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Inside

Education not an option but necessity: COAS

Page 6

NUST project declared global winner

Page 10

Celebrating Diversity





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EDITOR

In the year 2023, NUST embarked on a multitude of initiatives towards fostering educational equity. By harnessing the power of diverse perspectives, the university has been making significant headway as a leader in higher education, research and innovation in the region and beyond. This edition of NUSTIAN draws upon one of our core values – Diversity, Equity and Inclusion, which underscores our commitment to driving sustainable growth.
Happy reading!



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01

Pg 4

HIGHLIGHTS

02

Pg 27

RESEARCH &
INNOVATION

03

Pg 39

CONFERENCES &
WORKSHOPS

04

Pg 52

PARTNERSHIPS
FOR IMPACT

05

Pg 69

CO-CURRICULARS

06

Pg 80

ALUMNI AFFAIRS

SECTIONS



CHAPTER 1
HIGHLIGHTS

EXPERIENCE NUST



Global Standing

#367 in the World, **#64** in Asia
QS Rankings 2023/ 24



Sustainability Rankings

#339



Research Facilities

400+ labs
34 key laboratories



Our Programmes

159 academic programmes, **7** disciplines,
Engineering programmes (Washington Accord ratified)
4% UG acceptance rate



National Footprint

20 institutions
7 campuses
5 cities



International Partnerships

247 institutions
52 countries



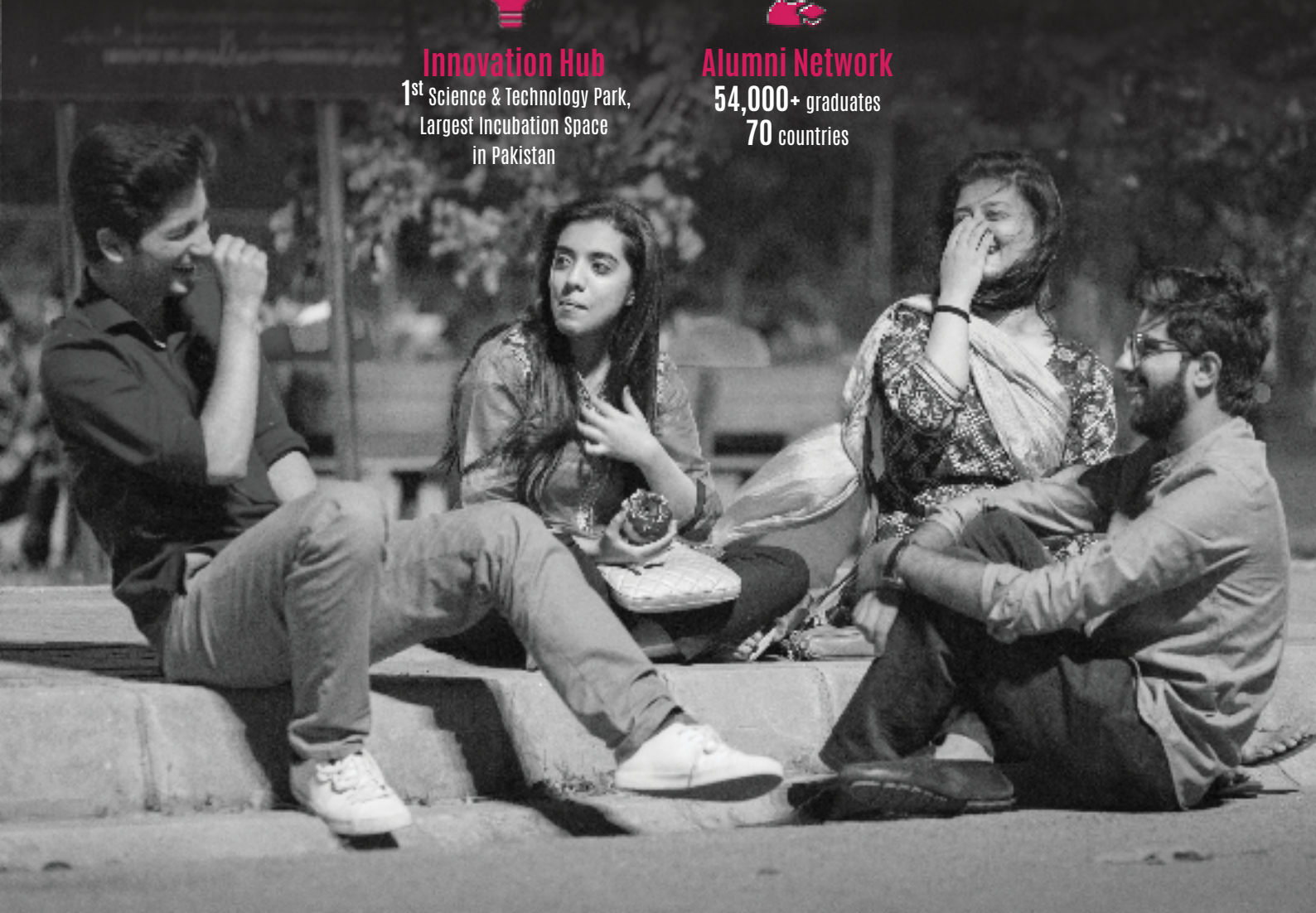
Innovation Hub

1st Science & Technology Park,
Largest Incubation Space
in Pakistan



Alumni Network

54,000+ graduates
70 countries



NUST Annual Convocation Week

Education not an option but necessity: COAS

The annual convocation week of the National University of Sciences & Technology (NUST) was held in the last week of October, 2023. Chief of Army Staff (COAS) & Chairman NUST Board of Governors, General Syed Asim Munir, NI (M), graced the occasion as chief guest at the inaugural "Master Convocation Ceremony" and conferred medals upon distinction holders.

Bachelor's, Master's and PhD students received degrees during the course of convocation week. Degrees were awarded to over 3500 graduates from all NUST Schools at the main campus in the 7 core disciplines.

While addressing the graduates, COAS extended his heartiest felicitations to graduates, their parents and faculty. He commended NUST for developing a conducive

ecosystem for teaching and learning – one that nurtures brilliant minds, who are fully poised to serve the nation.

COAS emphasised that education is not an option but a necessity. He highlighted that today is the beginning of a new chapter in graduating students' lives, which heralds a significant change that demands greater responsibility. He said that this newfound responsibility should manifest in their personality and choices in the journey ahead.

COAS remarked that it is now incumbent upon them to figure out and analyse challenges facing the country and put their intellectual resourcefulness to find their solutions.

Earlier upon arrival at NUST, COAS was received by Rector NUST Lt Gen (Retd) Javed Mahmood Bukhari.



Prime Minister's National Innovation Award

The Prime Minister's National Innovation Award (PMNIA), a flagship initiative under the PM Youth Programme to support early-stage startups from across Pakistan, culminated into the National Award Ceremony at the Prime Minister's Office on June 19, 2023. Top 50 contestants from the pitching round at NUST were awarded cash prizes. The idea-pitching stage of the highly anticipated event was held at NUST from June 17 through June 18. As many as 256 shortlisted candidates from across the country pitched their innovative ideas before an esteemed panel of judges at NUST.

Organised under the Prime Minister's Youth Programme through the Higher Education Commission (HEC) of Pakistan, the National Innovation Award would serve as an impetus towards fostering creativity and entrepreneurship, and providing opportunities to the youth of Pakistan.

InLights wins PKR 1M at PMNIA

InLights, Hatch8 startup from Cohort3, emerged victorious winning a cash award of PKR 1 million at PMNIA.

Congratulations to Muhammad Ahmad, who is the founder and CEO of the startup that has developed an automated traffic signal system. The function of this newly formed system completely revolves around traffic detection/observation, so as to be safe from long traffic jams in such populated areas.



4 NSTP startups win ISF Seed Fund

Four startups, namely Bendcrete, Zambeel, Awaaz AI, and Banacks, from National Science & Technology Park (NSTP-NUST) have achieved a significant milestone by securing \$35,000 in seed funding each for their groundbreaking products from the Innovator Seed Fund.

The unwavering commitment and meticulous preparation of the Innovation Team played a crucial role in guiding these startups on their fundraising journeys.



Global accolades for NUST researchers: 31 stand among top 2%

As many as 31 researchers from the National University of Sciences & Technology (NUST) have risen to prominence by standing amongst the world's top 2% from amongst 100,000 top-of-the-line researchers in 2023. NUST has consistently made headway in its R&D pursuits, bolstering its way to the top in Pakistan, and building the nation through transformative higher education. The number of researchers from NUST featured among the top 2% of the world's top-ranked researchers has steadily increased over the past four years, with 8, 9, 23 and 31 faculty members making to the list published in 2020, 2021, 2022 and 2023 respectively.



The data for ranking is compiled by Stanford University and published by Elsevier. The researchers are ranked based on a composite index factoring in several bibliometrics, including citations, hirsch-index, citations to papers in different authorship positions, etc. The thirty-one researchers are from ten different institutions of NUST and fifteen different disciplines. The distinguished researchers are Dr Noreen Sher Akbar, Dr Meraj Mustafa Hashmi, Dr Salman Raza Naqvi, Dr Rizwan Ul Haq, Dr Irfan Ahmad Rana, Dr Asim Shahzad, Dr Mubasher Jamil, Dr Arshad Hussain, Dr Faisal Shafait, Dr Syed Shoab Ahmad Shah, Dr Irfan Ahmed Gondal, Dr Shahid Iqbal, Dr Adeeb Shahzad, Dr Tayyaba Noor, Dr Muhammad Usman Akram, Dr Safia Akram, Dr Hasan Ali Khattak, Dr Muhammad Bilal Khan Niazi, Dr Adeel Waqas, Dr Iftikhar Hussain Gul, Dr Zaib Jahan, Dr Ghulam Ali, Dr Nasir Mahmood Ahmad, Dr Mudassir Iqbal, Dr Arshad Khan, Dr Muhammad Usman, Dr Tahir Mehmood, Dr Farooq Ahmed Tahir, Dr Izhar Mithal Jiskani, Dr Imran Akhtar, and Dr Imran Mir.



NUST project declared global winner

The National University of Sciences & Technology (NUST) made headlines internationally after one of its projects EKKO, a therapeutic device, was declared global winner in this year's "Better World Project" competition, held by Association of University Technology Managers (AUTM), Washington DC (USA). The project has been developed by Prof Dr Muhammad Usman Akram and his team from NUST College of Electrical & Mechanical Engineering. EKKO was among the 3 finalists out of over 40 projects submitted from around the world. Congratulating the winning team and the NUST Technology Transfer Office upon this landmark success, Dr Rizwan Riaz, Pro-Rector RIC at NUST termed it a proud moment for the entire Pakistani nation as the competition only includes research projects that have been successfully tested in the field and commercialised – a rare feat in Pakistani academia.

EKKO Wave Therapeutic Device provides non-invasive mobile therapy to treat neurological disorders including cerebral palsy, autism, etc. One of the various advantages of the device is its low cost making it accessible to all. In addition, EKKO offers safe treatment of neuro disorders through vibrational waves that affect neural activity in the brain and body.



Climate Action Plan launched

The National University of Sciences & Technology (NUST) organised first-ever Partnership for Climate Action (PCA-2023) conference in Pakistan from February 14 to 16, 2023. Themed around "Science for Sustainability," the conference was held in collaboration with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), German Red Cross, Pakistan Red Crescent, International Federation of Red Cross, International Rescue Committee and Welt Hunger Hilfe. The prime objective was to bring together and connect youth, academia and other stakeholders to build meaningful partnerships towards addressing climate change challenges. The conference also provided an opportunity for NUST to showcase its climate resilient technologies for potential deployment and commercialisation.

In his remarks, Dr Rizwan Riaz, NUST Pro-Rector Research, Innovation & Commercialisation said that the university takes its social responsibility seriously and has aligned all its core functions to the UN Sustainable Development Goals. Most significantly, he maintained, NUST has been proactively engaged in developing innovative technologies and devices to address the challenges of climate change.



AI TechVerse 2023

AI TechVerse 2023, the flagship annual event of National Centre of Artificial Intelligence (NCAI) at NUST, concluded on February 23, 2023. The three-day event was geared towards providing a platform for students, researchers, spinoffs, startups, and existing AI industries to connect, network and pitch their AI-based ideas and prototypes. Prominent amongst the attendees were the chief guest, Mr Ahsan Iqbal, Federal Minister for Planning, Development & Special Initiatives, and Lt Gen (Retd) Engr Javed Mahmood Bukhari, Rector NUST, while His Excellency Rashid Abdul Rehman Al Zamar, Charge'd Affairs of UAE to Pakistan, graced the closing ceremony as chief guest.

The Federal Minister highlighted that NCAI is one of his most cherished initiatives, and he was so pleased to see it progressing well. He said that Pakistan is a country facing numerous challenges, and to overcome them, we need to foster a culture of technological innovation and growth.



National Engineering Robotics Contest

Over 200 teams from across Pakistan took part in the 19th annual edition of the National Engineering Robotics Contest (NERC) held in the second and third week of July 2023. NUST College of Electrical & Mechanical Engineering (C&EME) organised the event in collaboration with STEM Careers Program and HEC. Winner NERC 2023 shield along with a cash prize was presented to the team "The Boys" from NUST CEME. A special award "Akhtar Nawaz Prize" was dedicated for those teams that came from far-flung areas of Pakistan. The event sponsors included MRS Technologies, Graana, Headstart School, Sapient Hall School, Robotics World Pvt. Ltd., Education Resource Network and Buraaq Tractors. Dr Rizwan Riaz, NUST Pro-Rector RIC, was the chief guest. He complimented the efforts of NUST CEME towards the promotion of Robotics in Pakistan, especially amongst the youth. Earlier, Brig Salman Wasif Ali Khan, Commandant CEME, highlighted how the competition had gained immense popularity and, as a result, the number of participants increased over the years.



FERN stands out at Formula Student UK 2023

Amidst a fierce competition, Formula Electric Racing NUST (FERN), a team of Pakistan Navy Engineering College (PNEC-NUST) left an indelible mark at the prestigious Formula Student UK 2023 at Silverstone Circuit. The team emerged as the sole representative from Pakistan and the entire South Asian region in FS Class, which is the main event, where teams compete with the cars they have designed and built. One of the standout achievements for the team was securing the 5th position in the Cost Event out of 100+ teams. FERN was the only team from Pakistan and the entire South Asian region to become the finalist of the Cost Event. The team's unwavering commitment to technical proficiency and adherence to safety regulations led to a commendable 10th position in the Lap Time Simulations event, and 41st in the design event. In the Business Plan Presentation event, they displayed their business acumen and strategic thinking, securing an impressive 9th position. The culmination of their remarkable performance across various events resulted in securing an impressive 22nd position overall in the FSUK competition.



Rising Stars Startup Competition

The National Science & Technology Park (NSTP) in collaboration with the US Embassy Pakistan organised the Rising Stars Startup Competition (RSSC) at NUST. The competition was specially designed for female and minority entrepreneurs in Pakistan.

The final round featured 26 exceptional teams, selected from over 300 participants across Pakistan after a comprehensive evaluation process. The event also featured an engaging expo, providing a platform for participants to showcase their innovative projects and solutions.

The competition had a prize pool exceeding PKR 6 million, which included seed money and laptops. It recognised 4 national winners, 6 regional winners, and one outstanding performer. Among the finalists were 23 women, two men, and one transgender, representing diverse religious and ethnic backgrounds. The event was graced by the guest of honour, Andrew Schofer, Deputy Chief of Mission Pakistan.



