

50th
Edition



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Editor's Note

We are pleased to present the latest edition of NUSTIAN. It is an effort to put together a treasure trove of the university's growth during the past one year. From breaking new ground as a hub of knowledge and innovation to inspiring tales of student accomplishments, there is a kaleidoscopic range of what we could achieve with an express resolution to build on our own legacy. Towards the end of a happening year, we bade farewell to our honorable former Rector Engr Javed Mahmood Bukhari, and welcomed our new Rector Dr Muhammad Zahid Latif, a visionary academician and a practitioner.

As we stride into the new year, we remain steadfast in our commitment to building the nation through the transformative power of education. We are thankful to all NUST institutions and departments for keeping us updated on latest scientific breakthroughs and myriad milestones.

Wishing you success in your future undertakings. Happy reading!

Faheem Khaliqdad

Design & Layout:

Co-Editor:

Photographers:

Kiran Rehman

Haleema Sadia

Ghulam Rasool

M. Ayaz

Afaq Ahmed

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PARTNERSHIPS FOR IMPACT

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ALUMNI AFFAIRS



EXPERIENCE NUST



Global Standing

#353 in the World, **#67** in Asia
#6 in South Asia
QS Rankings 2024/ 25



Engineering & Technology

#144 in the World
QS Subject Rankings 2024/ 25



Our Programmes

168 Academic Programmes, **7** Disciplines,
Engineering programmes (Washington Accord ratified)
40% UG acceptance rate



Research Facilities

400+ labs
34 key laboratories



National Footprint

21 Institutions
7 Campuses
5 cities



International Partnerships

256 institutions
52 countries



Innovation Hub

Pakistan's **1st** S&T Park - National
Science & Technology Park (NSTP),
(SEZ & STZ)



Alumni Network

58,000+ graduates
70+ countries



A black and white photograph of a man in academic regalia, including a graduation cap and gown, speaking at a podium. The image is partially overlaid with a blue vertical bar on the left and a red horizontal bar at the bottom. The man is wearing glasses and has a goatee. A microphone is visible in the foreground.

1

HIGHLIGHTS



Malaysian Prime Minister conferred honorary PhD degree at NUST



The National University of Sciences & Technology (NUST-Islamabad) conferred honorary degree of Doctor of Philosophy upon the Honourable Dato' Seri Anwar Ibrahim, Malaysia's Prime Minister during a Special Convocation held at the NUST main campus on Thursday, October 3, 2024. At the occasion, the honourable dignitary also delivered a keynote address on Allama Iqbal, demonstrating a deep understanding of Iqbal's thought, and its continuing relevance to balanced development, inclusive growth, and individual well-being.

The Prime Minister said, "I am sincerely thankful for the warmth and hospitality extended to me by the government and people of Pakistan, and I hope that our two nations will continue to grow even closer, forging stronger ties for the future." Expressing his gratitude upon conferment of the doctorate degree *honoris causa* by NUST, he said, "With great humility, and in the spirit of Iqbal, I accept this honour on behalf of the people of Malaysia as a symbol of the deep intellectual and cultural connection between our nations." He maintained that it was a profound honour to be at NUST, a prestigious seat of higher education, research and innovation.

Addressing the students, he remarked that their presence at NUST is a testament to their intellect, dedication and immense potential. He further said, "Just as Iqbal's philosophy calls for continual self-improvement, your journey here will shape not only your own future but also the destiny of this nation."

Earlier in his opening remarks, Lt Gen (Retd) Engr Javed Mahmood Bukhari, HI (M), Rector NUST, The Rector acknowledged the exemplary leadership and meritorious accomplishments of the Prime Minister.

Notable attendees of the event were Federal Minister for Commerce Mr Jam Kamal Khan; Secretary MoST Mr Sajid Baloch; Foreign Secretary Ms Amna Baloch; and a few cabinet members of Malaysia. An overwhelming number of students, senior academics, thought leaders, think tank experts, and media persons attended the Special Convocation. It was also highlighted during the event that Prime Minister Anwar Ibrahim's book "SCRIPT for a Better Malaysia," first published in Malaysia in 2022, is being translated into Urdu by a Pakistani university.



COAS inaugurates CIPS new building

Chief of Army Staff (COAS) & Chairman NUST BoG General Syed Asim Munir, NI (M) has emphasised that global peace today is confronted with ever evolving threats and challenges. He was delivering his keynote address at the 28th Annual Conference of International Association of Peacekeeping Training Centre (IAPTC), hosted for the first time in Pakistan at NUST Centre for International Peace and Stability (CIPS) in Islamabad from November 4-8, 2024. The COAS noted that despite numerous peacekeeping endeavours underway by the UN and other organisations, the plight of innocent Kashmiris and Palestinians serve as a stark reminder that still a lot needs to be done. The guest of honour, Jean Pierre Lacroix acknowledged Pakistan's contributions to UN Peacekeeping Operations and appreciated Pakistan for hosting the 28th IAPTC Annual Conference. The event officially commenced with the inauguration of new CIPS building by COAS General Syed Asim Munir.

Under Secretary General, Department of Peace Operations, Jean Pierre Lacroix, United Nation's Police Advisor, Acting Deputy Military Advisor, Foreign Secretary of Pakistan and Rector NUST, also accompanied the chief guest during inauguration and opening ceremony of the conference. Earlier on arrival, COAS was received by Inspector General Training and Evaluation, Lieutenant General Fayyaz Hussain Shah.



43 NUST researchers feature among world's top 2%

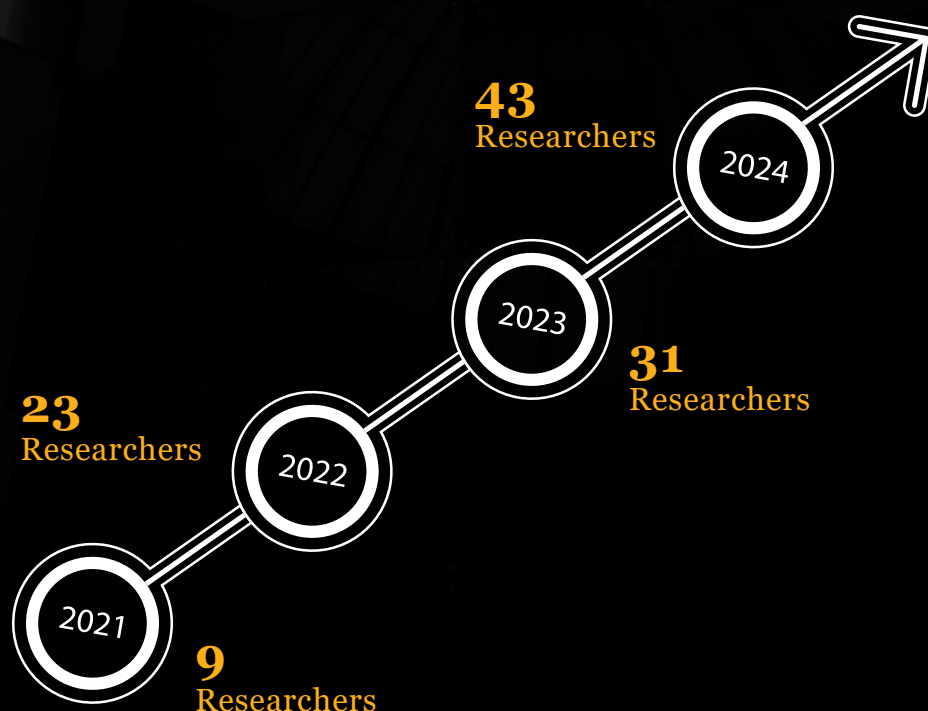
As many as 43 research luminaries from the National University of Sciences & Technology (NUST) have made the nation proud by standing amongst the world's top 2% scientists from among 100,000 top-of-the-line researchers in 2024, as per Elsevier and Stanford.

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. NUST is currently ranked #353 in the world, #64 in Asia and among the leading universities of Pakistan, as per QS University Rankings.

The number of NUST researchers featuring among the top 2% scientists globally has increased steadily over the past three years, with 9, 23, and 31 faculty members making to the list published in 2021, 2022, and 2023 respectively. This speaks volumes of the conducive research environment NUST affords for knowledge seekers and creators to make a difference in these epoch-making times. In 2024 43 researchers have made their mark on this prestigious list.

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 43 researchers, with 23 consistently making to the top, are from 10 different institutions of NUST and 15 different disciplines, including Artificial Intelligence, Signal Processing, Materials, Chemical Engineering, Mechanical, Civil Engineering, Nanotechnology, Bio-Medical, Physics, Cyber Security, Computer Science, Design and Manufacturing, Humanities, Mathematics and Fluid Mechanics.

The researchers are Dr Muhammad Shahid, Dr Noreen Sher Akbar, Dr Meraj Mustafa Hashmi, Dr Iftikhar Ahmad, Dr Rizwan Ul Haq, Dr Irfan Ahmad Rana, Dr Syed Shoaib Ahmad Shah, Dr Asim Shahzad, Dr Mubasher Jamil, Dr Faisal Shafait, Dr Shahzad Adeeb, Dr Tayyaba Noor, Dr Muhammad Usman Akram, Dr Safia Akram, Dr Hassan Elahi, Dr Asif Hussain Khoja, Dr Furqan Farooq, Dr Hassan Ali Khattak, Dr Muhammad Bilal Khan Niazi, Dr Naim Rashid, Dr Iftikhar Hussain Gul, Dr Adeel Waqas, Dr Muhammad Khursheed, Dr Zaib Jahan, Dr Nisar Ahmed, Dr Wajid Mumtaz, Dr Muhammad Taqi Mehran, Dr Shahid Ali Khan, Dr Ghulam Ali, Dr Syed Ali Hassan, Dr Haider Abbas, Dr Muhammad Yasin, Dr Mudassir Iqbal, Dr Arshad Khan, Dr Tahir Mehmood, Dr Syed Rizwan Hussain, Dr Javaria Akram, Dr Muhammad Umar Khan, Dr Asad Waqar Malik, Dr Uferah Shafi, Dr Imran Makhdoom, Dr Imran Akhtar, and Dr Imran Mir.



NUST awarded Special Technology Zone status

In a landmark development, the National University of Sciences & Technology (NUST) was awarded the Special Technology Zone (STZ) status in the year 2024, further reinforcing its role as one of the key drivers of Pakistan's knowledge economy. The National Science & Technology Park (NSTP), a flagship project of NUST, is the primary beneficiary of this status, marking a significant milestone in the university's mission to advance innovation and technological advancement.

NSTP not only capitalises on the university's core strengths and competencies but also avails robust support from the Government of Pakistan. Since its inception in 2019, NSTP has achieved remarkable milestones, including generating over PKR 20 billion in revenue, creating more than 6,000 high-tech jobs, and securing over PKR 10 billion in funds raised by its resident firms. This success highlights NSTP's pivotal role in promoting a dynamic ecosystem for innovation and entrepreneurship in Pakistan.

The STZ status has been conferred on two distinct land parcels within the NUST campus. The first parcel, covering approximately 8 acres, will house the NSTP Towers, which will accommodate startups, SMEs, and anchor tenants focused on AI, Chip Design, and other emerging verticals. This strategic development is set to create a thriving ecosystem for AI innovation, enabling Pakistan to make significant strides especially in the field of Artificial intelligence.

The second parcel of land, also within the STZ, will be home to N-ovative Health Technologies (NHTPL), which spans approximately 5 acres. NHTPL is already at the forefront of manufacturing cutting-edge medical devices and implants, including Bare Metal Stents (BMS), Drug-Eluting Stents (DES), and Percutaneous Transluminal Coronary Angioplasty (PTCA) balloon catheters. With the STZ status, this health cluster will expand to host enterprises focused on health tech, medical devices, biosciences, and pharmaceuticals, positioning itself as the largest health technology cluster in the country.

