is to manage and efficiently use the highly skilled researchers, scientists and experts of robotics and automation in order to generate resources based on innate strengths and build capacity in the fields of Robotics and Automation.

Finding Innovative & Creative Solutions for Society

FICS

NUST strongly believes in inculcating the spirit of entrepreneurship and innovation among students to tackle modern-day challenges head-on. Finding Innovative & Creative Solutions for Society (FICS) is an annual competition hosted by NUST in which students from around the country present their ideas and prototypes for funding and commercialization. The aim of this initiative is to instill a spirit of social entrepreneurship amongst students, encouraging them to convert their creative ideas into value-adding solutions and thereby benefit themselves and society. The three-stage competition spans over two months in which projects are examined by industry leaders, innovators, and investors.
Some of the objectives of FICS are given below:

- To encourage students to become valuable members of society and contribute to societal / community development by deploying technical knowledge and scientific tools.

- To allow students to think creatively and develop the latest applications and innovative technology based-solutions, hence encouraging them to work on practical utilization of knowledge.

1000+
2014-18: No. of Ideas Submitted

20+
No. of successful startups