Jazz, NUST to power Pakistan's first '5G Innovation Hackathon'

Jazz, Pakistan's largest digital operator, and the National University of Sciences & Technology (NUST) have partnered to bring Pakistan's first '5G Innovation Hackathon.' The groundbreaking initiative aims to harness the immense potential of 5G technology and other cutting-edge innovations. It would augur well for addressing critical challenges in Pakistan's key sectors, including health, education, financial services, disaster management, climate change, agri-tech and Industry 4.0. Jazz and NUST have also welcomed Code for Pakistan (CfP) as the implementation partner, having many years of experience in holding successful hackathons. In addition, National Information Technology Board (NITB) and Opps, a mobile & consumer electronics manufacturer, have also joined hands for the hackathon. By bringing together bright minds, developers and entrepreneurs, the hackathon would serve as a breeding ground for novel ideas and solutions that could shape the future of telecommunications in Pakistan.



Finding Innovative & Creative Solutions for Society (FICS '23)

Grand Finale & Prize Distribution Ceremony of Finding Innovative & Creative Solutions for Society (FICS 2023), NUST's flagship international entrepreneurial programme, was held at the university's main campus. The latest edition of the competition witnessed a remarkable collaboration between Turkiye and Pakistan. NUST partnered with Gazi University, to hold FICS international chapter in Turkiye earlier this year, wherein teams from 20 local universities competed for the top slot. The winners of the event qualified for the grand finale of FICS '23 at NUST, Islamabad. This year, there were over 700 project submissions from multiple national and international institutions. A total of 100+ finalist teams of FICS '23 demonstrated their prototypes of technology-based innovative solutions to a panel of over 30 industry judges.

The overall National Winner of FICS '23 was team "Solar Panel Cleaning System" from U.S.-Pakistan Center for Advanced Studies in Energy (USPCAS-E) NUST. Their project offers a simple, cost-effective, and efficient solution for cleaning of Solar PV panels. The project "Recycling of silicon based solar panels" of a team from Gazi University Turkiye secured first position amongst the international contestants, and was awarded a Global Champion Award of USD 5000. FICS '23 sponsors and partners included NetSol Technologies, TetraPak Pakistan, National Radio & Telecommunication Corporation (NRTC), Central Asian Cellular Forum (CACF), and Alfoze Technologies Pvt. Ltd.

An overwhelming number of dignitaries, particularly Ambassadors from Germany, Azerbaijan, Russia, and Malaysia, and Deputy Ambassadors from Palestine, Indonesia and Turkiye graced the occasion with their presence. Lt Gen (Retd) Engr Javed Mahmood Bukhari, Rector NUST, presented souvenirs to the dignitaries. Multiple recorded messages of international dignitaries and participants were also played at the event. These included FICS 2022 International Winner from Egypt, the Vice Rector from Universitas Pendidikan Indonesia (UPI) and Pakistan's Permanent Representative to the United Nations, Mr Munir Akram.

Mr Akram emphasised the role of universities, like NUST in supporting Pakistan towards achieving the SDGs, and, in so doing, improving the lives of communities at large.

The chief guest at the ceremony was Mr Waseem Ajmal Chaudhry, Federal Secretary, Ministry of Federal Education & Professional Training. He commended NUST for creating an international platform to enable the youth from different parts of the globe to come together and develop solutions to some of the world's most pressing problems.



HEC declares TechOne top incubator in Pakistan

TechOne NUST Incubator of NSTP has been crowned Pakistan's premier incubation ecosystem by the HEC. With over PKR 10 billion raised by its startups, investments from renowned investors like Tim Draper, graduation of over 150 successful startups, and substantial funding from The World Bank for its startups, NSTP's impact is undeniable. Notably, over 20% of its startups are female-founded, aligning with the pursuit of gender equality and social equity.



Two Hatch-8 startups win Shell Pakistan Tameer Award 2023

Two startups from the Hatch-8 programme of NSTP, have attained top positions at the 10th Shell Pakistan - Tameer Awards 2023, from a competitive pool of 400 applicants across six award categories. Both startups, Bendcrete and InLights, were awarded a prize money of PKR 0.5 Million each for their innovative products.

Bendcrete Engineering Services, is working in the construction industry that is developing bendable concrete solutions, secured 1st position in the Most Innovative Idea category. Meanwhile, InLights, which is

making smart traffic signal solutions, secured 1st position in the Transportation Category.



Saudi Arabian NDU delegation visits NUST

Headed by President SANDU M G Mohammad Alruwaili, a high-powered delegation from the Saudi Arabian National Defence University (SANDU), accompanied by members of the Saudi Ministry of Defence, paid a visit to the National University of Sciences & Technology (NUST) on November 7, 2023. The delegation was extended a very warm welcome, followed by a comprehensive briefing on the NUST ecosystem. The delegates extolled the university for its remarkable global achievements and unwavering commitment to advancing applied research and fostering innovation across various domains. They highly appreciated the quality standards NUST upholds and showed keen interest in developing deeper cooperation in an array of fields.

Earlier in January 2023, Lt Gen (Retd) Engr Javed Mahmood Bukhari, Rector NUST, along with members of senior management and faculty from the university, had visited SANDU to forge a multi-pronged partnership that would have far-reaching positive dividends for both sides.



Federal Minister MoST at NUST

Dr Umar Saif, the interim Federal Minister for Science & Technology, paid a visit to NUST on December 14, 2023. In a one-on-one meeting, Rector NUST Lt Gen (Retd) Engr Javed Mahmood Bukhari apprised the minister of NUST's national and global achievements, R&D initiatives and its efforts towards building the knowledge economy through a robust knowledge ecosystem. Later, the minister visited NSTP and NUST School of Interdisciplinary Engineering & Sciences (SINES).

While talking to media, the minister said that the main purpose of his visit to the university was to further streamline and formalise this partnership through the establishment of a new institution namely Indigenous Research & Development Agency (IRADA) at NUST. He added that IRADA would provide a platform to all universities across Pakistan, enabling them to embark on projects that align with national interests, possess the potential for commercialisation, and contribute significantly to the country's economy. He expressed his gratitude to NUST for hosting IRADA and providing the necessary ecosystem for its success.



Annual MacJannet Prize for Global Citizenship

NUST Community Services Club (NCSC) project "Tameer" has won the first place at the annual MacJannet Prize for Global Citizenship, hosted by the Talloires Network of Engaged Universities. The network aims to foster civic engagement in the higher education sector. The winning project has been conferred a cash award of USD 7500. NCSC had submitted two proposals, out of which NCSC Taameer program (a disaster management and preparedness program) won the first-place prize for the year 2023. NUST is a very active member of The Talloires Network since 2013 with the headquarters of

Pakistan Chapter of Talloires Network (PCTN) of Engaged Universities located at NUST.



NUST wins two Pak-UK Education Gateway Mobility Partnership grants

NUST School of Mechanical & Manufacturing Engineering (SMME) has won two Pak-UK Education Gateway Mobility Partnership grants, one each for faculty and postgraduate students. The grants have been co-sponsored by the British Council and HEC. Both applications were jointly led by Prof Dr Ibraheem Haneef and Asst Prof Dr Sara Ali. Coventry University, with whom NUST has already signed an MoU, is the UK partner both in the Faculty and PG Students Research Mobility Grants.

A consortium of five universities from Pakistan (NUST, NED UET Karachi, IBA Karachi, Air University Islamabad and PAF-IAST Haripur) was formed, with NUST as Consortium LEAD both for the Faculty and Students Research Mobility

Awards. The total value of the two awards is £80,000 and £48,243, respectively, out of which 50% share (PKR 18.45 million) will come to NUST for leading the Pakistani consortium.



Dr Rafia Mumtaz appointed visiting professor at Coventry University, UK

Dr Rafia Mumtaz, a faculty member at SEECs, was appointed as a visiting professor at Coventry University, UK. Dr Rafia has established strong academic and research linkages with Coventry University and has been instrumental in setting up twin labs namely "NUST Coventry Internet of Things Lab" at both universities. Her collaborative effort has resulted in the creation of many fully funded PhD positions for NUST students at Coventry University, UK. This is indeed a moment of great pride for NUST and reflects her untiring efforts to advance the mission of NUST.



NUST, UNFPA observe World Population Day

To commemorate the World Population Day, NUST School of Social Sciences & Humanities (S3H) and the United Nations Population Fund (UNFPA) jointly organised a seminar – Envisioning a Resilient Future for Pakistan's Population: Challenges and Way Forward. Dr Rubina Ali, Assistant Country Representative UNFPA, delivered the keynote address. She congratulated S3H on the establishment of Center of Excellence on Population & Wellbeing Studies (CePWS) – a research centre committed to population and demographic studies. Dr Rubina said that although the population growth rate is exponential in Pakistan, focus must remain on ensuring the rights of every individual. She stressed the need for capacity building of individuals as well as institutions to address population related issues.



Faculty Achievements

Dr Syed Ali Hassan - SEECS

Professor Syed Ali Hassan (SEECS, NUST) has been awarded the Gold Medal by the Pakistan Academy of Sciences for his meritorious contributions to "Engineering Sciences." Prof Hassan completed his higher education at top universities in the USA and Germany. His research spans more than a decade of work in Telecommunications and has published over 250 articles in allied areas. He has graduated over 65 MS and 7 PhD students, won more than a dozen projects from various funding agencies across the globe, has been an international visiting professor, and is also a member of many national curriculum committees.



Dr Imran Akhtar - PNEC

Dr Imran Akhtar, HoD Mechanical Engineering at Pakistan Navy Engineering College (PNEC-NUST), recently took part in K-Electric's 7/11+ Challenge, where his groundbreaking novel insulator design stood out among 300+ remarkable research ideas. Through insightful online and face-to-face sessions, the team led by Dr Akhtar delved deep into the practical aspects of the novel insulator design, leading to iterative improvements in the product.



NCRA achieves significant milestones

The National Centre of Robotics & Automation (NCRA) has achieved significant milestones during the past one year in various domains, reflecting its commitment to research, innovation, and industry support. Here are some of its notable accomplishments:

30 Journal Publications | **25** Conference Publications | **2** Startup Ventures

Over 1000 Students and Professionals Training and Development

PKR 135 million Research Funding

PKR 53 million Industrial Collaboration

7 new products Product Development

Robot Design and Development Lab

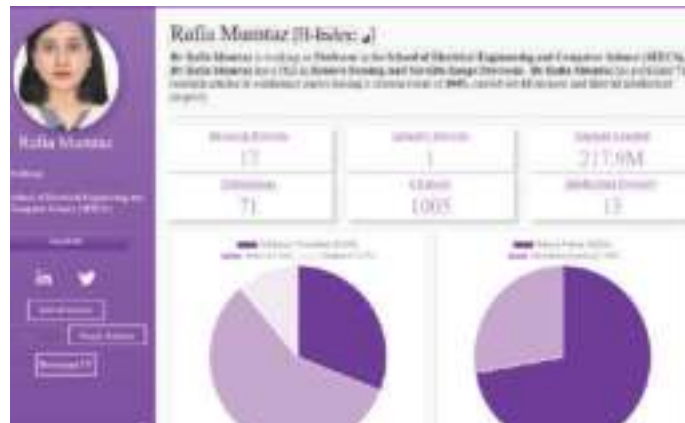
The Robot Design and Development Lab of NCRA has secured an impressive 19.63 million dollars in non-PSDP research funding, earmarked for their project titled "Multi-DOF Upper Limb Prosthetic Hand." Similarly, the lab has garnered PKR 2.75 million in industrial project funding, highlighting their ability to bridge the gap between academia and industry, ultimately driving innovation and practical applications.

The lab also runs a rigorous student internship program which has provided invaluable hands-on experience to engineers and researchers, preparing them for the challenges and opportunities in the world of robotics.



Launch of Research Collaboration Portal

NUST has developed a dedicated Research Collaboration Portal, which serves as a platform for international academia and industry to connect with NUST researchers for potential collaborations. By showcasing the strengths of NUST faculty, the portal aims to foster increased collaboration opportunities and enhance the visibility of NUST's research prowess. It provides a direct channel for interaction between NUST researchers and industry stakeholders, facilitating seamless collaboration and knowledge exchange. Accessible via the URL: www.collaborate.nust.edu.pk, the portal signifies NUST's commitment to promoting collaboration and innovation, furthering its impact on the global research landscape.



Airworks takes part in Teknofest 2023, Türkiye

Team Airworks, a team of students from Pakistan Navy Engineering College (PNEC-NUST), was the sole representative of Pakistan at Teknofest 2023 held from April 30 to May 1. The team once again lived up to their reputation by winning the Performance Award and a cash prize from TÜBİTAK for their hybrid VTOL configuration tasked with an autonomous mission that can be deployed for search and rescue missions, as well as rescue aid deliveries to disaster-struck areas. The mission was designed to solve practical issues, keeping in mind the recent earthquakes in Türkiye. The team demonstrated its commitment to innovation and addressing real-world challenges by focusing on building drones that can land on any platform without a runway.

The team holds the capability to implement such complicated and intricate missions in their UAV through the use of latest technology and flight controllers provided by their Avionics Sponsor, CUAV.

The Teknofest competition, held this year in Bursa by the Turkish government, provided the team with an opportunity to showcase their project and overcome three challenges related to team awareness, flight checks,

and a real flight on the runway. The team's success in the competition led to a meeting with Selçuk Bayraktar, the CTO of Baykar Drones, and the Minister of Turkish Science and Technology, TÜBİTAK, Hassan Mandal, as well as other influential personalities.



Team Envision stands first in Pakistan Sustainability Week Exhibition

Team Envision secured first position in the Alternative Energy Projects category, among numerous esteemed companies and universities at Pakistan Sustainability Week Exhibition (September 2023). Envision was the only team from Pakistan to clear the Technical Design Report in Teknofest 2023 (February 2023). This achievement underscores our relentless pursuit of sustainable solutions and inspires us to continue pushing boundaries for a better tomorrow.



Mechatronics Engineering students shine at Hult Prize 2023

Students from Mechatronics Engineering, Syed Absar Ul Hassan Zaidi, Muhammad Daud Abbas and Muhammad Abad Bajwa (DE-44 MTS) managed to bring their venture, Gaia Vogue, into the spotlight at the Hult Prize 2023 competition. Following their qualification for the New York summit, they went head-to-head with renowned institutions such as Yale and secured a coveted spot in the finals. They made Pakistan proud by representing the nation at the pinnacle of startup and innovation competitions.



KangarooCareAI wins Zindigi Prize

NSTP startup from the Rising Stars Startup Competition, KangarooCareAI Pvt Ltd., secured 1st place among 300+ startups in the Zindigi Prize competition by JS Bank held throughout Pakistan.



EcoBricks at Sparking Solutions Competition, Italy

The founders of the startup, namely Kashaf Akhtar, Burhan ur Rehman and Muhammad Ahmad participated in the Sparking Solutions Competition during the Youth4Climate Summit held in Rome, Italy on 19 October 2023. The solution was awarded funding and learning support by UNDP and the Ministry of Italy by a selection panel from over 1,100 applicants to the youth4climate call for solutions. The startup is part of #Cohort4 of the #Hatch8 program that is curated for early-stage startups. EcoBricks is developing eco-friendly bricks and pavers made from non-recyclable plastic waste, offering sustainable solutions to the construction industry.