The conferment of STZ status over 13 acres (STZ, Zone-B) of NUST land, combined with the existing Special Economic Zone (SEZ, Zone-A) status (58.3 acres), represents the most focused infrastructure expansion in Science, Technology, and Innovation (STI) in Pakistan. This development will not only transform NUST into a hub for cutting-edge research and industry collaboration but will also significantly boost the national knowledge economy, driving Pakistan towards a future of sustained technological growth and innovation.



Dr Muhammad Zahid Latif assumes office as Rector NUST

Islamabad – Celebrated academician Dr Muhammad Zahid Latif assumed the office of Rector National University of Sciences & Technology (NUST) on December 16, 2024. Holding a Doctorate from the prestigious Peking University, China, an MPhil degree with distinction, and four Master's degrees, Dr Zahid brings with him extensive experience of teaching and research, and has been on the faculty of some of the leading higher education institutions at home and abroad. He is also a retired three-star general and erstwhile Federal Secretary Defence Production with hands-on experience in cutting-edge technologies and domestic as well as international defence industries. Dr Zahid also holds the honour of delivering lectures at the universities and think tanks across USA, UK, and China. He is also a former Senior Research Fellow of Beijing Foreign Studies University, China, and is currently a Senior Fellow with the prestigious Chinese think-tank Taihe Institute. His writings have appeared in various research journals and his lifelong passion revolves around education. With his appointment as Rector NUST, the academic fraternity has welcomed the visionary educationist to his new role, who, with his diverse experience, is poised to not only further enhance NUST's position as a leader in higher education but also drive initiatives towards the advancement of research, innovation and global collaborations.



Dr Muhammad Zahid Latif

NUST bids farewell to Engr Javed Mahmood Bukhari





NUST takes centre stage at IDEAS



The 12th edition of International Defence Exhibition & Seminar (IDEAS 2024) was held at the Karachi Expo Centre. As a leading institution in technological research and development, NUST's participation was a highlight, with its pavilion featuring three specialized booths: Defence Technologies, NUST Technologies and Emerging Technologies.

The Defence Technologies booth showcased NUST's advanced research in defence solutions, while the NUST Technologies booth highlighted the university's contributions to advancements in various technological fields. The Emerging Technologies booth featured innovative projects that reflect the university's commitment to pushing the boundaries of innovation, from AI-driven solutions to sustainable tech applications.

IDEAS 2024 saw a diverse array of local and international delegates from over 70 countries, alongside representatives from national and global organizations. This year's event set the stage for meaningful collaborations in research and innovation. NUST's active participation underlined its role in fostering global partnerships, contributing to the growth of defense and technology sectors worldwide.

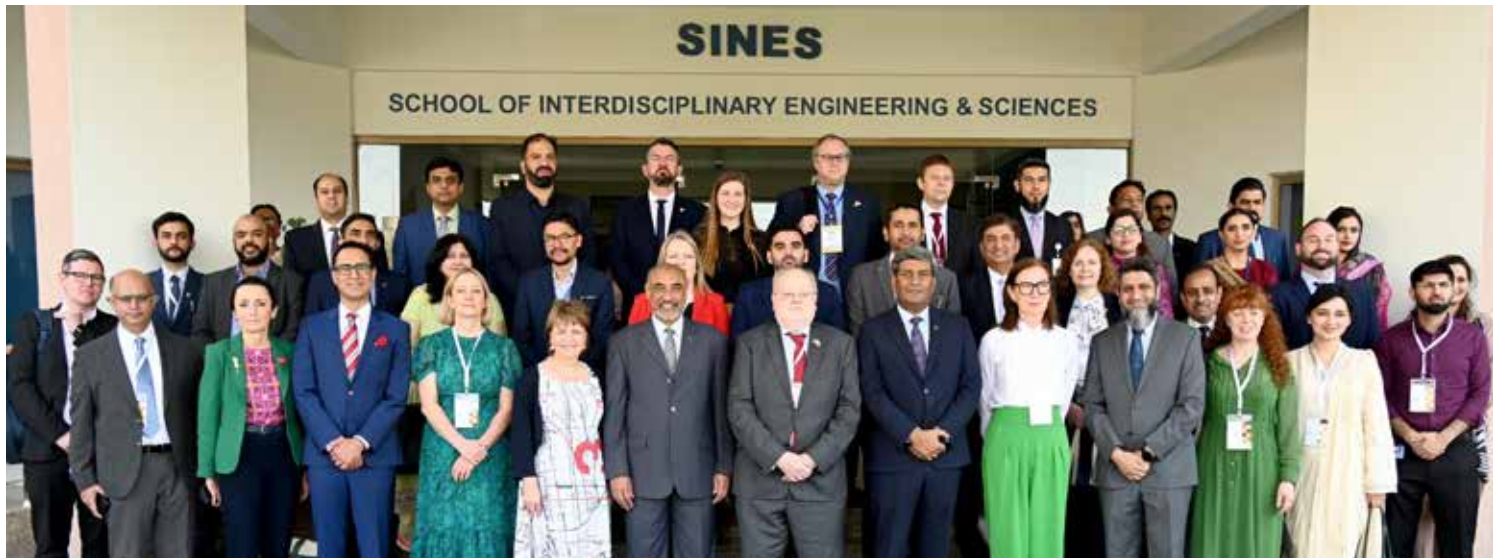
With the event drawing high-level representatives and industry leaders, NUST's involvement promises to strengthen its position as a key player in the global technological landscape, emphasizing the importance of research-driven innovation for defence and beyond.





UK delegation explores collaboration opportunities at NUST

A high-level British delegation, led by Sir Steve Smith, UK Government International Education Champion, visited NUST on April 23, 2024, to explore academic and research partnerships. Accompanied by British Council and HEC officials, the delegation was welcomed by Rector Engr Javed Mahmood Bukhari, who highlighted NUST's achievements in research and innovation. Sir Steve Smith commended NUST's global collaborations with 247 universities across 52 countries, underscoring its role in fostering international academic connections. The visit, part of the "Pakistan UK Education Gateway" initiative launched in 2018, aims to strengthen higher education ties between the two nations.



NUST Formula Student Team shines at international competition

The NUST Formula Student Team has achieved remarkable success, securing second place overall in the Low Voltage Hybrid Category at Formula Student Competition UK 2024. Their innovative design was recognized as the best among Asian teams in the Design Event. In the Lap Time Simulation Event, they secured an impressive 12th position out of 56 teams, surpassing renowned universities such as Oxford, Sussex, and University College Dublin. Additionally, the team was awarded the Learn and Compete Award, a testament to their commitment to continuous learning and competitiveness.



NAS HV 2024: NUST Formula Student Team's Hybrid Innovation

The NUST Formula Student Team unveils the NAS HV 2024, a hybrid vehicle designed for Formula Student UK 2024 at Silverstone. Weighing just 280 kg, the car features a CBR 600 F4i engine and a dual motor front wheel drive, achieving speeds of up to 220 km/h. Crafted by undergraduate students from PNEC NUST, the vehicle showcases NUST's commitment to innovation and excellence in automotive engineering.

Secretary-General Commonwealth, and Chairman PM's Youth Programme visit NUST

The National University of Sciences & Technology (NUST) welcomed a senior delegation of the Commonwealth, headed by its Secretary-General Rt Hon Patricia Scotland KC. Chairman Prime Minister's Youth Programme, Mr Rana Mashood Ahmed Khan, also accompanied the delegation to NUST. The event underscored the joint commitment to fostering innovation, academic excellence, and youth empowerment.

Lt Gen (Retd) Engr Javed Mahmood Bukhari, Rector NUST, warmly received the guests upon arrival. In a meeting held in his office, the Rector touched upon various facets of NUST's knowledge ecosystem that have contributed to bringing it among the league of world's leading higher education institutions. He, inter alia, highlighted one of the flagship initiatives of NUST – the establishment and expansion of Pakistan's first National Science & Technology Park (NSTP). Leveraging the university's core intellectual and technological strengths as well as its unique position in the global academia, the Rector said that NSTP has been focusing on eight diverse thematic areas, encompassing sectors such as education, health, energy, smart technologies, etc. He also highlighted exceptional entrepreneurship and investment opportunities available at NSTP.

In her remarks, the Commonwealth Secretary General Patricia Scotland said that NUST stands as an epitome of excellence in higher education, research and innovation in Pakistan and beyond, emphasising the crucial importance of such institutions in human resource development, particularly the youth. She said that the Commonwealth gives immense importance to education and initiatives for its promotion. She maintained that technology has changed the world rapidly, and it is imperative that the future generations be equipped with sound technological knowledge and skills to navigate future challenges. Chairman PM's Youth Programme emphasised the government's resolve and initiatives to ensure educational equity in the length and breadth of the country.

Following the meeting, the Secretary General and the Chairman engaged in an interactive session with NUST faculty members and students, and later visited the S&T Park.



Syrian delegation visits NUST to foster bilateral academic ties

A seven-member delegation from Syria, led by Dr Rami Waheed Al-Dhulli, Deputy Minister of Education & Educational Affairs, visited NUST on May 7, 2024. The delegation was accompanied by H.E. Dr Ramez Alraee, the Ambassador of Syria to Pakistan. The visit aimed to explore opportunities for initiating bilateral academic and research cooperation between Syria and Pakistan.



NUST represents Pakistan at COP29

Led by Dr Rafia Mumtaz, a NUST delegation including Mr Zia-ur-Rehman, Mr Asghar Ali, Mr Salman Atif, Dr Rabia Liaquat, and Dr Majid Ali, represented Pakistan at COP29 in Baku, Azerbaijan. They took active part in discussions, conducted over 10 sideline meetings, and explored academic collaborations with Azerbaijan Technical University in areas of Computing, Energy, and Sustainability. NUST's event at the Pakistan Pavilion, "Showcasing Pakistan as an Innovator in Green Technologies," received accolades from Mr Zulfiqar Younas, highlighting the university's commitment to sustainable solutions and global innovation.



Dr Ayesha Zeb conferred University Best Teacher Award

Dr Ayesha Zeb, Assistant Professor at NUST College of EME, has been honored with the University Best Teacher Award 2024. Since joining NUST in 2016, she has made significant contributions to Electrical Engineering, focusing on Precision Agriculture and AI. Leading the Industrial AI and IoT Research Group, Dr Ayesha is celebrated for her innovative teaching and dedication to student growth. Previously, she received the NUST Best Community Service Teacher Award in 2022.



NBS celebrates silver jubilee at homecoming

NUST Business School (NBS) recently marked its 25th anniversary with a grand homecoming event on November 15, 2024. The event brought together a diverse gathering of former deans, faculty, staff, and alumni to commemorate the institution's journey of growth and impact. The celebration was graced by the presence of Pro-Rector Academics Dr Osman Hasan and Pro-Rector Research, Innovation, and Commercialization (RIC), Dr Rizwan Riaz who extended their best wishes to the NBS community.

Welcoming the participants, Dr Naukhez Sarwar, Principal and Dean NBS acknowledged the contributions of the the school's successive leadership and pioneers, highlighting the significant milestones achieved by the school in a short span. The school has grown exponentially over the years, offering a diverse range of programs to over 1,500 students. NBS has also established valuable international partnerships, facilitating student exchange programs and pursuing accreditation from prestigious bodies like NBEAC and AACSB.

During the event, the speakers emphasised the importance of alumni engagement, underlining the significance of such gatherings in fostering a strong sense of community and shared values. Alumni representatives expressed their gratitude for the exceptional education and training they received at NBS, which has equipped them to excel in their professional careers. They shared inspiring stories of their achievements and how NBS played a pivotal role in shaping their lives.

