

National University of Sciences & Technology

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Paragons of Excellence

The cover features artistic sketches of NUST luminaries who made headlines in the year 2022 for their impactful contributions in their respective spheres of work.

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HIGHLIGHTS

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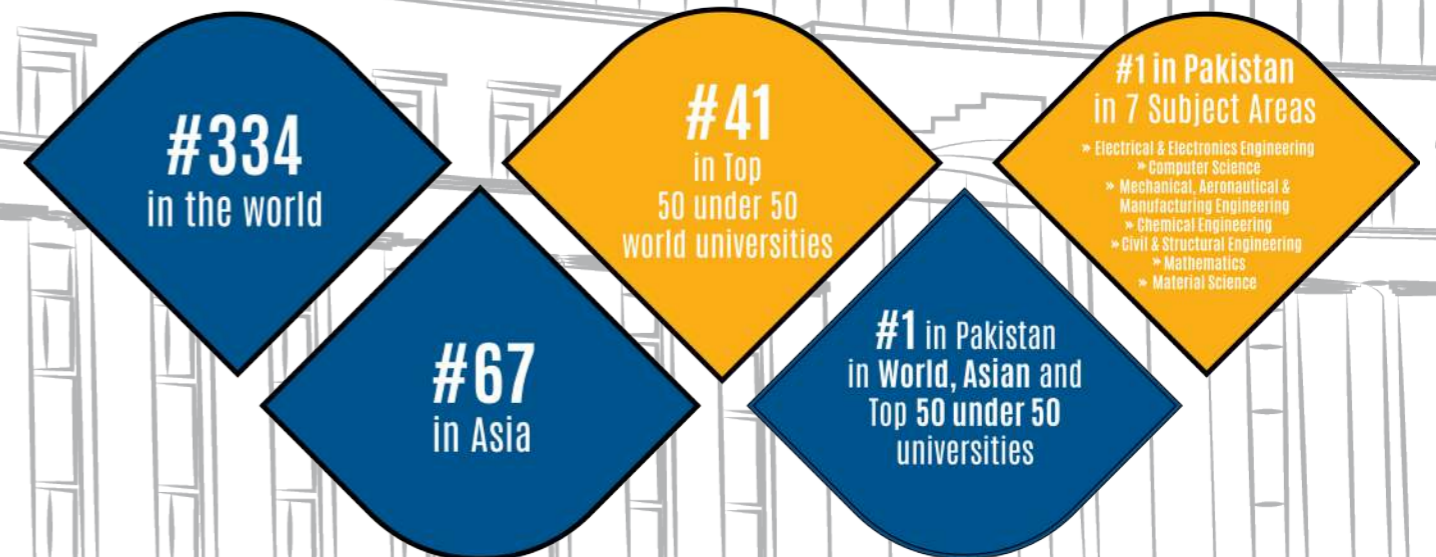
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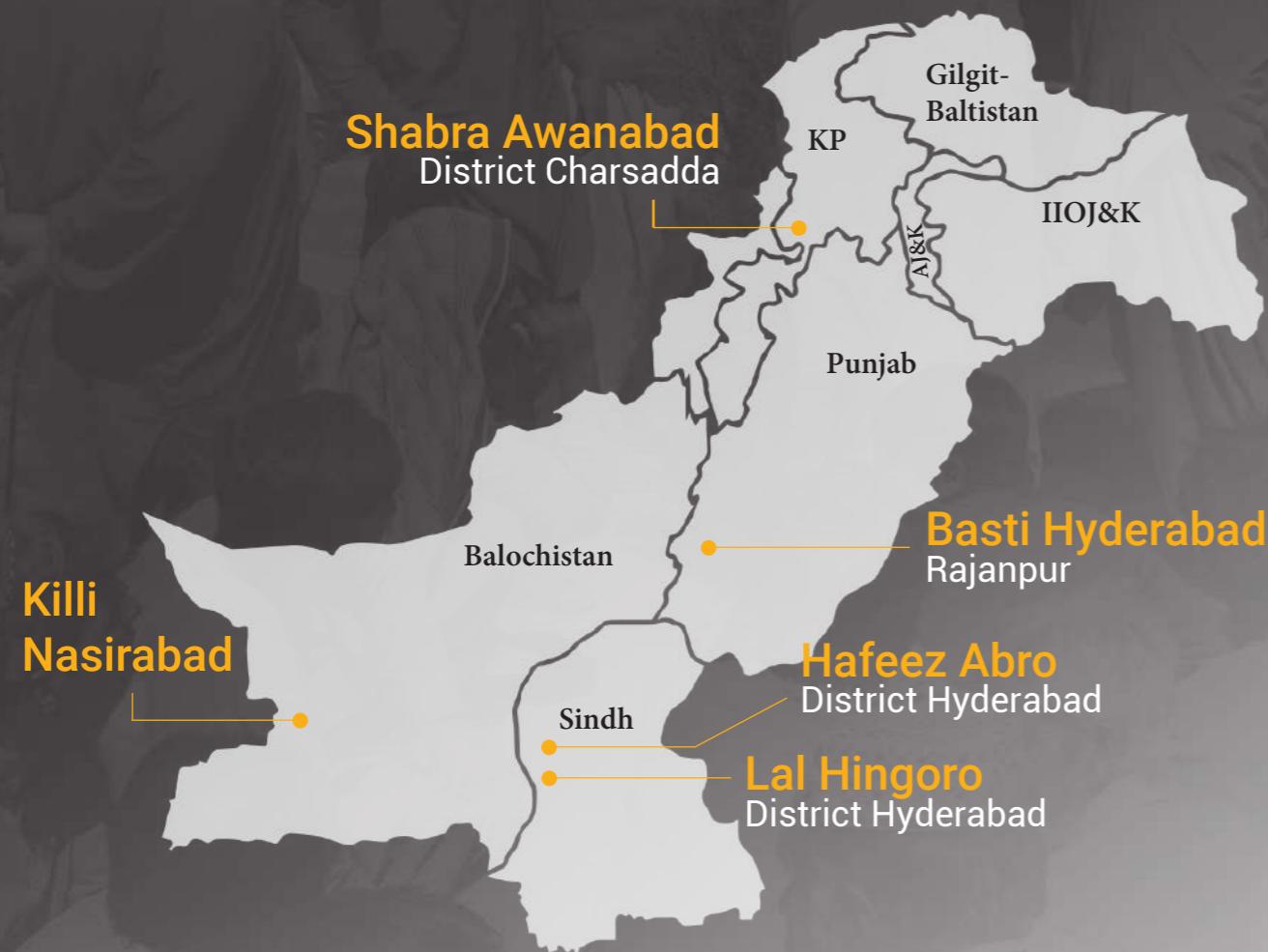
THE UNIVERSITY IMPACT RANKINGS