First-ever **PISTON CUP** at NUST

NUST School of Mechanical & Manufacturing Engineering (SMME) held first-ever Piston cup at the Islamabad Campus from November 17 to 19, 2023. The competition is first of its kind for UG and PG Engineering students within any Pakistani university. It garnered participation from 13 universities, with 7 teams successfully presenting their vehicles for the rigorous competition. The journey initially began in March 2023 with online registrations, followed by design and business presentations in May 2023 at SMME, NUST. The rigorous competition included meticulous inspections based on design rules, followed by a series of track events such as acceleration tests, grade ability tests, traction tests, and suspension tests. The final endurance test for surviving teams culminated on November 19, 2023, concluding with an award ceremony.



29th Convocation of College of EME

Over 580 undergraduate, MS and PhD students were conferred degrees at the 29th convocation of NUST College of Electrical & Mechanical Engineering (CEME) on October 18, 2023. The degrees were awarded in the disciplines of Electrical, Mechanical, Computer & Software and Mechatronics Engineering, and Engineering Management. Mr Saqib Ahmad, Country Managing Director, SAP graced the occasion as chief guest. Rector NUST Lt Gen (Retd) Engr Javed Mahmood Bukhari conferred the degrees upon the graduates.



The chief guest congratulated the graduating students and commended NUST College of EME and the university at large for maintaining quality standards in teaching and research.

30th Convocation of MCS

The 30th Convocation of NUST Military College of Signals (MCS) was held on Wednesday, November 1, 2023. Maj Gen (Retd) Hafeez Ur Rehman HI (M), Chairman Pakistan Telecommunication Authority (PTA), graced the occasion as chief guest. Prominent amongst others present were Lt Gen (Retd) Engr Javed Mahmood Bukhari, Rector NUST, and Maj Gen Muhammad Ali Khan HI (M), Signal Officer in Chief. In his convocation address, the chief guest congratulated graduating students upon their well-deserved achievements, and paid glowing tributes to the faculty and parents for their pivotal role in their success.



Inspiring ingenuity: students display impressive projects

MCS

NUST Military College of Signals (MCS) held its highly anticipated annual Open House on May 25, 2023. Graduating students of Telecommunication and Software Engineering displayed as many as 73 final-year projects before an impressive number of guests from industry, academia and the government. The chief guest, CEO ICT R&D Fund Mr Asim Shehryar Husain, appreciated the quality of projects on display and their conformity to contemporary technological trends.



PNEC

PNEC held an Open House and on-spot interviews on May 17, 2023, showcasing 32 projects in Electrical and Mechanical Engineering. 78 representatives from 44 local industries attended, along with displays by NUST Formula Student Team and Team Shell-Eco Marathon. The event also highlighted the Naval Architecture Department and courses at the Professional Development Centre. Six companies conducted on-spot interviews, praising the students' technical skills and professionalism.



NUST honours its recipients of Pakistan Civil Awards 2023

NUST paid glowing tributes to its distinguished faculty and staff upon conferment of the prestigious Civil Awards 2023 by the President Islamic Republic of Pakistan, H.E Dr Arif Alvi. Dr Faisal Shafait from SEECS and Dr Umar Shahbaz from CoEME have been conferred the coveted Pride of Performance, while Dr M Usman Akram from CoEME, Dr Salman Raza Naqvi from SCME, Dr Haider Abbas from MCS and Ms Arooba Gillani from NUST Placement Office have been conferred Tamgha-e-Imtiaz. The awards have been bestowed in recognition of their exceptional contributions to higher education, research and public service. Meanwhile, Registrar NUST Engr Brig Muhammad Ashfaq Maitla was also conferred Sitara-e-Imtiaz (M), in recognition of his meritorious services during his illustrious career.

On behalf of NUST, Engr Javed Mahmood Bukhari, Rector NUST, extended heartiest felicitations to the excelling faculty and staff members, and expressed deep gratitude for their outstanding services to NUST and the nation at large. Describing the award recipients as role models for present and future generations of scholars, scientists and change makers, he underscored that NUST's esteemed reputation is largely built upon the continuous efforts of its committed human resources, whom he termed the university's greatest asset.

Pride of Performance



Dr Umar Shahbaz (CoEME)



Dr Faisal Shafait (SEECS)

Tamgha-e-Imtiaz



Dr Haider Abbas (MCS)



Dr Salman Raza Naqvi (SCME)



Ms Arooba Gillani (NPO)



Dr M Usman Akram (CoEME)

High achiever awards

A high achiever awards ceremony was organised for the high achievers of year 2022 at Jinnah Auditorium on May 25, 2023. NUST holds this prestigious ceremony every year to recognize the High Achievers of NUST who have brought laurels in co-curricular & extra-curricular events organized at the national and international level.



NUST Placement Recognition Awards

To acknowledge the efforts of our esteemed industry partners in extending placement opportunities and guidance to our graduates and students during and after their degree programmes, NUST Placement Office hosted the first-of-its-kind NUST Placement Recognition Awards. The award ceremony also introduced the new concept of selecting and presenting the most promising graduates from each of the degree programmes from NUST.



NUST offers 6-month Certificate in Health Professions Education

With a view to enhancing knowledge and skills of healthcare professionals, the National University of Sciences & Technology (NUST) has introduced a comprehensive 6-month Certificate in Healthcare Professions Education (CHPE). The programme is geared towards advancing healthcare services vis-à-vis patient experiences and overall healthcare outcomes. The initiative comes at a time when Pakistan Medical & Dental Council (PMDC) has made it mandatory for all medical faculty to acquire this certification.



Dr M Yousaf defies cancer to complete PhD

Dr Muhammad Yousaf, a faculty member at NUST School of Electrical Engineering & Computer Science (SEECS), has defied cancer to pursue and materialise his PhD dream courtesy of his unflinching determination and perseverance. He successfully defended his PhD thesis in Economics amidst the chemotherapy sessions and later attended his convocation during the ongoing radiation therapy. His research, titled "Empirical Study of Vocational Education, Poverty and Inequality, Adult Skills, and Employment: Evidence from Developing Countries." showcases his unwavering commitment to scholarly pursuits.

Dr. Muhammad Yousaf's courageous journey stands as a symbol of resilience in the face of adversity. NUST extends heartiest congratulations to Dr. Muhammad Yousaf and his family upon this crowning achievement.



EMPOWERING MINDS, NURTURING EXCELLENCE

Prof Dr Muhammad Moazam Fraz (SEECS)

University Best Teacher 2022-23

A photograph of a red and white bus, possibly a school bus, with a dark red overlay. The bus is viewed from a low angle, showing the front and side. The text "CHAPTER 2 RESEARCH & INNOVATION" is overlaid in white, bold, serif font. The bus has a "TEST DRIVE" sign on the windshield and a "18" on the front bumper. The background shows trees and a cloudy sky.

CHAPTER 2

RESEARCH & INNOVATION

Dawlance-ARÇELİK establishes global Research & Development Centre at NUST

As part of the collaborative efforts to foster innovation-driven economic development of Pakistan, Arcelik A.Ş, the 2nd largest manufacturer in Europe based in Türkiye, has established the Global Research & Development (R&D) Centre, at NUST, Pakistan. Mr Fatih Ebiçlioğlu, the President of the Consumer Durables Group at Koç Holding, also attended the inauguration of the Arcelik R&D Centre, along with the Türkiye Ambassador to Pakistan, HE Mr. Mehmet Paçacı, among other senior dignitaries. This inauguration is a result of the agreement signed between Arcelik's Executive Director of R&D - Mr Emre Oğuz and the Chief Executive Officer of Dawlance (Pakistan) - Mr Umer Ahsan Khan, at the NUST University in Islamabad, along with Pro-Rector RIC Dr Rizwan Riaz. The initiative will deploy highly qualified engineers to train the youth in modern skill-sets for creating a globally competitive workforce in Pakistan.

Pro-Rector RIC-NUST, Dr Rizwan Riaz said that we are thankful to Arçelik for working in close liaison with NUST to establish the state-of-the-art R&D centre at the university. He further said that the partnership would enable the development and testing of IT solutions, pertaining to the home-appliances category, as Arçelik is expanding its footprint in Pakistan and other Asian countries.

Mr Umer Ahsan Khan, CEO of Dawlance, remarked that Arcelik's partnership with NUST - the premier science & technology institution of Pakistan - shows our commitment to foster technological advancements in Pakistan and enable the professional development of the youth.

Arçelik A.Ş, with its cutting-edge facilities in nine countries, is renowned globally for producing a wide range of innovative home appliances.



AI-Powered Fruit Quality Assessment System

NUST faculty namely Dr Ayesha Zeb and Dr Mohsin Islam Tiwana have jointly worked on an AI-driven automated decision support system for non-destructive fruit quality assessment. Their research results have been published in prestigious journals from Springer Nature and Elsevier, and their work has garnered international recognition.



3D Concrete Printer: a paradigm shift in Pakistan's construction industry

Led by Raja Dilawar Riaz, a team of four students, including Usama Majid, Ammar Ali, and Muhammad Faizan, under the guidance of Dr Muhammad Usman, Head of the Structures & Survey Department, has developed Pakistan's first 3D Concrete Printer. The innovation fosters a paradigm shift towards automated construction methodologies and promises to revolutionise the country's construction industry by addressing its inherent challenges. According

to the team's calculations, the printer offers a significant cost reduction of 30 to 35%.



NUST journals achieve coveted 'Y Category' status

In a landmark development, the Higher Education Commission of Pakistan has awarded the prestigious 'Y' category status to all journals affiliated with the National University of Science & Technology (NUST). This commendable milestone underscores NUST's dedication to fostering high-quality research and academic discourse across diverse disciplines. The 'Y' category recognition, bestowed upon each of NUST's journals, reflects the culmination of rigorous evaluation processes, affirming the scholarly eminence maintained by the university's publications.

In an additional stride towards global recognition, four of NUST's journals have secured indexing in the renowned Directory of Open Access Journals (DOAJ). This accolade not only enhances the visibility of the journals but also

positions NUST as a key contributor to the global open-access research community.



‘Building-Internationalisation in Pakistan’

In 2019, a consortium of eight universities, including NUST, secured a capacity-building project titled 'Building Internationalisation in Pakistan' (B-International) under the Erasmus+ Scheme. Led by Cardiff Metropolitan UK, the consortium comprised four foreign and four Pakistani universities. Professor Dr Riaz Ahmad, HoD Aerospace Engineering Department, SMME, served as the project's Principal Investigator at NUST. The consortium's collaborative efforts have yielded a groundbreaking toolkit, heralding a new era of global education and fostering international partnerships in Pakistani academia.



Tales from the field: A north-south bond

Dr Ghulam Haider, Associate Professor at NUST's Atta-ur-Rahman School of Applied Biosciences (ASAB), received the knowledge2action South Asia mobility grant 2022-23 funded by CLOC. Hosted by Dr Stephanie Moser at the University of Bern's Center for Development and Environment (CDE), Dr Haider presented his work on Pakistan's agricultural sector challenges and opportunities. He engaged with various research groups to hold discussions on sustainable land management and collaboration prospects. The exchange broadened avenues for joint teaching, training, and research initiatives, fostering enhanced collaboration between the South and the North.



Another project, led by Dr Fazal Adnan, Associate Professor at ASAB, and his team from the knowledge2actionarch group AntiBacter, focuses on real-time monitoring and surveillance of various zoonotic infections in Pakistan's hotspot areas. This project was also awarded funding from the K2A program. Collaborating with Prof Katharina Shaufler of the University of Greifswald, Germany, Dr Adnan, alongside his colleague Dr Muhammad Faraz Bhatti, aims to mitigate the spread of existing and emerging infections through proactive surveillance measures.



Turkish Aerospace Recruitment Drive

NUST Placement Office collaborated with Turkish Aerospace, a global leader in the Aerospace industry, for a recruitment drive at NUST Islamabad Campus. The event, held on June 13, 2023, provided students and graduates with a unique opportunity to explore career paths within Turkish Aerospace, renowned for its cutting-edge technologies and commitment to excellence.



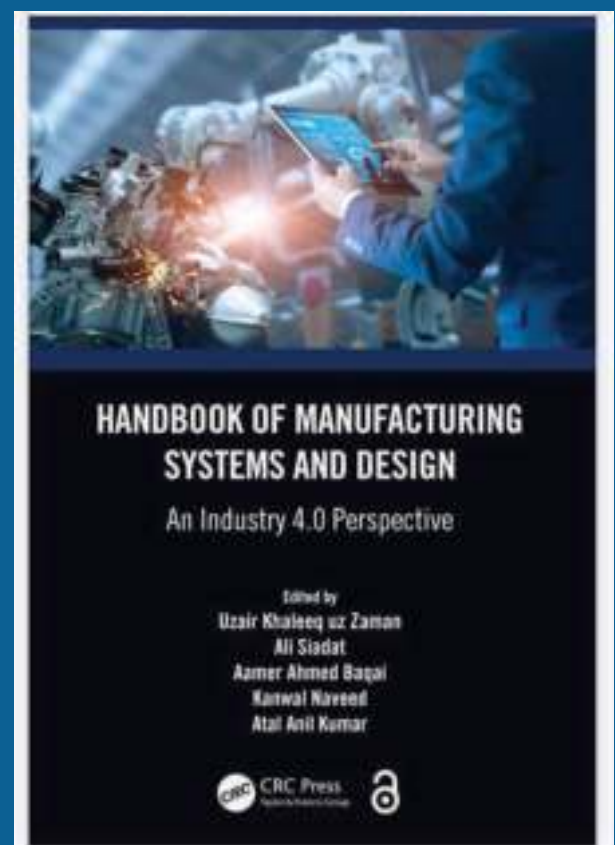
Internship at Turkish Aerospace Industries

A total of 8 students from NUST were selected for the SKY Global 2023 international internship programme organised by Turkish Aerospace Industries in Ankara. This programme provided students with an excellent opportunity to collaborate with international interns from Malaysia and El Salvador, fostering cultural exchange and cooperation.



Handbook of Manufacturing Systems and Design

The Mechatronics Department's faculty members, comprising Dr Uzair Khaleeq Uz Zaman, Assistant Professor Kanwal Naveed, and Assistant Professor Anas Bin Aqeel, in collaboration with former CEME Dean Dr Aamer Baqai, have jointly authored their inaugural book titled "Handbook of Manufacturing Systems and Design: An Industry 4.0 Perspective." The book is currently accessible through Taylor & Francis Group.



Professor Dr Rafia Mumtaz awarded PKR 1M project grant

Professor Dr Rafia Mumtaz has been awarded a grant of PKR 1 M for her project titled Cherry Sorter- an Embedded AI and Computer Vision-based solution for improved characterisation of the production for exportation, under Pakistan Innovation Fund by Ministry of Planning, Development & Special Initiatives.



Royal Society research project, UK

Dr Salman Raza Naqvi and Dr Nouman Aslam Khan (SCME) won funding worth 12000 GBP for Royal Society research project with Aston University, UK. The faculty visited Aston University and presented an optimised machine learning model for the prediction of bio-oils from plastic waste as a speaker for the workshop on "Application of Machine Learning for the Chemical Recycling of Plastic Waste." They also visited the Energy and Bioproducts Research Institute (ERBI) at Aston University and explored the opportunity of exchange research students.