The event featured a captivating qawwali performance by the Bakshi Brothers, which mesmerized the audience and created a memorable evening. Alumni from various countries, including the UK, KSA, and UAE, attended the event with their families, demonstrating the global reach and impact of NBS.

As NBS celebrates its 25th anniversary, it remains committed to providing world-class education, fostering innovation, and producing future leaders who will shape the global business landscape.

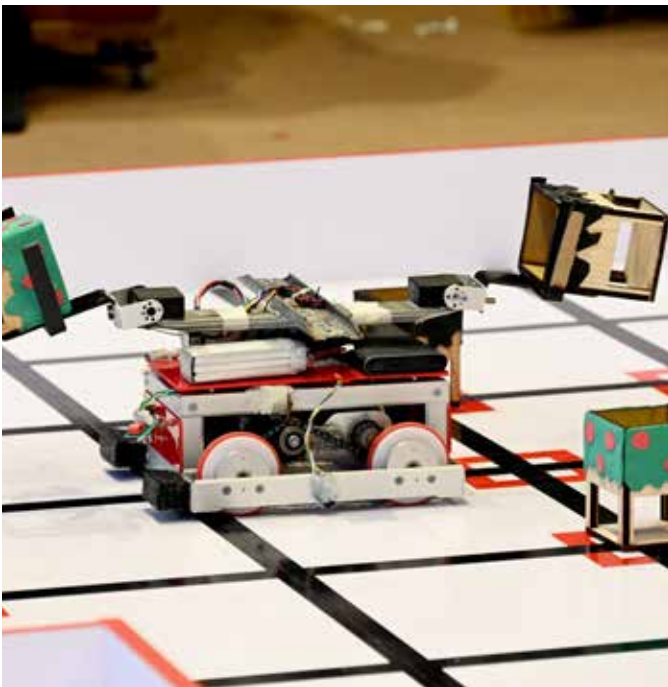


20th National Engineering & Robotics Contest

NUST held the 20th edition of National Engineering Robotics Contest (NERC), Pakistan's largest robotics competition, from July 9 to 13, 2024. Organised by the Department of Mechatronics Engineering in collaboration with the Higher Education Commission (HEC) and the STEM Careers Program, NERC 2024 attracted approximately 260 teams from schools, colleges, and universities across Pakistan. The event featured 12 categories, including Indigenous, Modular, Ready to Race (RTR), Robowars, and Aero.

In the highly competitive NERC Aero Build and Fly University Category, the SMME Aero Department team 'Millennium Falcons,' led by Ikhlas Jamshaid AE-1, clinched the first prize.

Since its inception in 2003, NERC has been hosted by the NUST College of EME (CEME), with this year's edition supported by key partners such as MRS Technologies, Graana, Headstart School, and others. Dr Nasir Rashid, Dean of NUST College of E&ME, highlighted the event's growth and enhanced standards. Chief guest Mr Ather Imran Nawaz, CEO of Sybrid Private Limited, lauded NUST's contribution to robotics education. The event concluded with a prize distribution ceremony for the top teams.



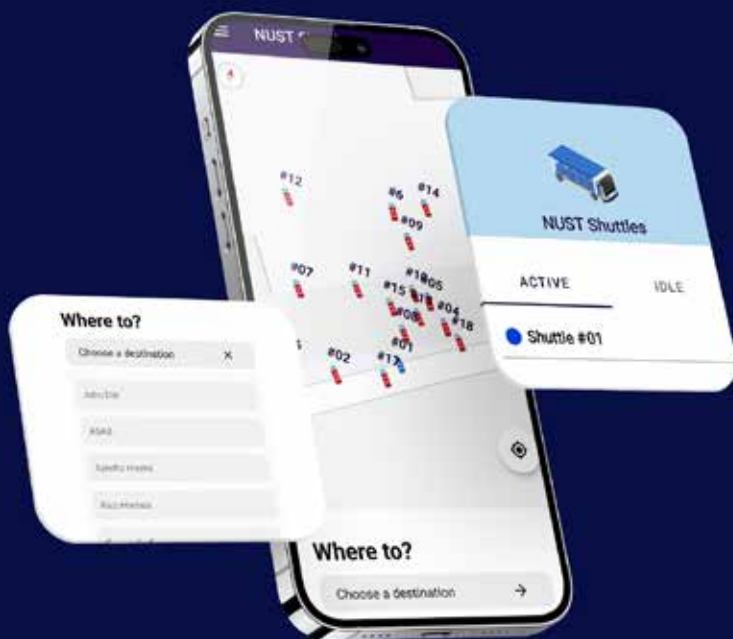


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RESEARCH & INNOVATION

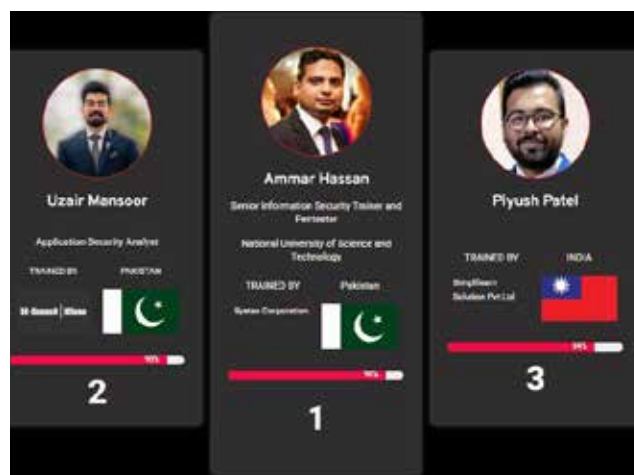
Shuttle App for Convenient EV Tracking!

The NUST School of Interdisciplinary Engineering and Sciences (SINES) has launched the Shuttle App, a new tool to track electric vehicles (EVs) in real time across the NUST H-12 campus. Designed for students, faculty, and staff, the app simplifies campus transportation by providing instant access to EV availability and locations. This innovation enhances convenience while supporting a sustainable, eco-friendly campus.



Dr Hassan tops EC Council Global Ethical Hacking Leaderboard

Dr Ammar Hassan from MCS has achieved a remarkable milestone by ranking first on the EC Council Global Ethical Hacking Leaderboard for Q4-2023. The achievement highlights NUST's exceptional expertise and contributions to the field of cybersecurity.



36 startups graduate from NSTP

The NUST Science and Technology Park (NSTP) celebrated the graduation of 36 startups from its Hatch 8 and ESSY programs in a ceremony attended by key industry and development leaders. Distinguished guests included CEO U Microfinance Bank, Mr Mohamed Al-Taheri and Deputy Representative UNHCR, Ms Tammi Sharpe.

The ESSY program, funded by UNHCR in partnership with the Pakistan Poverty Alleviation Fund (PPAF) and IDEA, supported entrepreneurs from diverse backgrounds, awarding a total of PKR 7.1 million to 25 promising startups. U Microfinance Bank also contributed cash prizes to further encourage innovation.

Dr Naseem Iqbal wins prestigious COMSTECH Research Award

Dr Iqbal, Professor at USPCAS-E, has been awarded the Best Research Paper Award 2023 in Chemistry by COMSTECH, the Ministerial Standing Committee on Scientific and Technological Cooperation under the Organization of Islamic Cooperation (OIC). The award recognizes his groundbreaking research in EV batteries, fuel cells, supercapacitors and carbon capture technologies. Dr Iqbal's work highlights NUST's dedication to advancing green energy solutions and tackling global energy challenges.



SCEE-NICE achieves five-year Level-II accreditation

BE Civil Engineering Program has secured Level-II Accreditation (Substantially Equivalent to Washington Accord) from the Pakistan Engineering Council (PEC) for an unprecedented five consecutive years. The prestigious recognition highlights the program's academic excellence, reflecting the quality of its faculty, students, curriculum and continuous improvement mechanisms.

Three-year accreditation from Washington Accord

NUST's BE Software Engineering Program has achieved a prestigious 3-year accreditation from the Washington Accord (WA). The milestone highlights NUST's commitment to continuous quality improvement and excellence in engineering education. Furthermore, it reflects the university's successful implementation of rigorous Outcome-Based Education (OBE) processes, aligning with global standards.



OPEN HOUSE/ JOB FAIRS

2024



MCE



NBC



SECS



SCME



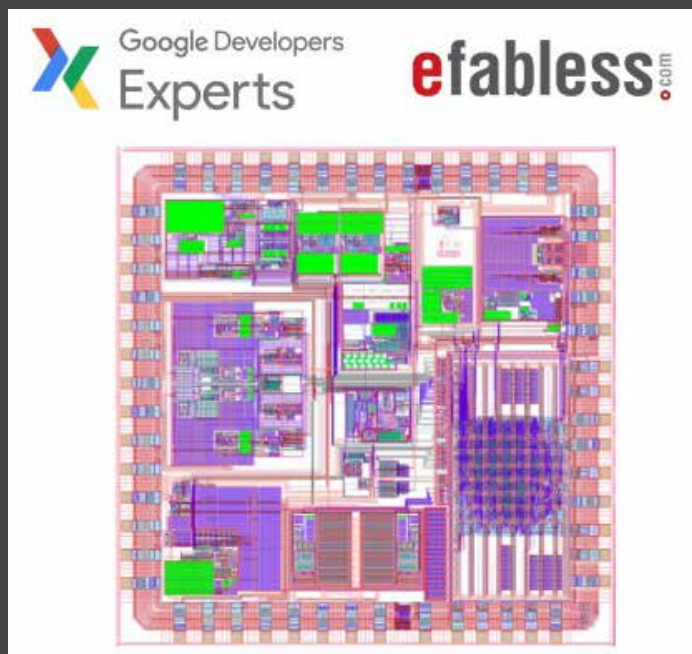
ASAB



SCEE

Google funds MCS project

A final-year project at MCS supervised by Assistant Professor Dr Hussain Ali has earned a \$5,000 grant from Google. The project, led by Obaidullah Ahmed (BEE-57) with team members Ayesha Rauf, Syeda Fareeha Batool Zaidi and Kashif Murad Baigal, involved the indigenous design of an ASIC for a Super Resolution CNN (SR-CNN) accelerator. The ASIC, aimed at real-time inferencing of machine learning algorithms, is a significant achievement for MCS. The campus is set to receive its first indigenously designed ASIC-for-AI in 2025, marking a proud milestone in AI and machine learning research.



Dr Hussain Mustatab Wahedi joins Global Young Academy 2024

Dr Wahedi, HoD Biomedicine at ASAB, has been selected as one of 45 researchers for Global Young Academy (GYA) in May 2024. His selection recognizes his exceptional scientific work and societal impact. As a member, Dr Wahedi will collaborate on global research, enhance his leadership skills and engage with international leaders in academia, government, and funding bodies, further elevating NUST's global presence in scientific innovation.

NUST Agri DMap: Leading the Way in Early Wheat Rust Detection

Agri DMap, a project to secure crop health, by Dr Rafia Mumtaz aims to transform agricultural sustainability by enhancing early detection of wheat rust disease. This innovative endeavor underscores NUST's commitment to advancing agricultural practices through cutting-edge technology and scientific research.





MCS and NRTC collaborate on local electronics manufacturing

MCS and National Radio Telecommunication Corporation (NRTC) have signed an MoU to explore and promote the local production and manufacturing of electronic devices and software in Pakistan. Through this collaboration, NRTC will support MCS in raising awareness among students and faculty via a series of lectures. Additionally, they will contribute to the development and revision of the Undergraduate Degree Program curriculum. NRTC will also provide essential software and hardware to MCS and offer internships and scholarships to a minimum of 50 MCS students.