Among **Top 200** world universities
#1 in Pakistan in **8** SDGs



NUST TAKES FLOOD RELIEF, REHAB EFFORTS ACROSS PAKISTAN

NUST's flood-relief efforts have culminated into a comprehensive plan to resurrect life in the most affected areas across the country. After a need-based assessment of identified villages completely wiped out due to heavy deluge, NUST teams have engaged with the local governments and communities to restore physical infrastructure and revive livelihood for the victims. The project is currently in full swing and is likely to be completed in two to three months.



Pakistan's first 5G Innovation Lab

In a landmark development, the groundbreaking of Pakistan's first 5G Innovation Lab was held at the National University of Sciences & Technology (NUST). This initiative is the result of strategic partnership between NUST and Jazz. The groundbreaking witnessed an overwhelming number of senior dignitaries, including Secretary IT Mr Mohsin Mushtaq; SAPM on Youth Affairs, Ms Shiza Fatima; Rector NUST, Engr Javed Mahmood Bukhari; and CEO Jazz Mr Aamir Ibrahim to name a few.

By leveraging its high bandwidth, low latency, and advanced security, the 5G Innovation Lab will help researchers to work on potential use cases for 5G in the fields of Artificial Intelligence, Augmented/Virtual Reality and Cloud-edge Computing Possessing Applications in Education, Healthcare, Industry 4.0, Agriculture, Security, Disaster Management, Entertainment, etc.

Addressing the occasion, Pro-Rector RIC Dr Rizwan Riaz said that the 5G Innovation Lab would strengthen and foster a collaborative, and development-focused ecosystem with cutting-edge technology by bringing together visionary startups, industry leaders, technical experts and investors for shared goals of advancement and growth.

5G



23 NUST researchers ranked among Top 2% globally

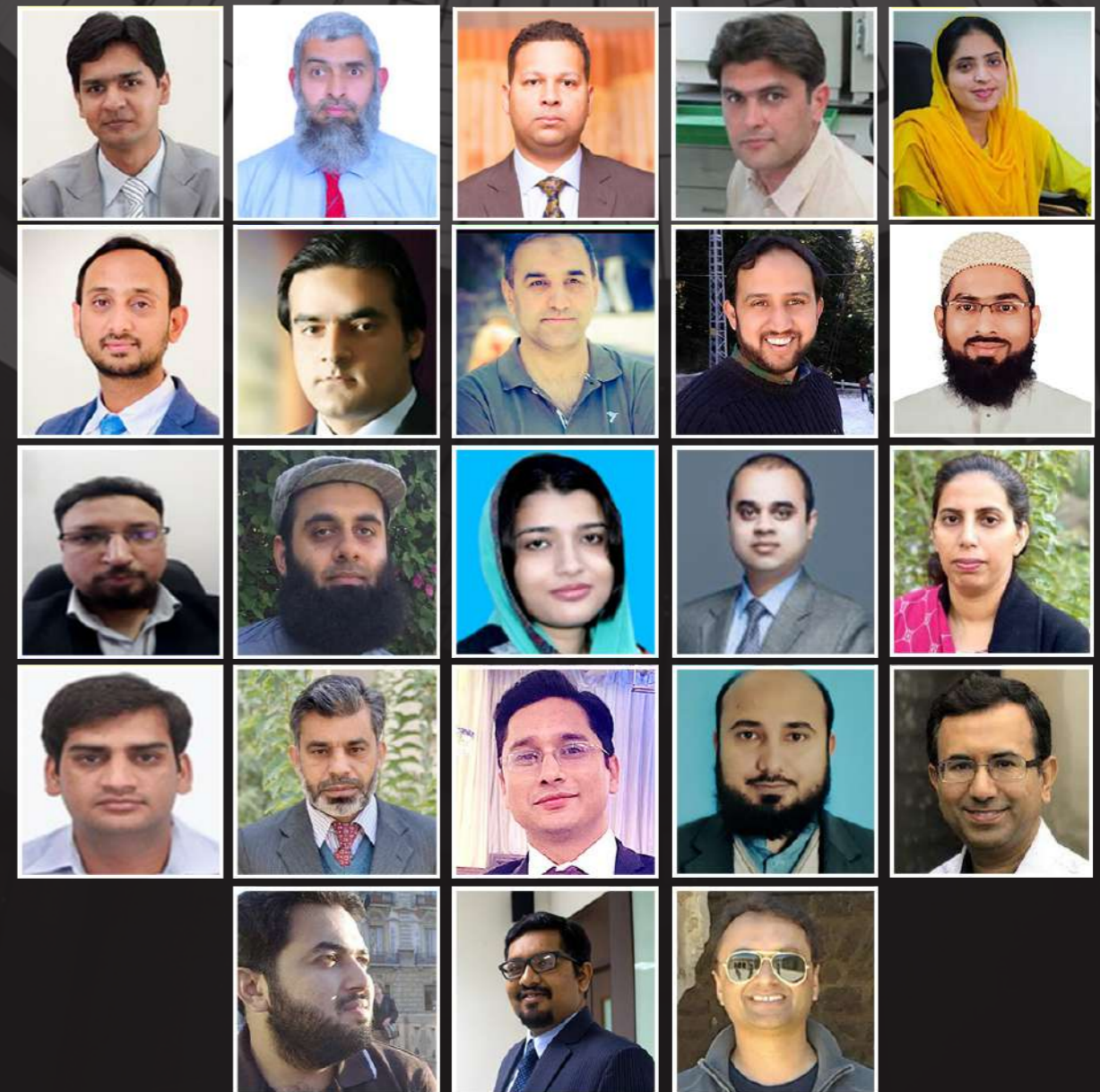
As many as 23 researchers from the National University of Sciences & Technology (NUST) have made the nation and NUST proud by landing amongst the world's Top 2% research luminaries. Four of these researchers have also been recognised for their career-long impact.