S³H, SADA faculty secure research grant

Dr Umer Khayyam, Associate Professor at S³H, and Mr Safi Ullah, Assistant Professor at SADA, have secured a Research Grant 2023 from the German Academic Exchange Service (DAAD), building on their previous grant in 2022. Their project, titled "Planning in Germany and Pakistan: Responding to Challenges of Climate Change through Intercultural Dialogue," focuses on exchanging ideas and developing research skills related to climate change. The grant will facilitate workshops, conferences, field visits, training sessions, and publications for students and faculty from both countries.



NUST & YES ELECTROMOTIVE BRING YOU ELECTRIC CONVENIENCE



Manufacturing Resource Centre at NUST SMME spearheaded the indigenous development of 10 electric vehicles (EVs) with cutting-edge, long-lasting batteries and sleek design. After meticulous planning, M/S Yes Electromotive, Lahore, secured the project at PKR 19.5 Million. SMME actively oversaw prototype development, offering technical guidance and inspections. NUST's Transportation Department rigorously tested the prototype, approving series production in Feb 2023 after covering 8000 km without major issues. Continuous feedback facilitated improvements.

NUST, Shandong Jiaotong University to set up “Intelligent Transportation International Joint Laboratory”

The National University of Sciences & Technology (NUST-Islamabad) and Shandong Jiaotong University, China have reached an understanding whereby a state-of-the-art “Intelligent Transportation International Joint Laboratory” will be established at NUST. Initiated by China Study Centre at NUST, the partnership is aimed at promoting research and development in the field of Intelligent Transportation, and will augur well for achieving multiple Sustainable Development Goals (viz. Sustainable Cities & Communities; Industry, Innovation, Infrastructure, etc) by promoting sustainable, efficient, and inclusive transportation systems in the two countries.

Dr Osman Hasan, Pro-Rector Academics, and Vice President Mr Jiang Huaping signed the agreement virtually on behalf of NUST and Shandong Jiaotong University respectively. Lt Gen (Retd) Engr Javed Mahmood Bukhari, Rector NUST, also graced the occasion with his presence, besides members of senior management and faculty from both universities.



SCEE wins ERASMUS-SQUARES Project

NUST School of Civil & Environmental Engineering (SCEE) won an ERASMUS-SQUARES project titled “Sustainability and Quality Assurance for Academic Governance and Redesign Engineering Studies.” Professor Dr Muhammad Irfan, Principal & Dean SCEE, and Dr Javed Iqbal of SCEE-IGIS were the Project Representatives. SCEE undertook the project in collaboration with 11 other International universities from Poland, Italy, Estonia, Bangladesh, Nepal, and Bhutan. The project aims to integrate skills of Energy Engineering, Civil Engineering, Environmental, and Sustainability Engineering into the competencies of undergraduate and postgraduate from Asia, to meet the ever-growing needs of efficiency, safety, energy saving, and renewable technologies. Besides universities, Small and Medium Enterprises (SMEs) have contributed to the project.

SCME celebrates entrepreneurial excellence

SCME's auditorium buzzed with anticipation on December 20, 2023, as nine elite student teams presented their meticulously crafted business plans. The presentations showcased the pinnacle of SCME's Fall 2023 entrepreneurial spirit.

Artisan Alchemy, presented by Saad Salman, Burhan ul Hassan, Hajra Khalid Abbasi, and Areeba Urooj of Che-14, claimed the top prize with their innovative and impeccably executed concept.

Sea-Story, presented by Ghufuran, Joshua Sharif, Wasi

Ullah, and Hussain Mahmood Khan of ME-14, earned the distinction of runners-up, displaying remarkable creativity and potential.



Use of Waste Plastic in Pavement

A trial section of the road using low-density polyethylene (LDPE) (designed by MCE faculty) as a modifier for partial replacement of asphalt has been built at MCE. The designed asphalt concrete mix offers an environmentally friendly, sustainable, and green pavement solution addressing the effective disposal of plastic waste.



Research article in high-impact journal

Muhammad Nouman Aslam Khan a faculty member from SCME-NUST has published a research article in the high-impact Journal of Renewable and Sustainable Energy Reviews with the title "Cellulosic biomass fermentation for biofuel production: Review of artificial intelligence approaches". The review focuses on the importance of different machine learning models and optimisation techniques to simulate and optimise process conditions, yield, and parameters in the fermentation of cellulosic biomass from fifty recent studies.

NSME designs fully electric ferry for Pasig River

In 2023, NUST Society of Maritime Engineers (NSME) at PNEC accepted another challenge from the Worldwide Ferry Safety Association, USA, Student Design Competition. This time, the team designed a fully electric ferry for the Pasig River (Philippines). The ferry has the capacity of carrying 100 passengers and 50 cycles.



Triumph at Schneider NextGen Go Green

NUST team from College of EME has made history after becoming first Pakistani team in 12 years to win Schneider NextGen Go Green 2023 Middle East and Africa Region. The team, including Huzaifa Ather, a student from the Mechatronics Engineering Department, would now go on to compete against teams from over 40 countries. Their winning solution, aimed at enhancing building efficiency, is to be showcased in Germany in January 2024.



Entrepreneurship Startup Skill Development of Youth Program (ESSY)

In 2023, NSTP-NUST launched the Entrepreneurship Startup Skill Development of Youth Program (ESSY). With a funding of PKR 21 Million by UNHCR, the programme targets Afghan youth, offering entrepreneurial education and a Founder Development Program over six months. The initiative, supported by DAFI scholarships, aims to equip participants with business fundamentals and entrepreneurship skills, fostering job creation and economic empowerment.

The program's pilot phase, initiated in August 2023, involves training at NSTP's Hatch8 Incubation Program, followed by startup grants and exposure visits to help Afghan refugee youth turn their ideas into viable businesses. NSTP, Pakistan's first fully integrated science and technology park and Hi-Tech SEZ, focuses on fostering innovation-led growth. Since 2019, NSTP has supported over 60 startups and high-tech SMEs, attracting international companies and significant investments.

Customized curriculum, field trips, and exposure to entrepreneurial ecosystems enhance participants' experiences. With ongoing support, these startups can offer innovative solutions to local challenges, contributing to economic development and social progress.



Certification in Sustainable Innovation

The National Science & Technology Park (NSTP-NUST), in collaboration with Accelerate Prosperity, has introduced Certification in Sustainable Innovation (CSI) for green tech businesses in Pakistan. CSI offers comprehensive support, including business training, coaching, access to experts, research labs, and co-working spaces. Participants can secure investments of up to PKR 30 Million. The program focuses on three key industries: Agriculture, Green Building/Construction, and Technology.



Student participation in CERN

Ikhlas Jamshaid, a highly talented Aerospace Engineering student from SMME, was selected, after a cut-throat global competition from 630 applicants across the world, to represent Pakistan at the CERN-Solvay Education Programme from September 30 to October 8, 2023. There were only 30 students from 30 different nationalities worldwide who were sponsored to join this programme.



College of EME students stand out in ASME Challenge

Muhammad Usman, Muhammad Zakariya, and Noman Shabbir, students (DE-43) from College of EME, secured the top position at the ASME Extended Reality Challenge, by crafting a design and simulation of an autonomous vehicle, earning them a prize of PKR 75,000. In addition, Noman Shabbir secured first position in ASME's inaugural case study competition. He and his teammates, hailing from four different countries, presented their case and solution to an international conference, earning recognition from ASME's senior leadership.

Meanwhile, Noor-ul-Huda, Muhammad Malik, Muhammad Umer, and Talha Tahir from DE-41 secured PKR 80,000 in funding for their final year project, which focuses on Multi-Modal sensor fusion. This financial support came through IGNITE's FYP seed program. Notably, Noor-ul-Huda was a key contributor to the team that received the Best Project Award for Batch 243 during their fellowship at Amal Academy.

Outreach Consultation

NUST Centre for Counselling & Career Advisory (C³A) arranged a series of activities for College of EME, MCS, PNEC, NBC, PNEC and CAE. The purpose was to acquaint students, particularly, freshmen, with a myriad of services offered by the Centre. The main goal was to eliminate any stigma attached with seeking professional assistance and to cultivate a supportive atmosphere for addressing both mental health and career-related issues.



Awareness Session on Mental Health

C³A organised an awareness session on the growing concerns of stress, anxiety, and depression among university students. It aimed to foster a supportive environment and equip students with strategies to manage their mental well-being effectively.

Meanwhile, C³A held another enlightening session on Career Planning & Management with second-year

students. The aim was to aid them in exploring career paths.



Awareness Session on NUST Policy on Protection against Harassment

As part of its mandate as NUST's Harassment Complaint Cell, C³A organised a lecture on NUST Policy on Protection against Harassment for the 2nd year students at NUST Balochistan Campus (NBC). The session provided an overview of the policy and its implementation at NUST, and the procedure for filing complaints.

Meanwhile, another session on "Policy on Protection against Harassment" was conducted with NG Staff. The session emphasised the importance of creating a safe and respectful workplace for all employees by clearly defining prohibited behaviours, briefing about confidential reporting channels, providing robust information about procedures of conducting an inquiry, and penalties as per policy.



Basic Counselling Skills Training with Student Advisors

A specialised training titled 'Basic Counselling Skills,' emphasised the pivotal role of student advisors in addressing students' emotional well-being. It covered diverse approaches to support students, from recognising signs of distress and "at risk" behaviours, to offering psychological first aid and guiding when to seek expert help. Attendees actively engaged, sharing experiences and seeking advice for handling challenging situations.





CHAPTER 3
CONFERENCES & WORKSHOPS

Innovation, digitalisation and investments critical to tackling power sector challenges of Pakistan: Experts

The University Advancement Office and the US-Pak Centre for Advanced Studies in Energy (USPCAS-E) at NUST in collaboration with Pakistan Renewable Energy Coalition organised a dialogue titled “Resolving Energy Sector Crisis through Digitalisation & Innovation.” The event brought together experts from the energy sector, policymakers and representatives from various industries to discuss the energy challenges of Pakistan and their potential solutions through digitalisation and innovation.

The panel discussion included industry representatives from KElectric, China Three Gorges South Asia Investment Limited, CPPA, and USPCAS-E NUST. Principal USPCAS-E Dr Adeel Waqas Ahmed emphasized the dialogue's significance for addressing Pakistan's energy sector challenges, with insights from Dr. Ashfaq Hasan Khan and Ms. Sadia Dada on policy and operational innovation at KElectric.

Pro-Rector RIC-NUST Dr Rizwan Riaz expressed satisfaction with the dialogue's outcome, aiming to address Pakistan's energy crisis through digitalization and innovation, with active student participation underscoring the need for future similar initiatives.



International Conference on Business, Management & Social Sciences (ICBMASS-2023)

The 3rd International Conference on Business, Management & Social Sciences (ICBMASS-2023) took place at NUST from March 14 to 15, 2023. Jointly organised by the Centre for International Peace & Stability (CIPS), NUST School of Social Sciences & Humanities (S3H) and NUST Business School (NBS), the conference delved into Non-Traditional Security challenges including cybersecurity, climate change, and economic health, fostering insights crucial for a sustainable future. The event featured distinguished speakers, including Dr Ijaz Shafi Gilani, Lt Gen Zubair Mehmood Hayat, and Prof Przemyslaw Osiewicz. Dr Bakare Najimdeen chaired the event. The conference delved into Non-Traditional Security challenges including cybersecurity, climate change, and economic health, fostering insights crucial for a sustainable future. In closing remarks, Maj Gen Salim Raza and Prof Dr

Ashfaq Hasan Khan highlighted the importance of understanding the complex dynamics of Non-Traditional Security threats, advocating for sustained national and international cooperation. Prof Dr Salma Siddique commended the conference's multidisciplinary approach, stressing the need for a comprehensive strategy to address these challenges effectively.



Seminar for Defense Attachés' Association (DAA) in Pakistan

The Centre for International Peace & Stability (CIPS-NUST) hosted the first ever "information session" for Defense Attachés' Association (DAA) in collaboration with the International Committee of the Red Cross (ICRC) Pakistan on February 28, 2023. The event brought together senior ICRC management, ICRC's armed and security forces delegates (FAS), and military diplomats from over 25 foreign embassies in Islamabad. During the session, Colonel Nicolas Presson, Defence Attaché of France and

Dean DAA shared insights into DAA's activities, while Major General Muhammad Salim Raza, Principal of the NUST Institute of Peace and Conflict Studies, commended the ICRC's efforts.



NUST takes center stage at "Invest in Pakistan" conference

Dr Rizwan Riaz, Pro-Rector RIC-NUST and Vice President of NSTP, delivered an insightful talk at the "Semiconductor/ Chip Design – Gearing up for the Future" panel during the "Invest in Pakistan" conference, organised by USAID and OPEN Silicon Valley. The event featured luminaries like Mobashar Yazdani from Google and Raghiv Hussain from Marvell Technology. Dr Rizwan highlighted NUST's strides in IC design and curriculum overhaul, leading to innovative RISC-V soft microprocessors. NUST plans to

collaborate with the US industry giants to advance chip development.



InnoXera 2023 - the biggest Global EdTech Summit

NUST hosted the biggest Global EdTech Summit "InnoXera" 2023 on May 2, 2023, in partnership with Classera Inc., the leading eLearning platform provider. With the theme "Learning in the AI Era." the summit brought together global decision-makers, industry leaders, and field experts from the Education Technology sector from Pakistan and the world over. Attended by over 600 attendees, InnoXera 2023 Pakistan was the first-of-its-kind EdTech summit in the country, dedicated to capturing a glimpse of futuristic innovations and corporate solutions in the spectrum of intelligent learning for governments, corporations, and individuals.



COMPPEC 2023

The Department of Computer & Software Engineering at NUST College of EME hosted the 20th all Pakistan Computer Project Exhibition & Competition (COMPPEC) from May 5 to 7, 2023. Over 40 universities, colleges, and schools participated, totaling more than 400

attendees. The event showcased innovative projects from undergraduates, postgraduates, and young learners. An industrial seminar by MRS Technologies and a panel discussion on “Innovation in Teaching in ChatGPT Era” were also part of the event.



Dr Rafia presents her work at IOFS forum

The Islamic Organisation for Food Security (IOFS) invited Professor Dr Rafia Mumtaz from NUST as a distinguished speaker to present her work at the 2nd IOFS forum. She shared her research findings on the IoT and AI-enabled System developed by her lab for Crop Disease Monitoring. Many officials and firms attending the forum showed keen interest in the innovative work and expressed the desire for collaboration with NUST.



APICTA 2023

BIOMISA, led by Babar Rao, PhD, MD, FAAD, NIDIskin, is pioneering AI-driven innovations in skin diagnostics, particularly in dermatology. Their project DermaVision, supervised by Dr. Muhammad Usman Akram, garnered international acclaim at the Asia Pacific ICT Alliance Awards (APICTA-23) in Hong Kong. Using AI, it creates digitally stained histopathology images from colorless skin tissue samples, aiding dermatopathologists in swift skin cancer analysis. The team, comprising undergraduates Hamid Rasool, Tayyab Rashid, and Tazeen Hina, alongside PhD scholar Muhammad Zeeshan Asif, are also collaborating with the US NIDI to perform non-invasive skin analysis.



Vyro CEO speaks at Google Think Event

Mr Ahmed Abu-bakar, CEO Vyro from NSTP Cohort 1, delivered a compelling talk at the Google Think App event in Lahore, drawing over 500 developers and industry leaders. His discussion, centered on "Igniting Business Success in the Hybrid App Ecosystem." Vyro's presence at the event showcased its exponential rise from NSTP Cohort1 to a workforce of 90 professionals with offices in Islamabad and Lahore, supported by a staggering 100 million app downloads.