NUST, Chiang Mai varsity inaugurate Pak-Thai Digital Innovation Lab

NUST and Chiang Mai University (CMU) launched the Pak-Thai Digital Innovation Lab (PTDIL) on July 24, 2024, to promote research in cyber-physical systems and develop solutions for societal challenges. The institutions signed a MoA to establish joint labs for collaborative research, facility sharing, and faculty/student exchange. Prof Dr Rafia Mumtaz and Prof Dr Pradorn Sureephong of CMU will lead the respective labs, enhancing international collaboration and advancing digital technologies.



Zheng He Development Centre to be set up at NUST

NUST has signed an agreement with Jiangsu Shengxianglin Stock Holding Co., China, to establish the Zheng He Development Centre at NUST. The center will offer technical training in advanced fields and provide placement opportunities for Pakistani students in top Chinese companies worldwide. The signing ceremony was attended by representatives from industry leaders like Huawei and ZTE.

NUST inaugurates Innovative Healthcare & Biomedical Technologies Laboratory

The Innovative Healthcare & Biomedical Technologies Laboratory was inaugurated at SMME, NUST, with an opening ceremony attended by distinguished guests, including Prof Dr Richard Dashwood, Vice-Provost Research and Enterprise and Deputy Vice-Chancellor Research, Coventry University, and Prof Dr Osman Hasan, Pro-Rector Academics.

This state-of-the-art lab, the latest addition to the collaborative labs established under the NUST-Coventry University partnership, will operate within the Department of Biomedical Engineering and Sciences. The lab aims to advance healthcare by developing reliable healthcare databases, innovative diagnostic tools, and pioneering therapeutic interventions.



NUST launches Digital Endowment Catalogue

NUST unveiled its first Digital Endowment Catalogue at a networking event in London, aimed at assisting scholarship students facing financial challenges. The platform, presented by Rector Engr Javed Mahmood Bukhari and Pro-Rector Dr. Rizwan Riaz, received positive feedback for its innovative approach. The inaugural transaction was made by long-time NUST partner, Mr. Taoha Qureshy. The catalogue features anonymous student cases, simplifies donations, and ensures transparency with real-time tracking, supporting NUST's NEED Initiative and fostering trust among donors.



Finding Innovative & Creative Solutions

The Grand Finale of Finding Innovative & Creative Solutions (FICS 2024), NUST's flagship initiative to foster social entrepreneurship, welcomed international participation from Türkiye and Azerbaijan. With over 800 project submissions, Team Harassment Defender emerged as the national winner, while the Global Champion Award went to Team ABC from Azerbaijan.

Mr Mohyuddin Ahmed Wani, Secretary Ministry of Federal Education & Professional Training, graced the event as chief guest. Prominent amongst others were Lt Gen (Retd) Engr Javed Mahmood Bukhari, Rector NUST, and Ambassadors and esteemed educationists from Azerbaijan, Türkiye and Brunei Darussalam.



NUST launches FICS Istanbul Chapter

NUST has launched the Istanbul Chapter of its global competition, Finding Innovative and Creative Solutions (FICS), under the Innovation and Commercialization Office (ICON). The initiative, designed to boost global creativity and problem-solving, connects students with industry experts and investors. Held at Altinbas University, Istanbul, the event showcased projects from 12 university teams, evaluated by industry experts.





NUST's TeleCardio project receives ERASMUS+ funding

NUST's TeleCardio project, funded by ERASMUS+, aims to revolutionize cardiovascular care by developing rapid, accurate diagnostic methods for heart diseases—the leading cause of death in Pakistan. Led by Prof Dr Rafia Mumtaz, Prof Dr Ali Hassan and Dr Muhammad Daud Abdullah Asif, the initiative promises to save lives and reduce the national burden of CVDs through innovative healthcare solutions.

Dr Haider Abbas honoured with *Tamgha-i-Imtiaz*

Professor Dr Haider Abbas of MCS was conferred the prestigious *Tamgha-i-Imtiaz* by the Government of Pakistan on 23rd March 2024. Renowned for his contributions to cybersecurity, Dr. Haider has secured over PKR 300 million in research grants and published more than 200 scientific articles. He remains a leading academic and cybersecurity expert, making significant contributions to research and academia in Pakistan.



Faculty development programme for Saudi NDU

NUST HR recently concluded an International Faculty Development Program for Saudi Arabia's National Defense University (NDU), focusing on practical modules like advanced EdTech, Emotional Intelligence for Academic Leadership, and Interactive Teaching Techniques. Guided by experienced trainers, the program provided a platform for knowledge exchange and professional development, strengthening ties between NUST and the international academic community.



Workshop on Astronomy, Telescopes, and Astrophotography

The 4th Workshop on Astronomy, Telescopes, and Astrophotography (WATA), organized by the School of Natural Sciences (SNS) at the National University of Sciences and Technology (NUST), was held on November 16, 2024. The event successfully brought together a diverse group of students, educators, and astronomy enthusiasts, all united by a shared interest in space exploration.

The event featured a variety of interactive modules designed to enhance participants' understanding of astronomy and space sciences, including Solar Observations, a Space Sciences Exhibition, Virtual Reality experiences, and 3D Printing sessions, all aimed at

engaging participants and fostering curiosity about the universe.

During the event, the Chief Guest, Prof Dr Osman Hassan, Pro-Rector ACAD, addressed the audience, providing valuable insights on the significance of space sciences. The workshop fostered a deeper understanding of the cosmos, encouraging participants to explore and engage with the field of astronomy.

Looking ahead, future WATA events will offer continued opportunities for learning and discovery, further promoting the appreciation of space sciences and their relevance to scientific inquiry.



MCS launches PIE for UK-Pak Women of Robotics & AI

A state-of-the-art Robotics Lab has been set up at the NUST Military College of Signals (MCS) to support research and training in robotics. The lab will focus on the project "PIE (Partnership in Equality) for UK-Pak Women in the Domain of Robotics & AI", aimed at promoting opportunities for women in both Pakistan and the UK in robotics and AI fields. To support the project, a team from Cardiff University, UK, including Mr Shadan Khan Khattak and Miss Sia Chow Siing, visited on June 3, 2024, and donated 9 robots.

NUST participates in education expo by FGEIs

NUST participated in the inaugural education expo organized by the Federal Government Educational Institutions (FGEIs) at FG Postgraduate College for Women, Wah Cantt. The event attracted over 5,000 students from SSC, HSSC, and undergraduate levels from various schools and colleges in Wah Cantt and surrounding areas. The NUST Admissions Directorate team represented the university, providing valuable information to students about the undergraduate and postgraduate admission process, campus facilities, scholarships and other incentives.



Malaysian High Commissioner delivers keynote address

H.E. Muhammad Azhar Mazlan, the High Commissioner of Malaysia to Pakistan, delivered a keynote address at NUST, emphasizing the strong and evolving bilateral relations between Pakistan and Malaysia. The event, organized by the NUST Institute of Policy Studies (NIPS), highlighted the shared stances of both nations on key international issues and the strategic partnership established in 2019. H.E. Khazar Farhadov, Azerbaijan's Ambassador to Pakistan, was also in attendance.



NUST delegation attends networking session at UK

Mr Taoha Qureshy MBE, a long-time supporter of advancement initiatives at the National University of Sciences and Technology (NUST), recently hosted a networking dinner for a NUST delegation. The purpose of the gathering was to explore potential avenues for collaboration between NUST and the business community, philanthropists, and influential figures in the UK. Mr Qureshy's immense and instrumental support throughout the outreach visit significantly contributed to advancing NUST's mission of transforming education and building the nation.



Climate Change Negotiations in My City 2024

The “COP in My City Pakistan 2024” event concluded on August 29, 2024, at NUST School of Interdisciplinary Engineering & Sciences (SINES). It is a joint initiative under the Climate Change for Youth Roadmap of the Ministry of Climate Change, with its successful execution attributed to the strong collaboration between NUST Placement Office (NPO), UNICEF, Prime Minister's Youth Program and UN Women.

The event was a pivotal moment in the COP in My City 2024 journey, marking the closure of the provincial-level competitions across seven regions of Pakistan—Federal, KPK, Punjab, AJK, Sindh, Balochistan and GB. This stage was crucial in selecting the most innovative and impactful climate action solutions from young minds across the country. The winners from these provincial competitions will now move forward to compete in the Grand Finale, scheduled for October 2024.

Launched in 2021, the “COP in My City” initiative has seen remarkable growth, expanding from regional initiatives to a national platform. The 2024 chapter focused on increased representation of youth from remote areas and young females, ensuring their voices are amplified in the global climate discourse. The winners of the Grand Finale will have the prestigious opportunity to represent Pakistan at COP29 in Baku, Azerbaijan, later this year.

His Excellency, Mr Khazar Farhadov, Ambassador of

Azerbaijan to Pakistan, graced the event as the Chief Guest. He commended the initiative for its critical role in empowering youth and fostering a collaborative approach to addressing climate change.

The event not only provided a platform for young minds to showcase their innovative ideas for sustainable environmental solutions but also facilitated sustained communication channels between youth, government officials and climate change experts. This ongoing collaboration is crucial for ensuring the younger generation's inclusion in the policymaking process.



Education Information Fair 2024

As part of the Education Information Fair 2024, organized by the Ministry of Federal Education and Professional Training, NUST conducted a series of informative sessions at Islamabad Model Colleges for boys and girls from September 5 to 7, 2024. The sessions, held at IMCG, IMCB Pakistan Town (Rural), and IMCG (PG), provided students with detailed information on NUST's undergraduate admission process, available scholarships, and guidance on choosing the best academic pathways for higher education. This initiative aimed to empower students with knowledge to make informed decisions about their educational future.



DICE frontiers in STEM education

NUST has evolved into a comprehensive research-oriented university over the last three decades. Now entering its fourth decade, NUST holds an undisputed national leadership in STEM education. In 2024, 84% of NUST's graduates were from STEM disciplines. Guided by the motto "Think Globally, Act Locally," NUST has adapted to economic and technological shifts to maintain local relevance and global recognition.

A new generation with distinct learning and behavioral patterns is emerging. Unlike their predecessors, Generation Alpha – the true digital natives born into a hyper-connected world – are shaped by early digital exposure. By 2028, Alphas will begin entering universities, including NUST. Crude statistics indicate that one in two Alphas will receive a formal university education, with half in Asia. Pakistan's 'youth-bulge' makes this shift even more significant. By 2045, Pakistan's population is projected to reach 375 million, with 66% under 29. The country must create three million jobs annually, a significant challenge for business and economic evangelists. The gig economy's rise is a response to this looming crisis, with Pakistan consistently ranking among the world's top five freelancing nations. As university leaders, we face the question of how we should transform the creativity and learning abilities of Generation Alpha into global talent. We must prepare this generation for their first career in STEM, along with lifelong upskilling and reskilling opportunities.

Each year, NUST attracts 60,000-

70,000 undergraduate applicants. In 2018, Mechanical Engineering ranked among the top three choices for 19,000 applicants, while Computer Science drew interest of only 2,100 among the top choices. By 2024, Mechanical Engineering applicants had dropped to 6,300, while Computer Science surged to 20,000. This trend, observed globally, necessitates strategies to enhance the value of non-computing STEM degrees.

This article proposes a DICE framework – Digitalization, Interdisciplinarity, Collaboration, and Entrepreneurship – essential to any university's strategy, including NUST, to cultivate talents with strong societal relevance. Digitalization, though evolutionary, by integrating computing technologies into both curricula and practice, will retain the top position. Interdisciplinarity is a norm for graduate education in STEM, but concerted efforts are required at the undergraduate level to bridge with other fields. Collaboration, an inherent attribute of STEM education, needs new pathways through cooperative programs and strong academia-industry linkages. Furthermore, the focus on entrepreneurship endeavors presently pursued in universities needs scaling due to the work habits of the upcoming Generation Alpha.

Digitalization:

Personal computers entered workplaces and STEM curricula in the 1980s. Today, simulation-based learning is integral, and computational/in-silico research is widely accepted. However, commercial software dominance burdens universities financially.

Leading institutions are shifting to open-source code development, a move NUST must adopt across STEM disciplines to enhance student employability.

AI marks the next frontier in STEM education. The Nobel Prize announcements in Natural Sciences signal that future scientific advancements will belong to those who harness AI. At NUST, while computing disciplines focus on fundamental AI development, non-computing STEM fields should include subjects like 'prompt engineering' for broad-based AI integration.

Interestingly, present AI is a significant 'Black Box' and, while being the solution, is itself a problem – a Catch-22 situation. The probable answer lies in explainable artificial intelligence (XAI). This form of AI aims to make AI models more transparent and predictable. It will allow certifiers and regulators to understand and predict AI behaviors, which are critical for regulatory frameworks in air, land, sea locomotives, human health, and humanoid robotics. Gen Alpha is expected to be the savior in this sense, and we need to enable them to handle AI in an explainable way. This process will start from the graduate level but trickle down to an undergraduate level in the next a few years.

Interdisciplinarity:

As Stephen Hawking predicted, the 21st century is the "century of complexity". STEM has transitioned from a model-driven to a data-driven approach. Advanced analytics, miniaturization, and intelligent

sensors redefine STEM. However, many fields still require this much-needed interdisciplinary integration. While all universities have different strategies to incorporate interdisciplinarity in their ecosystems, NUST matured a unique lab-driven facility at its main campus. A 200,000 sq ft facility comprises more than 40 university labs, corporate design centers, and central testing facilities. Experts in AI, HPC, IoT, biotech, nanotech, and engineering collaborate in the same building, furthering cross-disciplinary projects with the organic formation of interdisciplinary teams.

Interdisciplinarity also needs embedding in program design. For instance, at NUST, instead of launching a Bachelor's in either Food Engineering or Food Science and Technology, NUST opted for the latter while integrating engineering components into the program to bring in perspectives from mechanical processes, allowing food scientists to learn manufacturing fundamentals. Similarly, NUST plans to merge Statistics with Data Science, blending classical disciplines with digital skills.

NUST's interdisciplinary approach extends to graduate education. Master's and PhD students can diversify 25% and 50% of their coursework across disciplines, respectively, enhancing knowledge absorption across discipline-focused schools.

Collaboration:

Collaboration has always remained central to STEM education. While academia-industry linkages are crucial, traditional co-op programs face scalability issues in Pakistan due to industry constraints. NUST's alternative approach brings industry onto campus, with several companies and state-funded R&D centers established within university premises. This immersive exposure

aligns students' learning with real-world industry needs, refining final-year projects and engineering skills. Gen Alpha will experience an expanded industrial ecosystem at the NUST H-12 campus, reinforcing the university's role in Pakistan's knowledge economy.

Entrepreneurial Acumen:

Universities are striving to foster entrepreneurial mindsets among students. Generation Alpha will favor micro-enterprises, requiring universities to scale entrepreneurship support systems. Are entrepreneurship courses effectively delivered? Do instructors have real entrepreneurial experience? NUST mandates entrepreneurship courses across all undergraduate programs, but their delivery needs enhancement. Beyond conventional entrepreneurship, social entrepreneurship must be embedded into STEM programs. NUST supports student entrepreneurship through initiatives like FICS (Finding Innovative and Commercializable Solutions), which now involves participants from Azerbaijan, Turkey, and Pakistan. Expanding such programs will further cultivate an entrepreneurial ecosystem.

Leadership, Soft-Skills & Lifelong

Learning:

Beyond DICE, leadership and lifelong learning are pivotal for preparing Gen Alpha for evolving global challenges. STEM curricula often lack leadership and soft-skill development. To introduce structured leadership training, NUST must consolidate programs like CDC, C3A, NPO, and various clubs/societies. The concept of "badges," an alternative to transcripts, should be explored, as seen in programs at various international institutions of repute.

In addition, Gen Alpha needs resilience and conflict resolution abilities. They must learn to disagree in an agreeable way! Societies are losing the ability

to deconflict themselves. Such traits must be constructed orchestrally for better assimilation, and NUST must work to mature this idea soon.

The last critical area is lifelong learning. We know that after completing a four-year STEM program, many students do not immediately pursue master's or PhD degrees. So, while we should continue encouraging students to advance in their fields, we must also offer alternative pathways to build upon their undergraduate education. Micro-credentials provide flexible upskilling opportunities. NUST's ConnectEd program is a step in the right direction but needs scaling and cohesion for effective and meaningful integration. In years to come, universities will strengthen practitioners' programs for effective connections with various constituencies of society. The quest to stay relevant for universities is here to stay, and NUST must aggressively claim its leadership in executive/professional/skill development role.

Transforming STEM education requires a consolidated approach. DICE, leadership and soft skills, lifelong learning, and micro-credentials must be integral to university strategies. Only through these adaptations, Generation Alpha will find value in higher education and meet the demands of a complex, interconnected world.



About the Author:
Dr Adnan Maqsood
Director Academics
Dean Advanced Studies
& Research (ASR)-NUST

DewDrop: Generating water from air, driven by Solar Energy

Water scarcity is one of the most pressing challenges of our time, but a group of innovative minds at the U.S.-Pakistan Center for Advanced Studies in Energy (USPCAS-E) at National University of Sciences and Technology (NUST) is paving the way for a sustainable solution. Introducing DewDrop, an atmospheric water generator (AWG) powered by solar energy, designed to transform air moisture into clean, drinkable water.

The concept behind DewDrop was envisioned by Team Lead, Dr Nadia Shahzad, and Co-Team Lead, Dr Adeel Waqas, who noticed the shortage of water in Pakistan and even within NUST's campus. Determined to address this critical issue, they led their students to develop a solar-powered atmospheric water generator. The device captures humidity from the atmosphere and then harnesses

solar energy to transform the moisture into clean, drinkable water. Here are its key features:

1. **High Performance:** Designed for diverse climates, DewDrop ensures optimal water production even under challenging environmental conditions.
 2. **Eco-Friendly:** Solar-powered and requiring minimal maintenance, it exemplifies green innovation.
 3. **Portable Design:** With its compact structure, the device is perfect for deployment in remote areas, disaster-hit regions, military operations and flood relief efforts.
 4. **Uninterrupted Functionality:** Equipped with a battery backup, it continues to operate at night or during cloudy weather.
- DewDrop's journey reached an exciting milestone when the team presented their innovation at IDEAS 2024 in Karachi, Pakistan's premier defense and technology

exhibition. Team members Mr Ranjeet Kumar and Mr Syed Shabir Ahmed captivated attendees with live demonstrations of the device. The response was overwhelmingly positive, with industry leaders, academics and representatives from private and government organizations praising the ingenuity behind DewDrop.

In addition to the accolades, several industry leaders expressed interest in collaborating with the team. They proposed tailoring the device for large-scale industrial applications, such as mass water production and integration into existing systems. As climate changes shape the world around us, DewDrop stands as a shining example of how sustainable solutions can bridge the gap between necessity and possibility, offering a brighter and more secure future for all.

About the Authors: **Mr Syed Shabir Ahmed, Dr Nadia Shahzad, Dr Adeel Waqas, Mr Ranjeet Kumar**



A black and white photograph of a man in a suit, seen from the side, gesturing with his right hand while speaking at a podium. The background is a blurred audience. The image is overlaid with a blue vertical bar on the left and a dark red horizontal bar at the bottom.

3

**CONFERENCES
& WORKSHOPS**

4TH INTERNATIONAL CONFERENCE ON DIGITAL FUTURES AND TRANSFORMATIVE TECHNOLOGIES

ICoDT2

The 4th International Conference on Digital Futures and Transformative Technologies (ICoDT2) was held on 22-23 October 2024 at NUST's H-12 Islamabad Campus, hosted by NUST College of Aeronautical Engineering (CAE) and co-sponsored by IEEE. The conference focused on advancements in Artificial Intelligence, Cyber Security, IoT, Flight Dynamics, Autonomous Systems and Space Technologies.

The event featured keynote talks, technical paper presentations and workshops, fostering knowledge sharing and collaboration among global experts. ICoDT2 reaffirmed NUST's commitment to technological education and research, positioning the university as a hub for innovation in Pakistan.



NUST think tank hosts Seminar on Economic Crisis

The NUST Institute of Policy Studies held a seminar on "Pakistan's Economic Crisis: Challenges and the Way Forward" in Islamabad on January 18, 2024. Caretaker Finance Federal Minister, Dr Shamshad Akhtar, emphasized fiscal reforms and investment attraction, while Caretaker Energy Federal Minister, Muhammad Ali, addressed energy challenges.

Moderated by Dr Ashfaq Hasan Khan, the seminar featured Rector NUST Engr Javed Mahmood Bukhari and speakers like Mr Sakib Sherani, Prof Ather Maqsood, and Dr Muhammad Khan, who discussed governance, innovation, and energy reforms

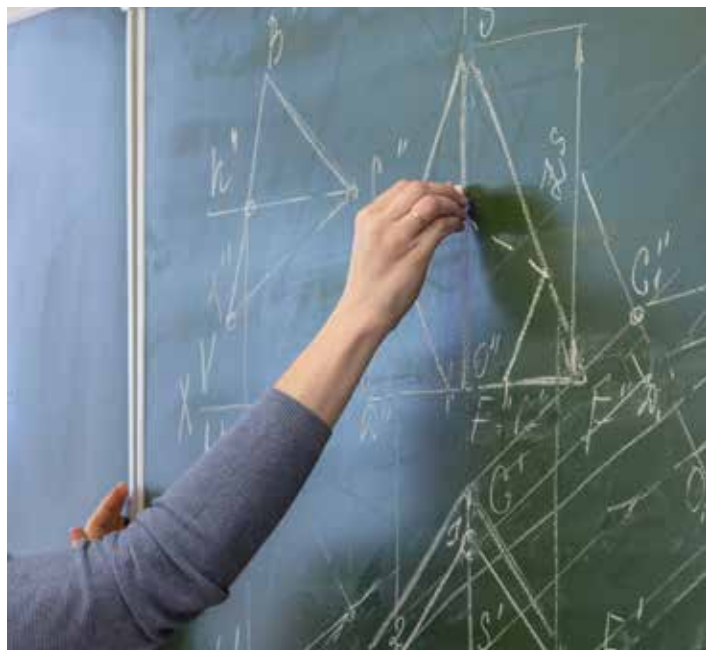


Session on Advancing PV Panel Manufacturing in Pakistan

The U.S.-Pakistan Centre for Advanced Studies in Energy at NUST hosted a Collaborative Consultative Session on Pakistan's solar industry, gathering experts from academia, industry, and policymaking. The session aimed to address challenges and opportunities in local PV manufacturing, fostering sustainable growth. Key speakers included representatives from LUMS Energy Institute, PCRET, NUST's China Study Center, Max Power Pvt Ltd., AEDB PPIB, EDB, LONGi Solar Pakistan, PPSEA, and HBL Investment Wing.

RTMS-IV: Advancing Mathematical Sciences at SNS Conference

The NUST School of Natural Sciences (SNS) successfully organized the Conference on Recent Trends in Mathematical Sciences (RTMS-IV) on March 4 & 5, 2024. The conference aimed to convene leading mathematicians, researchers, and scholars from diverse fields of mathematics to share insights, discoveries, and advancements. The event featured 30 talks covering a broad spectrum of topics within mathematical sciences, including algebra, differential equations, fluid mechanics, general relativity, graph theory, and approximate/numerical solutions of differential equations.