CEMP-2023

NUST School of Chemical & Materials Engineering (SCME) NUST organised the 6th edition of Conference on "Emerging Materials and Process" (CEMP) from November 22 to 23, 2023. Sponsored by industry giants like Bestway Cement, the event drew 120 presenters and 63 posters from across the globe with three outstanding posters recognised in categories such as Advanced Materials, Energy and Environment, and Modeling and Simulation. A thought-provoking panel discussion occurred on day two, fostering academia-industry collaboration. Titled "The Quest for Sustainability: Challenges and Prospects in Industry-University Collaboration," the discussion featured distinguished guest speakers including Dr Shahid Rasheed (Former Executive Director, Centre of Excellence

on CPEC), Mr Mirza Hussain (GM Dynea Chemical), and Mr Safdar Khan Khattak (GM Bestway Cement). Their insights added depth to our exploration of sustainability in the collaborative landscape.



Seminar and Book Launch on Russia-Ukraine Crisis

NUST Institute of Policy Studies (NIPS) organised a seminar on "Russia-Ukraine War-The Global Implications," together with the launch of a book titled "Russia-Ukraine War: Dawn of a New World Order" authored by Dr Ashfaque Hasan Khan, Director General of NIPS. Renowned thought leaders, including Ambassador (Retd) Masood Khalid and General Daya Ratnayake (Retd), shared their insights into the subject, while Dr Lucio Remuzat Renno commended the book for offering contextual understanding of the war.

Mr Danila Ganich, Ambassador of the Russian Federation to Pakistan, praised the book's insightful analysis and cogent conclusions.



Expanding BRICS and the New Alignments

NUST Institute of Policy Studies (NIPS) organised a roundtable on “Expanding BRICS and the New Alignments.” Dr Asad Majeed Khan, Pakistan’s former foreign secretary, delivered the keynote address on the impact of the expansion of BRICS on prevailing global geopolitics. The Ambassador of Brazil, H.E. Alfredo Leoni, Ambassador of Russia, H.E. Danila V. Ganich, High Commissioner of South Africa, H.E. Mthuthuzeli Madikiza, and Ambassador of Ethiopia to Pakistan, H.E. Jemal Beker Abdula, shared their views on BRICS expansion.



India’s Continued Suppression of Kashmiris’ Fundamental Freedoms and Right to Self-Determination

Former PM Azad Jammu and Kashmir Sardar Attique Ahmed Khan delivered a keynote address on “India’s Continued Suppression of Kashmiris’ Fundamental Freedoms and Right to Self-Determination.” He expressed solidarity with Kashmiri Muslims in Indian Illegally Occupied Jammu & Kashmir (IIOJK), who have been enduring the brunt of India’s brutal military occupation for over seven decades.



NUST think tank holds webinar on “Saudi-Iranian Rapprochement”

Ambassador (Retd) Javid Hussain, former Ambassador of Pakistan to Iran, Netherlands and South Korea, has said that the détente between Saudi Arabia and Iran has the potential to bring about positive changes, countering the negative impacts of competitive and conflict-ridden trends of the Middle Eastern geopolitics. He made these remarks as a keynote speaker at a webinar on “Saudi-Iranian Rapprochement,” held by NUST Institute of Policy Studies (NIPS). The session was attended by veteran

statesmen, diplomats, academics, researchers and students.

The other keynote speaker, Professor Ahmet Uysal, Director of Middle Eastern Studies, Center for Middle Eastern Studies (ORSAM), Ankara, said that Türkiye emphasises the importance of maintaining friendly relations with neighbours.



Uzbekistan-Pakistan Regional Connectivity: Political, Economic, Humanitarian, and Academic Aspects

H.E. Oybek Arif Usmanov, the Ambassador of Uzbekistan to Pakistan, delivered a keynote address at NUST Institute of Policy Studies (NIPS). He talked about various aspects of "Uzbekistan-Pakistan Regional Connectivity," including political, economic, humanitarian, and academic dimensions. Ambassador Usmanov highlighted the historical significance of the connections between Central Asia and South Asia and stressed the importance of comprehensive relations between the two countries for mutual development and regional integration.



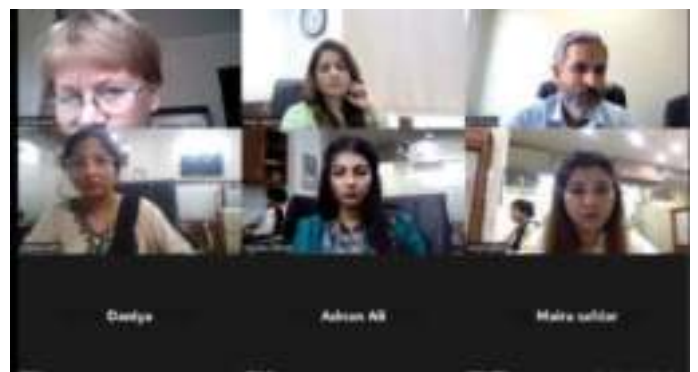
NUST organises webinar on "Pakistan: Image Building and Perception Management"

A webinar on "Pakistan: Image Building and Perception Management" was hosted by NIPS in 2023. Keynotes by Mr Javed Jabbar and Mr Toaha B Z Qureshi emphasised Pakistan's potential, soft power, and the importance of narrative building for global perception. Dr Ashfaque Hasan Khan highlighted citizen responsibilities and youth potential.



Pakistan and its Role in Regional Connectivity

NIPS organised another thought-provoking webinar on "Pakistan and its Role in Regional Connectivity." Dr Natalia Zamaraeva, a distinguished scholar with a PhD in History and a senior researcher at the Center of the Middle East Countries at the Institute of Oriental Studies of the Russian Academy of Sciences (RAS), underscored the crucial role of regional connectivity in fostering economic development, cultural exchange, and diplomatic relationships among nations.



Faculty presents paper at Nuclear Security Workshop, Jordan

Dr Rubina Waseem from the Centre for International Peace and stability (CIPS), NUST presented a paper during the “Nuclear Security Workshop,” held in Amman, Jordan, from September 25 to 28, 2023. Hosted by Sandia National Laboratories & Royal Scientific Society, the workshop provided a comprehensive examination of various aspects related to nuclear security. The event addressed essential concepts, terminology, and strategies related

to both domestic and international contexts to enhance nuclear security.



Seminar on the Constitution of Pakistan

A seminar featuring Mr Hamid Khan, a Senior Advocate at the Supreme Court of Pakistan, and Mr Ahmer Bilal Soofi, a former Federal Minister for Law, Justice & Parliamentary Affairs was attended by experts from academia, legal experts, researchers, and students at NUST. Mr Hamid Khan, spoke about the evolutionary process of the Constitution of Pakistan, emphasizing the importance of learning from history. Mr Ahmer Bilal Soofi, spoke

about the Constitution of Pakistan and International Law, highlighting the challenge of accommodating diversity while maintaining a balance between religion and modernism



Innovation and targeted investments key to revitalise Pakistan’s power sector: Experts

NUST US-Pakistan Center for Advanced Studies in Energy (USPCAS-E) and NUST University Advancement Office jointly organized an insightful and interactive policy dialogue on “Revitalising Pakistan’s Power Sector.” Prominent amongst the panelists were Mr Shah Jahan Mirza, Managing Director - PPIB, Mr Rafique Ahmed Shaikh, Member Technical – NEPRA, and Ms Sadia Dada, Chief Marketing & Communications Officer K-Electric. The dialogue encompassed diverse topics, viz. transition to renewable energy, technological advancements, circular debt management, tariff structure balancing, international policy influence, investment approaches, resilient policy formulation and collaborative regulatory considerations. It focused on the reasons behind the exorbitant cost of electricity across the country and the recommended path forward for maintaining the correct trajectory. Principal USPCAS-E Dr Adeel Waqas underscored the urgency of addressing Pakistan’s power sector challenges through innovation and global cooperation. Experts including

Shah Jahan Mirza, Rafique Ahmed Shaikh, and Sadia Dada highlighted challenges like electricity theft and currency devaluation. They advocated for integrating new solutions and investing in renewable energy to address Pakistan’s energy trilemma.



DEPUTY CHIEF OF MISSION, PAKISTAN, **ANDREW SCHOFER** SPEAKS AT RSSC GRAND FINALE

The grand finale of the Rising Stars Startup Competition was graced by Andrew Schofer, Deputy Chief of Mission, Pakistan. In his opening remarks, the Deputy Chief of Mission said, "The US Mission to Pakistan is proud to be part of cultivating a vibrant ecosystem of entrepreneurship in Pakistan and empowering young people to dream big, take risks, and become the job creators and change-makers that Pakistan needs." Since 2012, the US Embassy has funded over 181 entrepreneurship-related projects valued at \$14.7 million.



3rd IEEE “International Conference on Digital Futures and Transformative Technologies”

The conference featured 250 participants, including 3 foreign and 5 national speakers, with over 130 global paper submissions. Keynotes by international experts and workshops on generative AI enriched discussions on transformative technologies. This event affirmed NUST’s pivotal role in regional innovation, positioning the institution as a thought leader in the digital transformation landscape.



International Conference on Planning in Germany and Pakistan

SADA hosted International Conference on Planning in Germany and Pakistan based on the theme “Responding to the challenges of Climate Change.” The conference was held on November 30 and December 1, 2023, where notable international and national speakers presented their work. This conference was held under DAAD in collaboration with NUST, TU Dortmund Germany, UET Lahore, and LCWU Lahore.



National Conference on Regenerative Agriculture

A two-day National Conference on Regenerative Agriculture was organised at SCEE-IESE, NUST on November 15 to 16, 2023 in which distinguished speakers, including industrialists, representatives from agricultural community, government officials, researchers, faculty members, and experts from across the country participated to have a multi-stakeholder engagement and discussion on the existing situation, challenges, and potential solutions and future prospects of sustainable

and regenerative agriculture. The conference was attended by over 120 attendees who greatly benefitted from the enriching perspectives and discussions.



MUNINIP –IV held at PNEC

The 4th Edition of Model United Nations at NUST-PNEC (MUNINIP-IV) was organised from November 10 to 12, 2023, with 338 students participating in the event. 08 Committees, including a replica of PNA & Supreme Court, were formed. Renowned personalities chaired sessions. Commandant PNEC, Cdre Tauqeer Ahmad Khawaja SI(M), graced the Closing Ceremony.



Courtney Powell, COO 500 at NSTP

NSTP, Paklaunch, and the US State Department collaborated to host a USPWC-Paklaunch Accelerator pitching session. Distinguished guests included Courtney Powell, COO of 500 Global, renowned for its \$2.7 Billion AUM. The event boasted notable attendees like Dr Rizwan Riaz and Kate Somvongsiri, providing networking opportunities for startup founders and the NSTP community.



Willem C Vis International Commercial Arbitration Pre-moot (Asia Pacific Rounds) Astana, Kazakhstan

A team of six students and a faculty from NUST represented Pakistan in 3rd Astana International Financial Centre & Court (AIFC & IAC) Central Asia Pre-moot on Willem C Vis International Commercial Arbitration in Astana Kazakhstan on March 15, 2023. After gruelling preliminary rounds, the team made it to final round where they competed against Tashkent state university Uzbekistan. After this successful tour, the team represented NUST and Pakistan international arbitration moot held in Vienna Austria in April 2023.



HSRC 2023

The 6th HSRC 2023, organised by Headstart School's Robofort Centre, united 13 schools and universities for a three-day Engineering and Robotics competition in Islamabad. Modules included AEROS, drones, RC planes, and more. Mechatronics students from NUST College of Electrical & Mechanical Engineering secured top honours. Over 350 students showcased innovation, making it a true celebration of innovation and skill.



MatSEC-2023

The MatSEC Conference on Sustainable Energy and Climate Change, held on August 23, 2023, aimed to foster collaboration between Cranfield University and Pakistani institutions. Key participants included Prof Dr Osman Hasan, Prof Dr Amir Azam Khan, and Prof Dr Nasir M Ahmad. The event provided a platform for sharing advancements and strategies to address sustainability challenges.



NUST Rocket Team inspiring youth through stem activities

With notable accomplishments like constructing Pakistan's first student-built sounding rocket and surpassing US university teams at the Spaceport America Cup, NUST Rocket Team (NRT) from Pakistan Navy Engineering College (PNEC) is inspiring the youth through engaging STEM activities.

Their recent achievement of developing an in-house rocket propulsion system in 2023 further fuels their

commitment to propelling Pakistan's space industry forward and foster a passion for space sciences among the younger generation.

NRT was elated to visit Beaconhouse Clifton Campus as part of its mission to flourish space science culture among the masses.



“Protocols for Standard Energy Audit & IoT-based Monitoring in the Commercial & Industrial Sector”

A two-day training course, jointly organised by AEE, Pakistan Chapter, and E-Triangle Automation Company, concluded on December 22, 2023, at SCME. Professionals from various companies participated, gaining insights into energy audit, digital twins, and IoT-based monitoring. Trainers included industry experts and academics from NUST and E-Triangle Automation.



International Conference on Recent Trends in Statistics & Data Analytics

NUST School of Natural Sciences (SNS) hosted the 2nd International Conference on Recent Trends in Statistics & Data Analytics (ICRTSDA) from December 14 to 15, 2023. Dr Amjad Javaid Sandhu, Director General of the Federal Bureau of Statistics, graced the event as chief guest and shared his views about the use of Statistics, Data Science, and Data Analytics in research and policymaking. The conference included 28 oral and 10 poster presentations covering different topics in Statistics (Theory, Method, and Application), Data Science, and Data Analytics.



SNS students win national Mathematics competition

A team of two students, including Rashid Talha and Mudassir Aizaz, from NUST School of Natural Sciences (SNS) clinched first position at a national Mathematics competition held at the National University of Modern Languages (NUML), Islamabad on December 1, 2023. Both are currently in their third-year of BS Mathematics. The event, titled Battle of the Brains, was organised by NUML, attracting participation of 20 teams from different universities of Pakistan.



Int'l Conference on Water, Energy and Environment for Sustainability

NUST School of Natural Sciences (SNS) held the third edition of its flagship "International Conference on Water, Energy & Environment for Sustainability" from August 16 to 18, 2023. The conference was aimed at addressing the pressing challenges and finding innovative solutions vis-à-vis these interconnected fields. Dr Khurshid Husnain, Advisor COMSTECH, graced the conference as chief guest. It served as a platform for researchers, policymakers, industry professionals, and stakeholders to share knowledge, exchange ideas, and collaborate towards a sustainable future. The event was sponsored by NUST, Higher Education Commission (HEC) and Pakistan

Science Foundation (PSF).

The conference covered a wide range of topics, including water management, energy efficiency, renewable energy, climate change and adaptation, sustainable development, circular economy, and policy and governance. Besides keynote speeches and talks by area experts, the conference also featured poster presentations.





CHAPTER 4
PARTNERSHIPS FOR IMPACT



UN Peacekeeping Ministerial Preparatory Meet

The prestigious event spanning two days, was hosted by the Government of Pakistan in collaboration with the Government of Japan as co-host, at CIPS-NUST from August 30 to 31, 2023. The Preparatory Meet served as a vital precursor to the UN Peacekeeping Ministerial, scheduled in Ghana in December 2023. The event featured sessions comprising panel discussions with particular emphasis on different themes related to the 'Safety and Security of Peacekeepers.'