ASAB organises International Conference on Integrative Life Sciences

NUST Atta-ur-Rahman School of Applied Biosciences (ASAB) successfully organized a three-day International Conference on Integrative Life Sciences (ICiLS) from September 25-27, 2024. The conference focused on Agriculture Sciences, Biomedicine, and Microbiology & Biotechnology, with 19 international speakers, 82 national talks, and over 450 participants. The event featured a workshop, cultural evening, and product exhibitions, further enhancing the experience. Key figures such as Prof Osman Hassan and Prof Habib Bukhari joined the conference, paving the way for future collaborations and reinforcing ASAB's commitment to innovation.



National Conference on Reinventing Libraries

The NUST Central Library hosted the national conference "Reinventing Libraries - Shaping Next-Generation Learning Spaces" on September 19, 2024, with 150 participants. Keynote speakers and panelists, including Syed Javid Gillani, Ahmed El-Badawy, and Dr Kanwal Ameen, discussed libraries' evolving roles in global connections, digital publishing, academic success and data science. A book fair alongside the conference showcased diverse collections in literature, science, art, and technology, promoting creativity and intellectual growth.



Central Library organized Seminars on Ethics, AI and Sustainability

NUST Central Library organized a series of impactful events in August and September 2024 including a session on research ethics and integrity by Mr Ahmed Elbadawy from Wiley, a workshop on utilizing HEC Digital Libraries led by Mirza Waseem Baig, Deputy Director NUST Central Library, and a seminar on advancing UN SDG-4 with Miss Saima Naurin from HEC and Mr Javed Malik from the Malala Fund. Additionally, AI expert Ahmed Jafri from Meta USA delivered insights on AI trends and challenges.



NUST celebrates Women's Day with focus on empowerment and resilience

NUST hosted a Women's Day event that included a panel discussion on gender equality and sustainability. The panel featured Ms Anam Rathore from GIZ Pakistan and Ms. Maha Kamal from Women in Energy. The event highlighted initiatives aimed at empowering women and promoting gender equality. Dr Rizwan Riaz spoke about the role of women in the economy and NUST's commitment to inclusive opportunities. The event also included the presentation of awards to the panelists and winners of the "Voice of Pakistan" essay competition, reaffirming NUST's support for women's rights and achievements.



Well-being initiatives at NUST Balochistan Campus

The NUST Centre for Counselling and Career Advisory (C³A) conducted a series of well-being initiatives at NUST Balochistan Campus (NBC), focusing on mental health, career development and institutional policies. Activities included mental health seminars on stress, anxiety and depression led by Ms Khadija Sultan, along with an orientation on C³A's services for freshmen by Ms Rohia Nusrat. Students and staff attended sessions on NUST's anti-harassment policy, while second-year students explored career paths through self-awareness exercises. Additionally, student advisors received training in basic counselling skills. The visit highlighted C³A's commitment to enhancing the well-being of the NBC community.





NUST hosts USAID Workshop on Digital Communication Strategies

NUST organized a USAID-initiated Workshop on Digital Communication strategies, attended by representatives from sixteen Pakistani universities. The workshop covered topics such as social media strategies, digital marketing, storytelling, and photography. The Peoples University of Medical & Health Sciences for Women highlighted its advanced digital communication efforts. This event reinforced NUST's commitment to addressing challenges in digital media and staying ahead in communication innovation.

Mindfulness and Mental Well-being Session at United States Educational Foundation

Ms Ayesha Liaqat, faculty at NUST School of Social Sciences & Humanities (S3H), led a session on "Mindfulness and Mental Well-being for High School Students" as part of the EducationUSA College Prep Program by the United States Educational Foundation in Pakistan. The discussion covered stress management, productivity, and mental health support for U.S. university applications. Key topics included adolescent development, global adaptation, stress management, and preparing for future challenges.



C³A Seminar on Emotional Intelligence and Well-being

NUST's Centre for Counselling and Career Advisory (C3A) conducted a seminar on Emotional Intelligence (EI) and Well-being at the College of Electrical & Mechanical Engineering (CEME). Led by Ms Rohia Nusrat, the session covered key EI components like self-awareness and empathy. Through interactive activities, students learned practical skills to manage academic challenges and foster positive relationships.

NUST hosts Industry-Academia Collaboration Session with FPCCI

NUST held a collaborative session in Karachi with key members of the Federation of Pakistan Chambers of Commerce and Industry (FPCCI) to explore industry-academia partnerships. The session, led by Ms Maria Qadri, from NUST, brought together influential business leaders, industrialists, and FPCCI office bearers. Notable participants included Mr Zubair Tufail, CEO of Tufail Chemical Industries Ltd; Mr Asif Inam, Chairman & CEO of Diamond International Corporation Ltd and Chairman of the All-Pakistan Textile Mill Association; Mr Nasir Khan, Managing Director of Farooq Enterprises; Mr Hanif Gohar, Director & Owner of Gohar Construction Company Pvt Ltd; Ms Syeda Saeeda Bano, CEO of Khuandkai Group of Companies; Mr Mian Zahid Hussain, Chairman of Kenlubes; Ms Mariam Chaudhary, CEO of Mass Human Resource Services; and other FPCCI office bearers.



NUST delegation at BETT 2024, UK

NUST, led by Dr Rizwan Riaz and Ms Arooba Gillani, represented Pakistan at BETT 2024 in the UK, a key forum for educational technology. This marked Pakistan's first pavilion, featuring top universities and officials from HEC and Khyber Pakhtunkhwa government, with NUST invited by the Pakistan Britain Business Council. The delegation met Mr Steve Smith, UK Government's International Education Champion, and discussed expanding its partnership with Microsoft, including training, short courses, and placement opportunities.



NUST hosts GICC Conference

An overwhelming number of academics, policymakers, development workers and activists attended a conference on "Gender, Intersectionality & Climate Change: From Scientific Evidence to Action" from September 24 to 25, 2024 at NUST Islamabad Campus. Funded by the German Federal Ministry for Economic Cooperation and Development (BMZ) and supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, the conference highlighted the critical need for equitable climate policies that address the unique challenges facing women and marginalised communities.

GICC featured panel discussions, case studies, and an interactive exhibition showcasing innovative approaches to gender-responsive climate governance. The event kickstarted with a powerful opening statement by Mr Jan Kühn von Burgsdorff, First Secretary of German Embassy, stressing the importance of gender inclusion in climate policies and Germany's support for Pakistan's efforts to achieve the desired objectives.

Leading experts at the conference highlighted the disproportionate impact of climate change on women and marginalised communities. Complementing the insightful discussions, the conference featured an Art and Photo Exhibition, showcasing visual representations of how climate change impacts different communities, particularly women. A Project and Product Exhibition, modeled after the concept of a "human library," allowed attendees to engage with ongoing projects that promoted gender equity in climate action. The interactive platform fostered meaningful dialogue between experts and participants, further enriching the conference experience.

The conference underscores NUST's commitment to gender mainstreaming and providing real solutions for real problems. By integrating gender perspectives into climate action, NUST is leading the way in addressing the complex, interconnected challenges of climate change, social justice, and sustainable development, ensuring that the voices of marginalised communities are heard and acted upon.





4

**PARTNERSHIPS
FOR IMPACT**

UBank and NUST sign a Strategic Partnership

In a significant step to promote innovation and entrepreneurship in Pakistan, U Microfinance Bank Ltd (UBank) partnered with the National Science & Technology Park (NSTP) at NUST. The Memorandum of Understanding (MoU) was signed by Rector NUST, Engr Javed Mahmood Bukhari, and UBank's President & CEO, Mr Mohamed Essa Al Taheri. This collaboration will support NSTP's Hatch8 Incubation Programme and the Rising Stars Startup Competition.



NUST partners with US Mission for cultural exchange

NUST and the US Mission in Islamabad renewed their partnership with a Memorandum of Understanding (MoU) to continue supporting educational and cultural exchanges on October 8, 2024. The event, attended by key officials, also featured the ROBOGEN-II Capstone Finale, a STEM competition empowering young girls in robotics.

Session on Shaping the Future of PV Panel Manufacturing in Pakistan

US-Pakistan Center for Advanced Studies in Energy (USPCAS-E), NUST, in partnership with Renewables First, successfully hosted the 2nd Collaborative Consultative Session on "Shaping the Future of PV Panel Manufacturing in Pakistan." The session gathered solar PV manufacturers and industry experts to explore strategies for developing a conducive environment for solar PV supply chains, financing models, and opportunities for technology transfer in Pakistan's growing renewable energy sector.



NUST partners with Zayn Venture Capital

NUST has collaborated with Zayn Venture Capital as the Resident Venture Capitalist at NSTP, focusing on innovation, startup support, and economic growth. The partnership includes workshops, lab access, and investment opportunities. Dr. Rizwan Riaz highlighted its significance for economic progress and the upcoming AI Tower, while Faisal Aftab expressed commitment to scaling NUST's innovations.



Seminar on Powering a sustainable future

Commending the role of National University of Sciences & Technology (NUST) in world-class human capital formation and nation-building, Federal Minister for Energy (Power Division) Sardar Awais Ahmad Khan Leghari underscored the need for sustained government-university collaboration for tackling power sector challenges. He made these remarks at a seminar on "Powering a Sustainable Future: Identifying and Solving Challenges in Electricity Generation, Transmission, and Distribution," organised by NUST US-Pakistan Center for Advanced Studies in Energy (USPCAS-E) and NUST Institute of Policy Studies (NIPS) on October 8, 2024. The seminar was held in collaboration with the Ministry of Energy (Power Division) as part of the latter's efforts for result-oriented knowledge-based engagement with academia.

The minister stressed that power tariff reduction is one of the key priorities of the government which, he remarked, requires comprehensive power sector reforms based on the rationalisation of the overall political economy of power generation and distribution, including the mutually acceptable review of agreements with IPPs. The minister assured the attendees that the government was committed to providing cost-effective electricity to consumers and was in the process of taking practical steps toward that end.

Lt Gen (Retd) Engr Javed Mahmood Bukhari, Rector NUST, welcomed the honourable guest upon arrival at the university. He apprised him of the NUST's key strengths in interdisciplinary collaboration, research, and innovation promotion, highlighting how these attributes have positioned NUST as a leader in advancing knowledge and addressing societal challenges.

Other speakers of the seminar included: Mr Syed Moonis Abdullah Alvi, CEO K-Electric; Mr Tauseef Farooqi, former Chairman NEPRA; and Mr Syed Akhtar Ali, former Member, Energy, Planning Commission. The seminar was attended in large numbers by students, researchers, academics, and power sector experts.



Secy MoST visits NUST

Federal Secretary Ministry of Science & Technology (MoST) Mr Sajid Baloch visited NUST on November 6, 2024. Lt Gen (Retd) Engr Javed Mahmood Bukhari, Rector NUST, received the guest upon arrival at the university. Ensuing was a comprehensive presentation on the NUST knowledge ecosystem, including flagship initiatives and major accomplishments. The Secretary expressed his deep appreciation for the fast-paced growth of NUST as a hub of quality higher education, research, and innovation. Later, the esteemed guest visited the National Science & Technology Park and School of Interdisciplinary Engineering & Sciences at NUST, where he was briefed on cutting-edge projects and R&D activities supporting national progress.



NDU-KSA delegation at NUST

A fifteen-member delegation of NDU KSA, led by Commandant War College, Major General Badar Bin Muneef Al-Otabi visited NUST on 5th November 2024. The delegation was warmly received by Lt Gen (Retd) Engr Javed Mahmood Bukhari, Rector NUST. During the one-day visit, the delegation was given a detailed briefing on various dimensions of NUST, including an overview of NUST, the Academic Governance, Quality eco-systems of NUST, research regime, NUST's Think Tank and knowledge diplomacy.