Chief of Army Staff (COAS) General Asim Munir NI (M) graced the closing ceremony with his presence, and acknowledged the outstanding contributions of peacekeepers. Prominent among others at the two-day event were Mr Atul Khare and Mr Jean Pierre Lacroix, Under-Secretaries-General for the Department of Operational Support and the Department of Peacekeeping Operations (DPO), respectively.



NIPS-Rasanah DoU Signing Ceremony

NUST Institute of Policy Studies (NIPS) hosted a delegation from Rasanah, Saudi Arabia's leading think tank, for a three-day visit. In the delegation's meeting with Maj Gen (Retd) Abid Ejaz Kahloon, Pro-Rector Planning & Resources, NUST, senior officials of NUST and Rasanah shared the strategic overview of their institutions and highlighted the significance of sustained and targeted mutual collaboration. To formalise the partnership, NIPS and Rasanah signed the cooperation agreement outlining areas of mutual interest as well as types, forms and patterns of collaborative activities.



Study tour on women's leadership at US

Prof Dr Noreen Sher Akbar represented NUST on a study tour focused on women's leadership in higher education. Organised by HESSA, USA, the training was hosted at the University of Utah in Salt Lake City, USA, from January 30 to February 13, 2023. The purpose was to provide professional development and networking opportunities to the participants.



NUST welcomes TAI delegation

Led by Ms Derya Gurak, Director of Flight Sciences, a six-member delegation from Turkish Aerospace Industries (TAI) visited the Aerospace Engineering Department at NUST on November 29, 2023. Both parties affirmed their commitment to fostering mutually beneficial collaborations and groundbreaking innovations.



CEO Dante Lab Genomics Italy visits ASAB

CEO Andrea Riposati and Senior Director Generoso Ianniciello of Dante Lab Genomics Italy, along with CEO Yasir M Bajwa and Manager Dr Maira Gulzaman of Dante Labs Genomics Pakistan visited ASAB to explore partnership opportunities in genetic material study and analysis. Dr Rizwan Riaz, Pro-Rector Research, Innovation, and Commercialisation (RIC), NUST, and Ms Sana Maqbool, Director Innovation & Commercialisation Office

NUST (ICON) welcomed the delegation and discussed the establishment of a genomic center at ASAB NUST, as well as the offering of discounts and student internships.



CEO HBL Adnan Pasha explores partnership with NUST

Adnan Pasha Siddiqui, the Chief of Staff to the President and CEO of Habib Bank Limited (HBL), visited Orbit-Ed, an NSTP-based startup. The team showcased its VR training product, particularly highlighting the advanced presentation module. Impressed by their innovative initiatives, Mr Siddiqui expressed interest in future

collaborations, emphasizing the convergence of NUST's capabilities with HBL's vision.



VISITS

STZA Chairman Azfar Manzoor

Mr Azfar Manzoor and his team called on Dr Rizwan Riaz, Pro-Rector RIC NUST and VP NSTP, to explore avenues for collaboration. They received a briefing on NUST's state-of-the-art research facilities and recent fundraising successes of NSTP-based startups. Additionally, updates on cutting-edge laboratories by Turkish Aerospace and Dawlence Pakistan were also shared.



Chief Secretary Gilgit-Baltistan

NSTP-NUST hosted Chief Secretary Gilgit-Baltistan Mr Muhyuddin Ahmad Wani and a group of Provincial Secretaries. Dr Rizwan Riaz, Pro-Rector RIC NUST and VP NSTP, briefed the delegation on potential areas of collaboration. The meeting discussed initiatives in Science and technology and collaboration between IT Parks in Gilgit and NSTP.



Cisco Delegation

A delegation comprising Cisco leadership including Simon Hill (Director Customer Success, UAE), Haroon Raees (Customer Success Specialist, UAE), Syed Faisal Hashi (Customer Success Executive, Qatar), Faheem Anwar (Country BDM, Pakistan, Afghanistan, and Yemen), Aamir Omar (Territory Sales Leader, Pakistan), and Hasan Khan (Technical Solutions Architect, Pakistan) visited NUST and NSTP on March 8, 2023, to strengthen ties and develop a roadmap for progressive partnership.



Commander 12 Corps visits NBC, Quetta

Commander 12 Corps visited the NUST Balochistan Campus (NBC) on October 4, 2023. During the visit, he interacted with campus officials, toured the facilities, and received briefing on various ongoing academic and infrastructural initiatives. The visit concluded with an interactive session with the students.



Coventry University delegation

Coventry University's 18-member delegation visited NUST and other Pakistani universities from November 19 to December 3, 2023. The delegation was sponsored by the British Council and HEC to foster research collaborations. NUST led the grants, facilitating discussions and networking, strengthening ties and research linkages between NUST and Coventry University, marking a milestone in UK-Pakistan academic partnerships.



Delegation from Military Technological College (MTC), Oman

A six-member delegation from Military Technological College (MTC) Oman, led by Dean Dr Mohamed Al Siyabi, visited the Aerospace Engineering (AE) Department, SMME, NUST, on September 12, 2023. The discussions focused on academic and research collaboration, including the initiation of European Aviation Safety Agency B1, B2 training.



NUST inks DoU with Southwest Petroleum University, China

Department of Law, NUST School of Social Sciences (S³H) and Southwest Petroleum University's Law School in China signed a Document of Understanding (DoU) on October 17, 2023. Prominent amongst the participants were Dr Zafar Mahmood, Principal S³H, and Dean Fujingjing from Southwest Petroleum University. Facilitated by the China Study Centre (CSC-NUST), the DoU aims to enhance Higher Legal Education and Teaching, fostering international exchanges, and improving collaborative education mechanisms. The areas of cooperation include Talent Cultivation, Discipline Co-Construction, etc.



PNEC welcomes Economic Minister at Pakistan Embassy in UK

Dr Sameena Zehra, Economic Minister at the Pakistani Embassy in the UK, visited NUST-PNEC on December 5, 2023 for discussions on NUST Formula Student Team (NFST) achievements and STEM education advancement in Pakistan. Joined by Dr Sajjad Haider Zaidi and Dr Mohsin, the meeting highlighted NFST's role in bridging industry-academia gaps and promoting STEM education, including initiatives like F1 in School. Collaboration opportunities with the Commandant PNEC were also explored to further promote the Formula Student culture in Pakistan.



NUST delegation visits Coventry University, UK

Led by Dr Rizwan Riaz, Pro-Rector RIC, a delegation from NUST visited Coventry University, UK, in August 2023. The delegation, comprising faculty members, PhD students, and consortium partners from Pakistani universities, explored various faculties, departments, and research centers at Coventry University. Dr Rizwan Riaz, Prof Javaid Iqbal, and Prof Ibraheem Haneef visited various research centers and held meetings with key officials including Prof Ian M Marshall (Deputy Vice-Chancellor and Chief Operating Officer, Coventry University), Prof Richard Dashwood (Deputy Vice-Chancellor of Research, Coventry University), and Prof Paul Noon, OBE (Pro Vice-Chancellor of Enterprise and Innovation, Coventry University).

Discussions were focused on strengthening research ties and identifying future cooperation opportunities between the two universities.



NTNU (Norway) and NUST sign agreement

Dr Bilal Khan Niazi from SCME signed an MoU with the Norwegian University of Science & Technology (NTNU) in May 2023. The agreement is geared towards promoting faculty and graduate mobility, joint research activities, publications, and special short-term academic programmes between the two institutions.

Federal Minister for Science & Technology inaugurates Khuzdar Block at NBC, Quetta

Federal Minister for Science and Technology, Mr Agha Hassan Baloch, inaugurated Khuzdar Block at NBC, Quetta, on May 3, 2023. The block is dedicated to Artificial Intelligence and Engineering studies. Commending NUST for broadening educational access in underdeveloped regions, the Minister emphasised the role of scientific research in addressing Pakistan's challenges. Rector

NUST, Lt Gen (Retd) Engr Javed Mahmood Bukhari, was also present at the occasion.



NUST signs MoA with Excel Labs

RIC-NUST and Excel Labs, Inc. signed a Memorandum of Agreement (MoA) on March 17, 2023. The understanding includes clinical sample sharing for research purposes, internships, joint research projects, and workshops. Additionally, Excel Labs is offering a 25% discount on all diagnostic tests for NUST employees and students. Speaking at the ceremony, Dr Naseer Ahmed emphasised the importance of industry-academia linkages for student opportunities, while Principal ASAB highlighted the significance of local diagnostic kit development for healthcare sector growth.

NUST signs MoU with ZTBL

A Memorandum of Understanding (MoU) was signed between NUST and Zarai Taraqiati Bank Limited (ZTBL) on July 25, 2023. The ZTBL team was given a tour of NSTP and SINES, where they were introduced to various agricultural-related projects.



Dr Hussain M Wahedi represents NUST at UNGA78 Science Summit 2023

Associate Professor Dr Hussain Mustatab Wahedi from ASAB represented NUST at the United Nations General Assembly (UNGA78) Science Summit 2023. He discussed 'Principles and Significance of Frugal Innovation in Healthcare,' emphasising resource-efficient healthcare research. The session, held on September 15, 2023, explored global frugal innovation impact. Dr Wahedi highlighted innovative healthcare products developed by NUST and Pakistani startups, underscoring their importance for sustainable development goals.



NSTP and Google Cloud show support for woman entrepreneurs

NSTP-NUST hosted an 'Empowering Woman Entrepreneurs: Turn Your Difference into an Advantage!' event in collaboration with Google Cloud. Google Singapore's Maryam Arshad Mahmood & Esna Ong shared insights on harnessing Google Development Group, exploring platforms, and scaling businesses.



NSTP collaborates with PakLaunch for Silicon Valley Webinar Series

NSTP partnered with PakLaunch to host a successful webinar series featuring Silicon Valley professionals. Topics included Venture Capital funding and startup scaling strategies. Many distinguished speakers like Yousuf Khan, Dr Umar Saif, Faisal Aftab, and William Bao Bean graced the virtual platform with valuable insights during the sessions.



MoU with HR Office, Presidency of Türkiye

NUST achieved a historic milestone by becoming the first international university to sign an MoU with the Human Resource Office, Presidency of the Republic of Türkiye. The signing ceremony, including a NUST delegation led by Dr Rizwan Riaz, Pro-Rector RIC, NUST, took place on April 14, 2023, at the Çankaya Presidential Mansion in Ankara. The MoU aims to foster collaboration in areas of mutual interest, particularly the placement of NUST graduates in Türkiye for internships, jobs, and higher education. H.E. Dr Salim Atay, President of the Office of Human Resources, commended NUST's achievements and signaled potential

benefits and future growth opportunities.



NUST to partner with Azerbaijani universities

A delegation led by Dr Rizwan Riaz, Pro-Rector RIC NUST, visited Baku, Azerbaijan from October 17 to 19, 2023. During the visit, they signed agreements with prominent Azerbaijani universities, including Azerbaijan Technical University (AZTU) and ADA University. The agreements aim to enhance mutual progress in education and research through initiatives such as internship exchanges, student competitions, and joint research ventures.



NUST, TCS collaborate for sustainability with 'Going Electric' event

NUST and TCS Pakistan jointly held the 'Going Electric' launch event on December 5, 2023, to promote sustainability in Pakistan. Dr Rizwan Riaz, Pro-Rector RIC, NUST, was the chief guest, joined by DG Projects NUST, Maj General Dr Saeed Ur Rehman Sarwar, Group CEO of TCS, Mr Moin A. Malik, and CEO of Ezbike, Mr Mohammad Hadi.

Dr Rizwan Riaz highlighted the collaboration's significance, emphasising the synergy between industry and academia. He stressed the importance of university-driven research and providing industry solutions. The event concluded with an MoU signing between Mr Malik and Director ICON NUST, Ms Sana Maqbool, pledging to support entrepreneurial growth in Pakistan.



NUST and BUU of Türkiye forge partnership

NUST and Bursa Uludağ Üniversitesi (BUU) of Türkiye entered into a partnership on April 10, 2023. The NUST delegation led by Dr Rizwan Riaz, Pro-Rector RIC, NUST, visited Bursa for this purpose. Under the newly forged partnership, NUST students could benefit from BUU's expertise and advanced facilities across various fields, including automotive, health sciences, food, and agriculture, besides joint research projects and academic exchanges.

Expressing his thoughts, Prof Dr Ahmed Saim Kılavuz, Rector of BUU, said that the partnership with NUST would help enhance interaction between individuals and share expertise in automotive and health sciences simulation facilities. This agreement marks a significant milestone in strengthening academic and research partnerships between NUST and BUU.



ICESCO (Morocco) and NUST ink partnership to advance higher education and research

Islamic World Educational, Scientific & Cultural Organisation (ICESCO) and NUST reached an understanding on March 22, 2023, to enhance higher education and research in Islamic countries. Rector NUST Lt Gen (Retd) Engr Javed Mahmood Bukhari and DG ICESCO, Dr Salim M AlMalik, signed the agreement at NUST School of Interdisciplinary Engineering & Sciences (SINES). Dr Mukhtar Ahmed, Chairman Higher Education Commission of Pakistan, also was also in attendance.

An ICESCO Chair will be established at NUST to strengthen ties and promote academic and scientific cooperation, particularly in Data Analytics. The partnership aims

to foster joint research, faculty and student exchange programmes, and scientific activities, advancing sustainable development and social harmony in the Islamic world and beyond.



PTC delegation explores collaborative opportunities

Pakistan Tobacco Company (PTC) delegation, led by CEO & MD Mr Ali Akbar, visited NUST on January 31, 2023, and held a meeting with the Pro Rector RIC, NUST. The delegation received a guided tour of the NSTP and SINES. They were impressed by the state-of-the-art labs, research projects, and technological advancements showcased by NUST faculty and students. They expressed keen interest in collaborating with NUST, particularly in the areas of Technology and Data Analytics.



General partner of Zayn VC at NUST

Dr Rizwan Riaz, Pro-Rector RIC, NUST, met with General Partner of Zayn VC, Faisal Aftab, to discuss funding for NSTP startups and R&D at NUST. The meeting was also attended by A/Dir NSTP Emmad Ahsan, and Head of Marketing NSTP, Zayn N. Qureshi.



PEC Chairman and BUISTEMS VC visit NBC, Quetta

Chairman Pakistan Engineering Council (PEC) Engr M Najeeb Haroon and Vice Chancellor BUISTEMS Dr Khalid Hafeez visited NBC, Quetta, engaging in collaborative discussions with faculty members. Emphasising environmental sustainability, the visit included a symbolic tree plantation activity, tours of academic blocks and discussions on ongoing capstone projects.



NUST research team completes project with Engro Polymers and Chemicals

Dr Samina Naveed's research team, along with Dr Tanweer ul Islam, completed the project titled 'Forecasting the PVC Demand Based on Leading Indicators' in collaboration with Engro Polymers and Chemicals. The meeting on October 31, 2023, attended by Engro's CEO, Mr Jahangir Piracha, Pro-Rector Academics, Dr Osman Hasan, and S3H Principal, Dr. Zafar Mahmood, applauded the model's performance and the team's work. This successful project paves the way for future collaborative research between NUST and Engro.



IESE-SCEE partners with UNESCO to promote sustainable agriculture

Dr Hassan Anwer, Assistant Professor specialising in Nanotechnologies and functional films, secured a PKR 8 million grant in October 2023 for his project titled 'Development of a Slow-Release Fertiliser to Minimise the Nutrient Loss and Environmental Impact of Nitrogenous Fertilizers.' The UNESCO-funded project aims to address the significant wastage of nitrogen-based fertilisers (NFs) in agriculture, estimated at 70%-75% due to various factors such as volatilisation, photodecomposition, and leaching.



IESE-SCEE secures 349,375 Euros EU grant for RESURGENCE project

NUST School of Civil & Environmental Engineering (SCEE-IESE) secured a funding grant worth 349,375 Euros in July 2023 for the European Union-sponsored project 'Industrial Water Efficiency: Reuse, Resource Recovery and Energy Efficiency for Greener Digitised EU Processes (RESURGENCE).' Dr Sher Jamal Khan and Dr Muhammad Arshad, both tenured professors at SCEE-IESE, are engaged in the project.

IGIS-SCEE signs DoU with Hongik University, Seoul, Korea

SCEE's Institute of Geographical Information Systems (IGIS) at NUST signed an MoU with the Department of Civil and Environmental Engineering at Hongik University, Seoul, Korea. As part of the collaboration, IGIS-SCEE conducted an international webinar titled 'Remote Sensing and GIS Applications in Hydrology,' showcasing thesis-related work presentations by MS and PhD students from both institutions, with participation from scholars across various disciplines.

The agreement aims on academic collaboration in various fields including Water Resource Management, Remote Sensing, Geoinformatics, Smart Materials,

Seismic Engineering of Structures, and Smart Devices development. The collaboration entails faculty and student exchanges, joint research projects, and the organization of webinars on advanced topics.



SCEE partners with NDRMF

NUST-SCEE partnered with NDRMF for research on Disaster Risk Reduction (DRR), climate change adaptation, and mitigation in Pakistan. Following the signing of an MoU, a team from SCEE NUST visited National Disaster & Risk Management Fund (NDRMF) to initiate scientific research on climate-induced disasters and risk reduction, with a particular focus on areas vulnerable to hazardous glacial lake outburst floods (GLOFs).



Secretary Planning Development & Special Initiatives visits NBC

The Secretary Planning, Development & Special Initiatives visited NBC on December 18, 2023. Dean, Campus Director, and Director of Works, briefed him about campus operations and ongoing construction projects. The visit included a campus drive, tour of the academic block, and discussions, offering an overview of NBC's infrastructure and educational endeavours.



ANNUAL **DONOR DINNER** & **PARTNERSHIP** AWARDS



To celebrate longstanding association with its partners, NUST hosted the annual dinner reception on June 20, 2023. Ms Maria Qadri, Director of Advancement shared major highlights of the NEED Initiative, a dedicated programme established for educational support of financially disadvantaged students enrolled at NUST. Dr Amjad Saqib, Founder Akhuwat Foundation and Vice Chairman of Punjab Educational Endowment Fund graced the event as a keynote speaker. Over **120** business partners representing diverse industries, government partners, philanthropists, and esteemed friends of NUST graced the event. During the networking session, Rector NUST Engr Javed Mehmood Bukhari also interacted with the participants.



NUST circular endowment agreement with Interloop Limited



NUST Circular Endowment Agreement with Muslim Hands



NUST circular endowment agreement with Astral Constructors

Fundraising

NUST extensive outreach efforts successfully engaged over 250 donors across diverse regions, including the UK and Europe, the USA, and the Middle East. The donor base includes alumni, community members, governmental organizations, and corporate clients. As of 2023, the total fund collected till date against multiple programmes is PKR 1,313 M (excluding government/scholarship funding).

Endowment Building

NUST is committed to expanding perpetual free seats for deserving students. In the year 2023, there has been a noteworthy increase of 52.3% seats compared to the previous year. Currently, NUST has 2,409 scholarship awardees. This collective impact entails an annual disbursement amounting to PKR 670 M.

NUST inaugurates international office in UK

Leveraging relationships cultivated through outreach visits, NUST inaugurated its first international office in the United Kingdom. The office holds the mandate to efficiently facilitate charitable donations from across Europe and the UK to Pakistan. This dedicated fundraising channel will facilitate streamlining the donation process, and significantly expand the donor base at the international level. Prior to this, with alumni support, NUST has successfully established NUSTian USA.



Prof James' from Coventry University UK

Led by Prof Ibraheem Haneef and Dr Sara Ali, NUST-SMME secured two competitive research mobility grants worth £128,243 in collaboration with Coventry University, UK. During Prof James' visit in June 2023, significant outcomes were achieved, including the inauguration of the 'NUST-Coventry Human-Robot Interaction Lab,' a complimentary course on practical reinforcement learning for NUST PG students, fully sponsored internships for 5 MS students, and fully funded PhD positions for 16 students from SMME and SEECS at Coventry University.



Visit to Pakistan Council of Scientific and Industrial Research (PCSIR), Lahore

Principal SCME Prof Dr Amir Azam Khan, along with the Head of Chemical Engineering Department, Dr Erum Pervaiz and Dr Waheed Miran visited Pakistan Council of Scientific & Industrial Research (PCSIR), Lahore in December, 2023. The visit included a comprehensive tour of various facilities, focusing on Applied Chemistry Research Centre, Mineral Processing Research Centre, and others. The visit aimed at exploring potential future collaborations, opportunities for student internships and the potential commercialization of PCSIR products.

Aerospace Cooperation Webinar

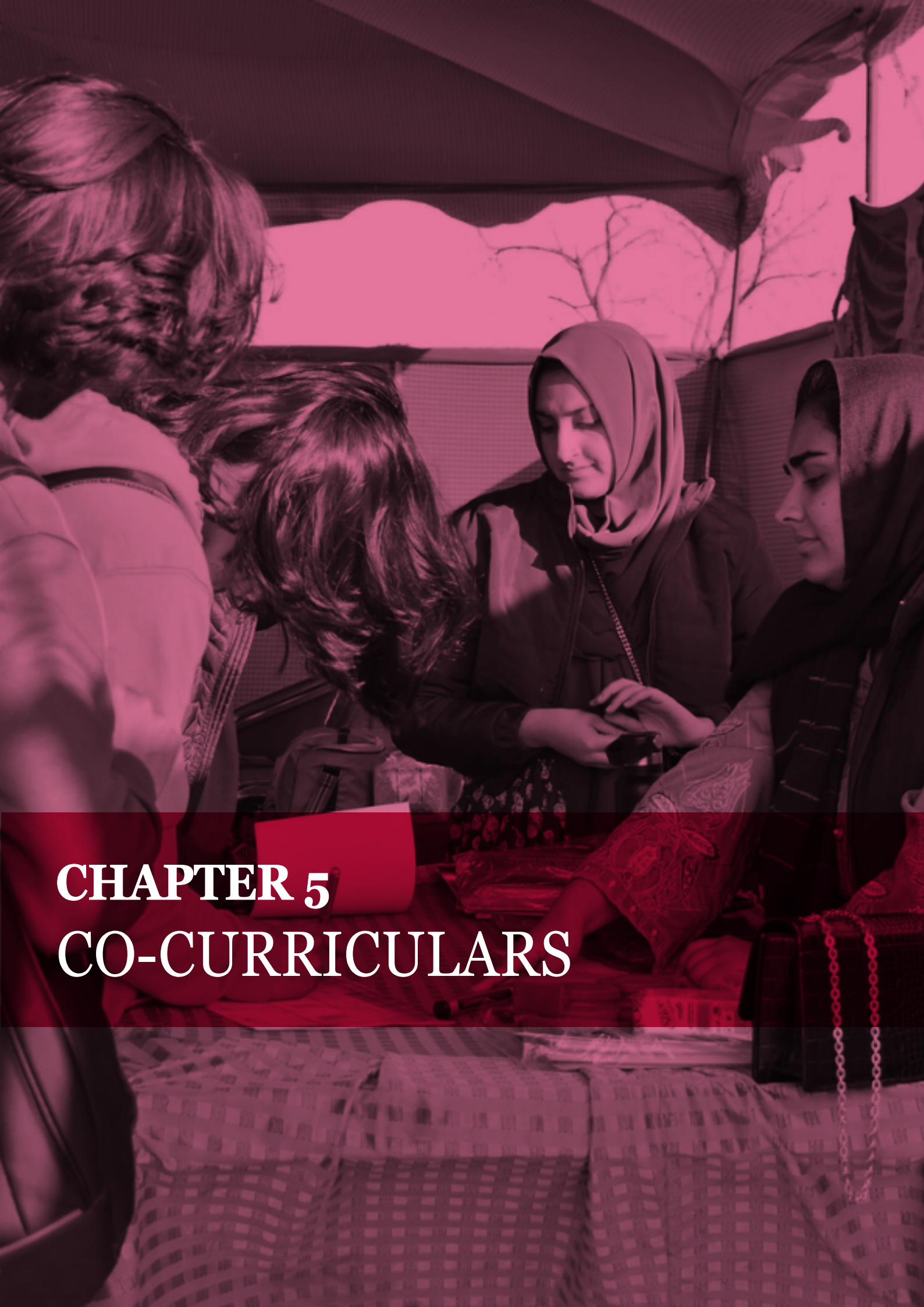
The NUST Academics Directorate organised an 'Aerospace Cooperation Webinar' between Istanbul Technical University (ITU), Turkey, and NUST on May 24, 2023. Experts from both countries shared their experience and expertise with students, paving the way for further collaboration. Future initiatives include exchange programmes for faculty and students between NUST and ITU.



PEC team launches BE Aerospace

The PEC team, led by Engr Prof Dr Khalid Rehman and Engr Salman Ahmed, conducted a Zero Visit, vis-a-vis accreditation of the BE Aerospace programme at NUST, on June 6, 2023. They assessed the feasibility by inspecting labs, offices, the library, and infrastructure facilities. The Aerospace Engineering Department at SMME offers a modern curriculum in Aerospace, Aviation, and Aeronautics, in collaboration with industry leaders like TAI. The department boasts highly qualified faculty and state-of-the-art infrastructure, with the inaugural batch demonstrating a commitment to merit and gender equality with 50% female representation.



A photograph of four young women sitting on a patterned rug inside a tent. One woman in the center is looking at a smartphone held in her hands. To her right, another woman is looking at the phone. In the foreground, the back of a woman's head and shoulders is visible. The scene is lit with a warm, reddish-pink light. A semi-transparent red banner is overlaid at the bottom of the image.

CHAPTER 5 CO-CURRICULARS

National Literary Festival 2023

The National Literary Festival 4.0, organised by the NUST Literary Circle at NUST, Islamabad, took place from March 10 to 12, 2023. The festival aimed to promote literature and foster a culture of reading and writing among students. It brought together writers, poets, literary enthusiasts, and students from across Pakistan. The closing ceremony marked the end of the successful festival, with organizers expressing gratitude to participants, volunteers, and sponsors. Winners of various competitions were announced and awarded certificates and prizes. Cultural performances showcased Pakistan's rich cultural diversity, making the event memorable.



National Science Bee 2023

The 10th National Science Bee, organised by the NUST Science Society (NSS), welcomed over 650 participants from 122 teams across Pakistan. The event, held from February 10 to 12, 2023, featured challenging modules, a formal Theme Dinner for networking, and the Buzz Night tradition. The STEM Expo connected inventors with industry experts, while panel discussions ignited meaningful conversations.



NSTP's "Innovation Inside" engages 4500+ students

NSTP launched "Innovation Inside" in 2022, a programme aimed at educating students about Pakistan's innovation and startup ecosystem through interactive events. In 2023, over 4500 students from various institutions, such as Beaconhouse, University of Gujrat, and Pakistan-U.S Alumni Network (PUAN), participated in sessions with NSTP's management. These provided valuable insights into innovation, entrepreneurship, and opportunities to collaborate with NSTP tenants.



NUST represented at "Universities as Frontline Responders"

Talioires Network (TN) and Open Society University Network (OSUN) have launched the global initiative 'Voices from the Margins – Listening and Raising Up Stories of Universities as Frontline Responders,' with the aim of uniting global higher education leaders to share frontline experiences. Ms Maheen Mumtaz, Assistant Manager Community Service at NUST, gave a brief on NUST's civic engagement activities, and led a workshop on "Universities as Frontline Responders" in Madrid on October 18 to 19, 2023.



NUST Career Connect 2023

The NUST Placement Office (NPO) held a successful two-day NUST Career Connect 2023 in the federal metropolis. The event was inaugurated by Pro-Rector RIC Dr Rizwan Riaz. Over 100 firms from various sectors participated in the career fair, seeking to recruit graduates from diverse disciplines. Notable organisations such as Mobilink Microfinance Bank, Defense Housing Authority, S&P Global, and Zong were present. Around 1900 students from NUST constituent schools and colleges in Islamabad, Rawalpindi, and Risalpur attended the event.



NUST

Supports

Gaza Relief Efforts

NUST Community Services Club (NCSC) initiated a donation drive in October, to aid the Palestinian brothers and sisters amidst the humanitarian crisis in Gaza. The drive welcomed in-kind contributions, including medicines, canned foods, and hygiene kits, adhering to specific guidelines for optimal aid impact. Donation booths were strategically stationed across the NUST campus, extensively covering both boys' and girls' hostels, as well as residential areas.

NCSC successfully handed over donations amounting to PKR 0.58 million to the Al-Khidmat Foundation at the ASAB Seminar Hall on November 30, 2023. Mr Asad Mehmood, Director of Student Affairs, presented the donation to Prof Dr Hafeez ur Rahman, President of Al-Khidmat Foundation. With a longstanding presence in Gaza since the onset of conflict, Al-Khidmat Foundation has been ensuring direct and impactful utilisation of every donation received.

**CONTRIBUTE TO THIS NOBLE CAUSE
THROUGH DONATION OF FUNDS**

Account no: 22927902085701

Account title: NUST Student Affairs AC HBL NUST H-12 Branch

NUST Orientation 2023

NUST Orientation 2023 took place at the Islamabad campus from September 4 to 8, 2023. Over 1000 students participated in an array of activities organised by the Clubs and Societies, including NUST Law Society (NLS), NUST Physics & Astronomy Society (NPAS), etc. NCSC, in collaboration with the Orientation '23 team, arranged a visit for orphan students. Freshmen also participated in activities such as "Crack It Out" by NUST Science Society (NSS), a Scavenger Hunt by the NUST IEEE Club, and an e-Gaming Event by the NUST Technical Amusement Club (NTAC). In addition, NARC organised an Archery Competition for the newbies.



NUST Cultural Fest 2023

The *Bazm-e-Pakistan* Society organised NUST Cultural Fest on February 24, 2023. The festivities commenced with the setup of traditional breakfast stalls at the SCME ground in the morning. Throughout the day, visitors could try out a diverse array of delicious food options from various stalls. Alongside the culinary delights, attendees enjoyed different rides such as a pirate ship and a ferris wheel. As the day progressed, NUST students showcased traditional dances on stage, complemented by additional food stalls. As dusk approached, the event transitioned to the lively Dhamal Night festivities, featuring a DJ Night that captivated attendees.



NUST Summer School

The NUST Summer School 2023 served as a vital orientation for prospective students to acquaint themselves with NUST's academic and campus life. The event witnessed a remarkable turnout, with over 100 participants coming from across the country. The attendees engaged in a meticulously planned series of orientation and social activities over nine days. Through well-coordinated sessions, participants gained insights into various academic disciplines, campus resources, and extracurricular opportunities. The successful conclusion of the event underscored its importance in preparing students for a fulfilling journey at NUST.