The delegation also attended the 28th Annual Conference of International Association of Peacekeeping Training Centre (IAPTC), being held for the first time in Pakistan.

NUST partners with Atlas Honda

NUST has partnered with Atlas Honda to promote electric mobility in Pakistan, utilizing academic expertise and advanced research facilities. The collaboration was marked by a visit from Atlas Honda's senior management on January 30, 2024, where they presented the Honda BENLY e electric motorcycle to NUST. Dr Saeed Ur Rehman Sarwar, DG Projects, emphasized the significance of the collaboration in advancing the electric mobility sector.



NUST partners with Shaukat Khanum Memorial Cancer Hospital

NUST has signed an MoU with Shaukat Khanum Memorial Cancer Hospital and Research Centre to establish a framework for industry-focused capacity-building programs. These programs aim to equip professionals, particularly in the healthcare sector, with the latest skills and knowledge essential for their development and success.



NUST and MIND-Austria hosts 2nd Summer School Training Session

The 2nd NUST Summer School Training Session was held from August 5 to September 4, 2024. Organized by the Registrar Directorate in collaboration with MIND - Austria, the closing ceremony was graced by H.E. Dr. Hannes Machor, Acting Ambassador of Austria, and Dr. Osman Hassan, Pro-Rector Academics. The training proved invaluable for Fall 2024 entrants, with Ambassador Machor commending the efforts of the team in enhancing the educational experience for participants.



NUST and Toyota Sign MoU

NUST and Toyota signed a landmark Memorandum of Understanding (MoU) at the IDEAS Expo 2024, aiming to foster innovation and address key national challenges in Pakistan. The partnership combines NUST's academic excellence with Toyota's industry expertise to develop transformative solutions, particularly in engineering advancements and applied research. The MoU reflects both organizations' commitment to sustainable development, industrial growth and creating impactful solutions to real-world challenges through advanced research and innovation.



NUST and Aussie ASEAN Education & Immigration forge academic partnership

NUST signed a Memorandum of Understanding (MoU) with Aussie ASEAN Education & Immigration, Islamabad, to strengthen educational and cultural ties between Pakistan and ASEAN nations. Representatives from UNSW Australia, Bada Global South Korea, and NUST were present to mark the occasion, highlighting the importance of cross-border academic engagement.



Dr Amir Ayub visits NUST

Following a recent visit of a NUST delegation to UK, Dr. Aamir Ayub, founding member and Chief Coordinator of Financial Assistance for Medical Students (FAMS) and a well-known figure for his philanthropic contributions to healthcare, has formalised a partnership with NUST. It is aimed at providing financial support to deserving medical students at the NUST School of Health Sciences (NSHS).

The honourable guest also visited the National Science and Technology Park (NSTP) and the NUST School of Health Sciences (NSHS). Dr Rizwan Ashraf, Principal NSHS, briefed him on the school's vision and plans for future expansion, emphasising the institution's growing commitment to advancing healthcare education and research.

NUST signs MoU with Pakistan Bar Council

NUST hosted a delegation from the Pakistan Bar Council (PBC) on January 8, 2024. Led by the Vice Chairman and Chairman of the Executive Committee of PBC, along with the Director of the Directorate of Legal Education, the visit centered on the formal signing of a Memorandum of Understanding (MoU). The MoU aims to provide 5% scholarships to the children of Advocates at NUST, enhancing legal education quality, promoting research and facilitating professional development opportunities for law students.



Meta's Engineering Manager visits NUST

Mr. Ahmed Jafri, Engineering Manager at Meta, Seattle, USA, visited the NUST Islamabad campus on August 19, 2024. His visit included a productive meeting at the Pro-Rector's office, followed by insightful tours and discussions across various departments such as SEECS, SINES, NSTP, NUST Lincoln Corner, and NCAI. The visit highlighted NUST's ongoing commitment to excellence in education and innovation, fostering stronger connections with global tech leaders.



NUST and Altınbaş University forge strategic partnership

NUST and Altınbaş University (AU) have entered into a strategic alliance with the signing of an MoU on February 20th, 2024. The partnership focuses on advancing research, innovation, academic exchange and industry engagement. Both institutions are committed to driving academic excellence and fostering innovative solutions through this collaboration, which aims to cultivate future leaders.



National Foods Limited Recruitment Drive 2024

National Foods Limited conducted a highly successful campus recruitment drive at NUST-PNEC on February 13, 2024, engaging students from Mechanical, Electrical, and Naval Architecture disciplines. The event offered interviews, career guidance stalls and complimentary refreshments, helping students explore internship and job opportunities within the company.

PARTNERSHIPS &



Delegation from Jiangzhong Cancer Research Centre, China Visits NUST to Foster Collaboration



Delegation from Beihang University, China visits NUST



NUST Delegation Visits House of Lords



NUST Visits Mae Fah Luang University (MFU), Thailand



Visit of Ohio State University Delegates



NUST Partners with PASHA

COLLABORATIONS



NUST meets Consul General and Muslim Business Community in Manchester



Embassy of France Delegation Explores Academic Collaboration Opportunities at NUST



NUST Signs MoU with Pakistan Bar Council



Visit of Mr. Stefano La Torre, International Relations Office from University of Foggia, Italy to NUST



NUST Collaborates with Oman's Military Technological College (MTC)



CEO of The World Hepatitis Alliance, UK



CIPS partners with Intelligence Bureau Academy



NUST Partners with Federal Colleges to Launch Training Institutes



KATOP Visits NUST



NCAI Partners with RMU



Nera Telecommunications Delegation



NUST and AIM enter Partnership



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CO-CURRICULARS

NUST observes Independence Day with patriotic zeal

NUST celebrated Independence Day with grandeur, bringing together a vibrant community of performers, faculty, students, staff, families, and attendees from diverse ethnic and professional backgrounds. The event was a remarkable showcase of unity and cultural pride, featuring captivating performances and heartwarming tributes to the nation. The celebration reflected the spirit of inclusivity and patriotism, making it a truly memorable occasion for all who participated.



NUST Career Connect attracts over 100 leading employers

Around 2500 final-year students at NUST participated in NUST Career Connect 2024, engaging in on-spot interviews with 114 national and multinational companies. Companies like P&G, L'Oréal, Food Panda, Total Parco, and others were present. Dr Rizwan Riaz, NUST Pro-Rector for Research, Innovation & Commercialisation, highlighted the importance of sustainable partnerships between academia and industry during the event.



Tree Plantation Drive 2024

To commemorate the completion of the new CIPS building, a tree plantation drive was organized on February 27, 2024. The event was graced by the presence of Pro-Rector P&R Maj Gen (Retd) Muhammad Arif Malik and Principal NIPCONS Maj Gen (Retd) Raja Aftab Khan. They inaugurated the drive by planting tree saplings. Students from various NUST schools participated environment friendly campaign.to a greener tomorrow by planting trees.



NUST celebrates excellence at Lapel Pin and High Achiever Ceremonies 2024

NUST recently honoured outstanding faculty, student leaders, and high-achieving students at two separate ceremonies. The Annual Lapel Pin Award Ceremony, held on May 8, recognised faculty sponsors and student office bearers, featuring speeches from Dr Osman Hasan, Pro-Rector Academics, Col. Asad Mehmood, Director Student Affairs, and Prof. Christiano Tomassoni from the University of Perugia. Following this, the Annual High Achiever Ceremony took place on May 15. This event, also hosted by the Student Affairs Directorate, celebrated student accomplishments in co-curricular and extracurricular activities at national, international, and inter-varsity levels throughout 2023.



NUST wins first place at Jazz Digital Squad Data Hackathon

NUST's team, Data Aficionados, secured first place in the grand finale of Pakistan's first-ever Jazz Digital Squad Data Hackathon. The event, which was held in Islamabad, saw the top 5 teams from across the country competing. Tailored for undergraduate and graduate students, the hackathon highlighted the teams' data analytics expertise. The victorious NUST team was awarded PKR 0.5 Million and earned an invitation to Jazz HQ to present their analysis to a distinguished jury, further showcasing their exceptional skills in data analytics.



Eid celebrations at NUST: home away from home

Students and staff at NUST celebrated Eid with the university's leadership, including Pro-Rector P&R, Maj Gen Muhammad Arif Malik, Pro-Rector RIC, Dr Rizwan Riaz and Pro-Rector Academics, Dr Osman Hasan.



NBC celebrates Pakistan Day

NUST Balochistan Campus (NBC) commemorated Pakistan Resolution Day with a bilingual debating contest on March 23, 2024. The event featured speeches on 'Resilience and Progress: Pakistan's Journey since the Historic Resolution' and 'Iqbal, your nation's destiny has been lost.' Participants included Ms Amna Nadeem and Mr Asfandiyar delivering speeches in English, and Mr Khazran, Ms Khadija, and Mr Waseem Abbas in Urdu.



NUSTians claim top spot at HEC championship

The NUST Debating Society triumphed in the English category of the HEC Pakistan University Debating Championship 2023-24 National Round, held on May 15, 2024, at the HEC Auditorium, Islamabad. Team members Tayyaba Naveed (SEECs), Riya Fatima Aeyzaz (NBS) and Shahmir Muhammad (SMME) secured first place, winning a cash prize of Rs. 200K. The awards ceremony was graced by Chairman HEC, Dr Mukhtar Ahmed.



Eco-Carnival 2024

NUST's Eco-Carnival, held on April 22, 2024, focused on environmental awareness, offering exhibitions and eco-friendly product displays. The event aimed to engage students in sustainability efforts, emphasizing the importance of environmental conservation.

NUST Cultural Fest 2024

NUST's Bazm-e-Pakistan & NUST Olympiad 2024 Cultural Fest brought together a vibrant display of Pakistani culture. Attended by Ms Mumtaz Zahra Baloch, Spokesperson & Additional Foreign Secretary, Ministry of Foreign Affairs, Pakistan, the event featured folk dances, local cuisine, and a demonstration by the Pakistan Army School of Physical Training. The fest was held on March 9, 2024.



NBC students stand out at 6th Engineering Capstone Expo

The Civil Engineering students from NUST Balochistan Campus (NBC) achieved 1st and 3rd positions at the 6th Engineering Capstone Expo 2024 (Final year Engineering Design Project Exhibition). The 1st place was awarded to the project "Seismic Retrofitting Through Externally Attached Sub-Structure to Improve Structural Resilience" by Mr M Yaseen, Mr Awais Raza and Mr Hakeem Ullah, supervised by Dr Momin Shahzad. The 3rd place went to the project on "Laboratory Evaluation on Incompatibility of Waste Polymers-Modified Bitumen" by Mr Waseem Abbas, Mr Azhan Ghani, Ms Bibi Zubaida and Mr M Abdullah, supervised by Dr. Adham Alnadish. The event featured 79 projects from across Balochistan.



All Pakistan Youth Mushaira 2024

NUST Literary Circle hosted the All Pakistan Youth Mushaira 2024 on May 9, 2024, at Jinnah Auditorium, celebrating literature and poetic artistry. Renowned poets Umair Najm, Ali Zaryoun, Raaz Ehtasham and Ata Turab shared verses of hope, pain and reflection, enchanting the audience with their masterful expressions.





Henry Dunant Moot Court Competition

NUST Law School celebrates its first major triumph as an independent institution, with its moot court team winning the national title at the Henry Dunant Moot Court Competition. The team also claimed two prestigious awards: "Best Researcher" and "Best Preliminary Answers," earning a spot in the international finals in Hong Kong.