COMMUNITY SERVICES

Blood donation drives

NUST Community Service Club (NCSC) organised two Blood Donation Drives, collecting over 600 pints of blood from October 16 to 18, and over 550 pints from November 26 to 28, 2023. NUST held the drives in collaboration with various partners. A special camp on February 14 to 16, 2024, gathered a record-breaking 525 pints to support Thalassemia patients, showcasing NCSC's impactful contributions to healthcare.



NCSC promotes dental hygiene at Ashiana Trust

As many as 34 volunteers from NCSC visited Ashiana Trust to promote dental hygiene awareness on December 25, 2023. They conducted an interactive session for 15 boys, illustrating proper toothbrushing methods and stressing the significance of routine dental check-ups.



Visit to Pehli Kiran School - Elevate Project

NCSC volunteers organised an educational visit to Pehli Kiran School on May 18 to 19, 2023, focusing on hands-on science experiments for the children. The experiments covered topics like the solar system, sound vibrations, and properties of light, aiming to enhance the students' learning experience.



Library set up at Haraf Foundation School

NCSC TABA team and NUST Book Club (NBC) successfully completed "Book Asylum," a project to establish a library at Haraf Foundation School, Islamabad. The project is aimed to empower underprivileged students by providing them with access to a library with books ranging from kindergarten to grade 5 level. With sponsorship funds, the team procured furniture, including a bookshelf and table, and set up 450 donated books in the library.



NCSC's Ramazan Ration Drive

NCSC's Ramazan Ration Drive raised PKR 952,973 to aid over 200 underprivileged families on April 8, 2023. Launched on March 13, 2023, NCSC students identified recipients in Mehrabadi, issuing tokens for ration collection at NUST. Additionally, 50% of the ration bags supported deserving NUST employees, showcasing NCSC's impactful community support.



Workshop on Autism Sensitisation

NCSC TABA and NUST BioReach Society held an Autism workshop at Dar-e-Arqam School on May 20, 2023. Experienced teachers and a brave mother shared insights on autism causes and treatments in Pakistan, sensitising the school community to better interaction with autistic children and emphasizing empathy.



PSL final screening for fundraising

NCSC, in collaboration with NUST Media Club and Teach for Pakistan, hosted a PSL final screening on March 18, 2023. The event included food stalls and face painting for attendees. All ticket proceeds will support Project Al Qalam, providing education for underprivileged students, specifically benefiting 15 children of NUST NG staff.



Teach for Pakistan students' visits NUST

Teach for Pakistan students visited NUST School of Mechanical & Manufacturing Engineering (SMME) and School of Social Sciences & Humanities (S³H) on April 6, 2023. They explored the Robotics & Artificial Intelligence lab and the Human Systems Lab, followed by the Radio and TV studios at S³H. The students also attended career counseling sessions on higher education, and a presentation on the NUST admission process.



C³A, DBS organise Mental Health Awareness Event

C³A, in collaboration with the Department of Behavioural Sciences (DBS-S3H), organised a three-day event titled "Mental Health is a Universal Human Right" from October 10 to 12, 2023. The event aimed to promote mental health awareness within the NUST community in celebration of World Mental Health Day 2023.



Drug Addiction Awareness Seminar

NUST Character Building Society organised events from December 1 through 11, 2023, to raise awareness on drug addiction and self-control. Renowned speakers Muhammad Ali and Raja Zia ul Haq shared insights into overcoming addictions and personal transformation.



Education & Community Services Society (ECSS-PNEC)

The President of ECSS, accompanied by the Vice President, General Secretary, Director Admin, Mentor Communications, and Naval officers, visited the Old Age Edhi home in North Karachi on September 28, 2023. During the visit, the delegation engaged with 25 senior citizens, who graciously shared their life experiences. The visit concluded with the team providing essential items such as fruits, bakery items, groceries, one month's gas supply, and winter clothing to the residents.



NUST holds Nature Conservation Walk

As part of the HEC Green Youth Movement (GYM) initiative, the NUST Environment Club (NEC) conducted Nature Conservation Walk at Shah Allah Ditta Caves in Islamabad's Margalla Hills on October 21, 2023. The event sought to enhance environmental awareness and advocate for sustainable practices. Participants actively participated in litter cleanup, trail upkeep, and were educated on the "Leave No Trace" principles to endorse responsible outdoor conduct and waste management.



NUST and Cisco explore opportunities for collaboration

A total of 681 students from NUST School of Electrical Engineering & Computer Science (SECS) and the NUST College of Electrical & Mechanical Engineering (CEME) received free Cisco certifications. Cisco leaders from the UAE, Qatar, and Pakistan visited NUST on March 8, 2023 to enhance partnerships and discuss future endeavours. Additionally, in May 2023, the University Advancement Office (UAO) team attended the Cisco Summit in Paris to explore avenues for international collaboration and expansion.



NLC organises *Dabistan-e-Mohabbat*

NUST Literary Circle organised "*Dabistan-e-Mohabbat*," a student discussion platform, on October 19, 2023. The session aimed to reignite a love for literature across various cultures and art forms, including painting, music, and poetry, fostering contrasting discussions and opinions on literature from different languages.



Open House & Job Fair at MCE-NUST

NUST Military College of Engineering (MCE) at NUST Risalpur organised a successful Open House & Job Fair on June 1, 2023, featuring innovative Final Year Design Projects (FYDP) from five engineering departments. Despite Risalpur's remote location, the event attracted visits from eight prominent industries and companies, all expressing keen interest in hiring graduates. A total of 37 projects were showcased, with five projects qualifying to

advanced stages in FICS (Finding Innovative & Creative Solutions), indicating their potential as marketable products.



Celebrating International Women's Day

In recognition of the various challenges and obstacles often encountered by women, NSTP startups came together to celebrate International Women's Day. This special occasion provided an opportunity to reflect on the unique struggles faced by women in various spheres of life and to celebrate their resilience, achievements, and contributions to society.



NUST participates in USAID-sponsored HESSA Project Summit 2023

The USAID-sponsored HESSA project held its second four-day summit from June 19 to 24, 2023, with 16 universities nationwide participating. NUST fielded a five-member team, including 2 C³A officers, advocating for leadership in Career Readiness and Mental Health components. Through HESSA, C³A shared best practices with 15 partner universities.



NCBS hosts seminar on conquering addictions

NCBS organised a seminar titled "Unleashing the Fire Within - Burning Addictions" on December 1, 2023 at the SCEE Seminar Hall. Renowned speakers Muhammad Ali and Raja Zia ul Haq guided students on conquering addictions, aiming to inspire transformation and promote an addiction-free future.



NUST Lapel Pin Award Ceremony 2023

The Lapel Pin Award Ceremony, held on May 4, 2023, recognized the outstanding efforts of Office Bearers of various NUST Clubs and Societies for organizing phenomenal events throughout the academic year 2022-2023.



PNEC students participate in Pakistan Sustainability Week 2023

The Pakistan Sustainability Week 2023, held at the Expo Centre Karachi from September 7 to 9, brought together academics, industry professionals, students, and environmental enthusiasts to address sustainability issues. Cdre Dr Sajjad Haider Zaidi inaugurated the event, adding prestige. The NUST PNEC Team Envision secured first place in the Projects Competition, showcasing commitment to sustainability. Panel discussions, led by experts like Dr Ashad Aiz and Dr Tahir Abdul Hussain Ratlamwala, offered insights into sustainable practices and research collaborations.

PNEC Olympiad



PNEC's Olympiad '23, promoting sportsmanship and an active lifestyle, hosted 700 students from 32 Karachi universities. Cdre Tauqeer Ahmad Khawaja inaugurated the event on October 6, with matches ongoing until October 8. Cdre Rashid Nazir awarded trophies at the closing ceremony, where PNEC-NUST claimed the Championship Trophy, with IOBM as the Runner-up.

SCEE-NICE holds annual sports gala



The annual "SCEE-NICE Sports Gala" was held from March 6 to 10, 2023, with the aim to foster a healthy lifestyle and highlight sports' significance for physical and mental wellbeing. With cricket, football, basketball, badminton, and table tennis, students showcased their athleticism, fostering community and team spirit through competition and camaraderie.

MCS Sports Week 2023



NUST Military College of Signals (MCS) organised Sports Week 2023, from February 27 to March 3, 2023, offering a diverse range of sporting activities, including cricket, football, basketball, badminton, and table tennis. The aim of these competitions is to promote participation in extracurricular and healthy activities among students. A significant number of faculty, staff, and students actively participated, showcasing impressive sporting skills throughout the week.



CHAPTER 6 ALUMNI AFFAIRS

NUST Alumni Association 2023-2026

The NUST Alumni Association (NAA) completed its three-year term in June 2023, leading to the commencement of elections for forming the new NUST Alumni Association (NAA). The electoral process for the NUST Constituent Alumni Association (NCAA) occurred across 16 constituent schools and colleges. As a result, alumni representatives from 9 institutes were successfully elected. Currently, the NUST Constituent Alumni Association focuses on enhancing engagement at the school/college level. The Presidents for the respective NUST Constituent Alumni Associations are listed below:



Alumni Talk Series 2023

NUST hosted a series of Alumni Talk events in 2023, featuring distinguished speakers from various fields. These talks covered a wide range of topics, from career development strategies and soft skills to graduate school opportunities and industry innovations. Alumni shared valuable insights and experiences, aiming to inspire and guide current students in their academic and professional journeys. Topics included civil service careers, academic opportunities abroad, positive attitude, industry innovation, and career pathways. These events provided valuable networking opportunities and empowered students to explore diverse career avenues and enhance their skill sets for future success.



NUST ACHIEVEMENTS

8 INTERNATIONAL CHAPTERS



**DR HAMMAD M
CHEEMA**

Appointed as a board member of the Punjab Information Technology Board (PITB)



MAHA YUSUF

Presidential Postdoctoral Research Fellow at Princeton University



**SULTAN ABDUL
WADOOD**

Presidential Postdoctoral Research Fellows at Princeton University



DR SEEMAB LATIF

Won the Asian Development Bank Global Challenge



DR KASHIF SIDDIQ

Invented the world's first solid-state 360-degree sensor architecture



AMNA BAIG

Awarded the prestigious Eisenhower Fellowship, USA

ALUMNI ACCOMPLISHMENTS

4 NATIONAL CHAPTERS



KHADIJA SULTAN
2nd position in the
World Psychiatric
Association's Thematic
Conference



**SHAHZADA UMAR
ABBAS BABAR**
SSP Safe City Operations, ICT



MEHWISH NASIM
Received "The Women in
Tech Western Australia
(WitWA 2023)" award



SARAH QURESHI
CEO of Aero Engine Craft



RIZWAN GHAFFAR
Principal Engineer at
Broadcom Inc, USA



AWAIS SHAFIQUE
NUST Alumnus in Forbes 30
under 30 for Europe

Alumni Convention – Toronto, Canada

Nustian Canada hosted its largest gathering in the Greater Toronto Area (GTA) in April 2023, drawing over 100 alumni and their families. The event marked a significant milestone in fostering engagement among Canadian alumni and facilitating collaboration among members. This vibrant get-together showcased the strength of the NUSTIAN community in Canada, highlighting the enduring bonds and shared experiences among its members.



Venturing beyond the Borders

To strengthen the connections with alumni based in France, the alumni meetup was arranged at Maison Noura, Paris, on May 15, 2023. Ms Maria Qadri (Director Advancement), and Ms Rubab Asif (GM Alumni) shared the exciting updates about NUST. NUST Alumni from various multinational companies joined the meetup including Saad Mushtaq, Muhammad Qammar Zaman,

Muhammad Karam, Nouman Saleem, Hashim Sirhindi, Yasser Toor, and Dr Shams Qazi.



Unveiling the Spirit of NUST Alumni Network

Another Alumni and Community Event was held on November 8, 2022, in Houston, Texas. NUST delegation was headed by Pro-Rector RIC Dr Rizwan Riaz and included Director Coordination Mr Imran Malik, Director Advancement Ms Maria Qadri who briefed the alumni and leading members of Pakistani diaspora on NUST's endeavors for world-class higher education.



Revealing the Essence of NUST Alumni Network

Lt Gen (Retd) Engr Javed Mahmood Bukhari, Rector NUST, hosted the first-ever alumni meetup in Xian, China, on October 10, 2023. The event sparked discussions on strengthening the NUST bond exploring avenues for mutual support and adding a touch of nostalgia, souvenirs were distributed among the alumni.



NUST Alumni Reunion at GITEX GLOBAL 2023

NUST Alumni in UAE gathered at "GITEX GLOBAL, the Largest Tech and Startup Show in the World" from October 16 to 19, 2023. Mr Haroon Raees (MCS 1996), President NAA – UAE Chapter, welcomed the NUSTIANS serving in different global organizations and shared the NUSTIANS spirit.



Spirit of Unity Across Borders

NUST Alumni in France gathered for a delightful dinner meetup at Khajuraho, Paris on October 14, 2023. Four NUSTIANS came together including Saad Mushtaq (CEME 2006), Dr Yasir Toor (MCS 2005), Hashim Sirhindi (MCS 2005), and Qamar Zaman (SEECs 2012) to share laughter, NUST stories, and warmth of cherished friendships.



Seoul, South Korea

NUST community in Korea warmly embraced newcomers with an engaging meetup in Seoul, Korea on October 8, 2023. The meetup was held in Arabesque Itaewon, Seoul, with the participation of 21 NUST alumni who gathered to extend a warm welcome to those venturing into higher education in Korea.



NUSTIAN USA SV Annual Event 2023: a Celebratory Milestone

NUSTIAN USA commemorated its 5th anniversary on November 5, 2023. A total of 150 attendees including NUSTIANS from NorCal, SoCal, and Pakistan Entrepreneurs gathered and added a flair to the networking event. Ambassador Sardar Masood Khan, who graced the occasion as the guest of honour.



ALUMNI MEETUPS

ALUMNI VISITS



Adeel Abbas (CEME 2001), Staff Software Engineer at Twitter, USA visited NUST on January 10, 2023.



Syed Faran Hashmat Rizvi (SECS 2013), Lead Discipline Engineer at Chemanol, KSA - February 8, 2023



Waqas Idrees (CEME 2013), Senior Energy Specialist at USAID's Power Sector Improvement Activity (PSIA), visited NUST on February 10, 2023.



Dr Sajid Siraj (CEME 1999), Associate Professor at the University of Leeds, UK - March 09, 2023.



Fahad Ali (NBS 2009), Head of Food Services Division at Lotte Kolson, Karachi, visited NUST on April 11, 2023.



Syed Zulfarnain Gilani (MCS 1997), Senior Lecturer at Edith Cowan University, Australia, - June 16, 2023



Dr Saqib Nawaz (IESE 2014), Postdoctoral Research Fellow at KAUST, along with Noreddine Ghaffour, Professor of Environmental Science and Engineering at KAUST - August 16, 2023



Humaira Kousar (MCS 2019), Ph.D. candidate at Korea Advanced Institute of Science and Technology, South Korea - December 06, 2023.

GRADUATING CLASS 2023

WELCOME TO NUST ALUMNI NETWORK



"Welcome of Graduating Class 2023 to NUST Alumni Network" stalls were part of the event, providing comprehensive information about the network and facilitating registration on the alumni portal to join the community. Interaction with proud parents was also encouraged. This year, over 1700 alumni were engaged through the campaign during Annual Convocation Week, marking an ongoing commitment to welcoming the graduating class to the NUST Alumni Network.

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