NLS team secures position in Sports Arbitration Moot

A team from NUST Law School, consisting of Ms Areej Anwar, Ms Ayesha Akbar, Mr Ayaan Shehryar, Mr Waleed Shehzad and Ms Maham Khan, has advanced to the Round of 16 in the Sports Arbitration Moot, ranking 6th out of 66 global teams. The team is the only South Asian representative in the top 10.



NUST Law Department makes history at Vis East Moot

The Department of Law at S³H, NUST, has made history as the first team to represent Pakistan at the prestigious Vis East Moot in Hong Kong. Led by Mr Afaq and Ms Zala, and under the guidance of Dr Asif Khan, the students demonstrated their legal prowess on an international stage. Special thanks to CLDP, USA, for their generous sponsorship.

NUST triumphs at Madrid Sports Arbitration Moot

NUST's Law Department team earned recognition at the Sports Arbitration Moot Court Competition hosted by the Madrid International Arbitration Centre, Spain. They secured the "Best Appellant Team" award, becoming the first Pakistani team to excel in Sports Law on the global stage. The team comprised Areej Anwar, M Ayaan Shehryar, Waleed Shehzad and Ayesha Akber, with faculty coach Haziq Ali Khan and international coach Emiliano Olivetti. The team advanced through rigorous rounds culminating in the finals held at Palacio de Santoña.



NUST launches 'Haami:' A Student-led Fundraising Club

NUST inaugurated 'Haami,' its first student-led fundraising club, on April 18, 2024. Spearheaded by Ms Arooba Gillani, the club supports the NUST Endowment for Educational Development (NEED) Initiative. Aimed at assisting financially challenged students, 'Haami' promotes philanthropy and community service through fundraising campaigns.



NUSTian shines at Gen-Forum 2024

Kainat Kamal, a PhD scholar at NUST's Centre for International Peace and Stability (CIPS), represented Pakistan at the Gen-Forum 2024 in Bangkok, organized by UN Women Asia and the Pacific and the Australian Government. She earned recognition for her origami artwork on Women, Peace, and Security (WPS), showcased on UN Women's platforms, and moderated a session titled "Peace and Art," highlighting art's role in peacebuilding. Additionally, she co-developed the forum's Strategic Outcome Document with UN Women, reflecting NUST's commitment to interdisciplinary research and the impactful contributions of young Pakistani leaders in global peacebuilding.

PNCA Annual Tamasha

The NUST Dramatics Club showcased its talent at Tamasha 2023, a National Arts & Theatre Competition hosted by Quaid e Azam University on December 24, 2023, at the Pakistan National Council of Arts (PNCA) in Islamabad. Their performance of 'Barri Dair Kar Di Mehrban Atay Atay' by team 'Baaz Dramay' earned nominations for Best Onstage Humorous Character and Best Onstage Actress. Ms Iqra Rizwan, as "Superintendent," won the Best Onstage Humorous Character Award.



NUST Internship Program for International Students (NIPIS-24)

NUST has successfully concluded its flagship program, the “NUST Internship Program for International Students (NIPIS-24),” with a closing ceremony that celebrated the achievements of the interns. The program offered students from across the globe the opportunity to gain hands-on training and valuable learning experiences in their respective fields.

The ceremony was graced by Pro-Rector RIC, Dr Rizwan Riaz, who distributed certificates to the interns in recognition of their hard work and dedication. This year, the program welcomed 15 interns from six countries, including Egypt, Sri Lanka, Türkiye, the United Kingdom, Ireland, and Nepal. The program has been instrumental in fostering international collaboration and enhancing the professional development of students at NUST.



Team SAF SHIKAN wins Bronze at ISSSP 2024

Team SAF SHIKAN from NUST's College of Aeronautical Engineering (CAE) proudly secured the Bronze Medal at the International Space Science and Scientific Payload Design Competition 2024. Organized by the Chinese University of Hong Kong, the competition saw participation from over 80 universities across 50+ countries. The team's innovative design of a smart deployable radiation shield for space station protection stood out, showcasing Pakistan's potential in space science and engineering.

PIAM 3D Additive Manufacturing Competition

CAE NUST students earned significant recognition at the PIAM 3D Additive Manufacturing competition, securing second place. The competition, held by the National Center of Physics, Islamabad, challenged participants to design a complex wheel for a space exploration rover.

Islamabad United Interactive Session

The Islamabad United team visited NUST on May 2, 2024 to celebrate their successful PSL journey, engaging with students in an interactive session. The event provided an opportunity for students to connect with the players, gain insights into their experiences, and celebrate the spirit of sportsmanship.

National CanSat Competition 2024

Team SAF SHIKAN from CAE emerged victorious in the National CanSat Competition 2024, held by the Space Education Research Lab (SERL) of the Institute of Space Technology (IST), Islamabad. The competition aimed to foster Space Technology Education and Popularization through the design, development and launch of student satellites, CanSat.

World Mental Health Day 2024

World Mental Health Day 2024, themed Prioritizing Mental Health in the Workplace, underscored our commitment to fostering an inclusive and supportive environment at #NUST.

NUST Centre for Counseling and Career Advisory (C³A) hosted a counselling camp for students and faculty, offering personalized emotional support and career guidance, on October 10, 2024. More than 200 participants engaged in interactive mental health activities, with booths from Rozan, Saving 9, and the Down Syndrome Club. The event was a resounding success.



NCSC and Sundas Foundation host successful blood donation drives

The NUST Community Service Club (NCSC), in collaboration with the Sundas Foundation, organized two impactful blood donation drives this year.

The first, held at the Helipad Ground, saw 830 donors register and 606 pints of blood collected, with a record-breaking 277 pints donated on the first day. The second drive, at the NBS ground from March 5th to 6th, 2024, collected 321 pints in two days. These initiatives reflect NUST's commitment to compassion and community service, making a tangible difference in creating a healthier future.



World Health & Autism Awareness

The NUST School of Health Sciences hosted a notable event commemorating World Health Day and Autism Day on April 29, 2024. Dr Shahzad Ali, Vice Chancellor of Health Services Academy, and Dr Shahid Mahmood Baig, former Chairman of Pakistan Science Foundation, were distinguished guests. They emphasized the importance of autism awareness and commended NUST's healthcare innovations. The event concluded with a symbolic unity walk alongside informative lectures on autism awareness and the role of AI in healthcare.

Ramadan Ration Drive 2024

NUST Community Service Club's Ramadan Ration Drive 2024, held from March 13 to April 1, raised over PKR 1.1 million. The funds enabled the distribution of 236 ration bags to underprivileged families, embodying the spirit of Ramadan and making a meaningful impact on the community.



SPORTS



NUST Olympiad 24



NUST wins NHA Cricket Tournament



All Pakistan Table Tennis Championship 2024-25



NUST Qualifies for HEC All Pakistan Basketball Championship



NUST Inter College Table Tennis & Chess Championships



NUST Inter-School Cricket Championship 2023-24



NUST Interschool Table Tennis, Volleyball & Chess Championships



NUST Swimming Training Camp 2024



Inter-School Volleyball
Championship (Women)



Inter-School Table Tennis
Championship (Women)



Inter-School Volleyball
Championship (Women)



Inter-School Volleyball
Championship (Men)



Inter-School Volleyball
Championship (Men)



Inter-School Volleyball
Championship (Men)





International Youth Day

Students Ali Noor and Mahnoor Quddusi (BE Environmental Engineering, Batch 2020) presented their Final Year Design Project, "Design and Performance Evaluation of DEWATS for Sustainable Fecal Sludge Treatment," at International Youth Day 2024, organized by the PMYP at the Pak-China Friendship Center. The event featured prominent guests, including Prime Minister Muhammad Shahbaz Sharif and Ministers Rana Mashood, Dr Ahsan Iqbal, and Ms Shana Fatima Khwaja.

NUST Law team shines at IBA-ICC Moot Court in The Hague

A team of law students from NUST's School of Social Sciences and Humanities (S3H), coached by Haziq Ali Khan, qualified for the prestigious IBA-ICC Moot Court Competition in The Hague, Netherlands. Competing against global teams, they represented Pakistan with distinction and gained valuable insights from visits to leading legal institutions, further enriching their knowledge of international law.



NUST PNEC wins gold at IEEEEP symposium 2024

NUST PNEC students Mahnoor Mehmood, Muhammad Zubair Irshad, Muhammad Shayan Bin Wajid and Hammad Waseem secured first place in the Gold Category at the 38th IEEEEP Multi-topic International Symposium, held on May 9, 2024, in Karachi. Competing against 40 teams from across Pakistan, their project, "IoT-based Energy Management System for Optimal Consumption in Residential Facilities," impressed judges with its innovation and practical impact. Guided by Dr Syed Sajjad Haider Zaidi, this marks PNEC's eighth win since 2014.



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ALUMNI AFFAIRS

Dr Maha Yusuf becomes first Pakistani female to earn Doctorate in Chemical Engineering from Stanford

Dr Yusuf, a distinguished alumna of NUST, has made history as the first Pakistani female to earn a doctorate in Chemical Engineering from Stanford University. Her groundbreaking achievement reflects her unwavering dedication and serves as a testament to the power of perseverance and support in realizing one's dreams. Dr Yusuf's groundbreaking journey is an inspiration to future generations of NUST students, particularly women in STEM, demonstrating that with dedication and determination, dreams can be realized.



NUST Student wins Microsoft Gold award in EMEA Program

Mashal Ashfaq, a student from NUST SEECS, has earned the Microsoft Gold award in the Microsoft Learn Student Ambassador program for the EMEA region. As the second NUST student to achieve this honor, Mashal has made significant contributions through leadership in the Islamabad chapter, impacting over 1,000 individuals. She also manages the largest Microsoft Learn SA chapter in EMEA and works as a full-stack developer at Shadiyana and Walee. This recognition celebrates her outstanding leadership and community service.

NUST graduate selected for KTP role at University of Hull, UK

Hassan Raza Bukhari, a 2022 graduate from NUST's School of Electrical Engineering & Computer Science (SEECS), has been selected for a government-funded Knowledge Transfer Partnership (KTP) role at the University of Hull, UK. Under this role, he leads the development of an Ingenious Personalized Telehealth System using Artificial Intelligence to detect health deterioration for proactive treatment. Supervised by Professor Dr Rafia Mumtaz, Head of SEECS Software Engineering Department, Hassan aims to leverage AI for societal good, particularly in healthcare.



Rewinding 2024

One Platform. Several Success Stories.

From viral campaigns to daily highlights, our posts and reels celebrated your excellence, diversity and achievements.

750,000+
Strong Digital Family

8,346,179
Digital Reach

25
TV Features



80+
Newspaper Headlines



576
Events Covered Digitally



3,250+
Moments Shared with NUSTians

ALUMNI REUNIONS



📍 Silicon Valley, USA



📍 Stockholm, Sweden



📍 Amsterdam, Netherlands



📍 Birmingham, UK



📍 Islamabad, Pakistan



📍 Boston, USA



📍 Detroit, USA



📍 Dubai, UAE



Hannover, Germany



Durham, NC, USA

74

Countries

16Constituent Alumni
Associations**50**Industrial
Sectors

Enschede, Netherlands



Milan, Italy



Paris, France



Phoenix, USA

ALUMNI REUNIONS



Convocations 2024



Graduates this year: 4253

UG 2625 | MS 1537 | PhD 91



Master Convocation



School of Social
Sciences and
Humanities



School of
Natural Sciences



NUST Business
School



School of Mechanical
and Manufacturing
Engineering



U.S. Pakistan Center
For Advanced Studies
In Energy

Harbingers of a promising Future!



U.S. Pakistan Center
For Advanced Studies
In Energy



School of
Interdisciplinary
Engineering & Science



Centre for
International Peace
and Stability



School of Art, Design
and Architecture



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