The number of NUST researchers featuring among Top 2% of the world has steadily increased over the past three years. This speaks volumes of the conducive research environment NUST affords for knowledge seekers and creators to make a difference in these epoch-making times.

Elsevier publishes these rankings based on a composite index factoring in several bibliometrics, including citations, hirsch-index, authorship positions, etc.

The esteemed researchers include Dr Noreen Sher Akbar, Dr Meraj Mustafa, Dr Mubasher Jamil, Dr Salman Raza Naqvi, Dr Faisal Shafait, Dr Adeeb Shahzad, Dr Shahid Iqbal, Dr Muhammad Moazam Fraz, Dr Iftikhar Ahmed, Dr Iftikhar Ahmad Rana, Dr Irfan Hussain Gul, Dr Muhammad Usman Akram, Dr Haider Abbas, Dr Hasan Ali Khattak, Dr Tayyaba Noor, Dr Farooq Ahmed Tahir, Dr Abdul Ghafoor, Dr Muhammad Jawad Khan, Dr Safia Akram, Dr Tahir Abdul Hussain Ratlamwala, Dr Tahir Mehmood, Dr Syed Ali Hassan, and Dr Muhammad Ishaq.

The star researchers recognised for their career-long impact include Dr Noreen Sher Akbar, Dr Mubasher Jamil, Dr Meraj Mustafa, and Dr Faisal Shafait.



NUST launches Asia's first Innovation Centre at SCCI

National University of Sciences & Technology (NUST) launched Asia's first Innovation Center at Sialkot Chamber of Commerce & Industry (SCCI) on August 29, 2022. Khawaja Muhammad Asif, Minister for Defence along with Dr Rizwan Riaz, NUST Pro-Rector RIC and Mr Imran Akbar, President SCCI inaugurated the Innovation Centre of NUST (ICON). The concept behind this initiative is to strengthen and foster Industry-Academia linkages and serve as a bridge between industries and academia. The ICON project was the initiative of Innovation & Commercialisation office NUST - the first industry liaison office established by any university in Pakistan in collaboration with Chambers of Commerce & Industry.



16 new startups graduate from National Science & Technology Park

National Science & Technology Park held the Graduation Ceremony of the 3rd cohort of its Hatch 8 programme at NUST main campus. As many as 16 startups have graduated as part of the third cohort. Hatch 8 is a pre-incubation programme of NSTP, which admits entrepreneurs at the idea stage of their product development and transforms them into viable businesses in due course of time.

Mr Ahsan Iqbal, Federal Minister for Planning, Development & Special Initiatives, was the chief guest who felicitated the startups upon graduating. He said that creativity is the solution to each one of our problems and NSTP serves as a powerhouse of innovation and is a breeding ground for innovation.

During the course of Hatch 8 Programme, entrepreneurs go through hands-on learning, aimed at inculcating in themselves the entrepreneurial skills and relevant business acumen, all the while nurturing their business ideas. Expert mentorship and coaching is provided to startups during the programme.

The tech startups graduating from the Park, inter alia, span a wide array of themes ranging from Ed-Tech, Health-Tech, and Smart-Tech. Out of the 16 startups, four were given awards for high achievement on the basis of revenue generation, customer base and socio-economic impact. The Innovator award was presented to As-Siraat, while first and second runners-up being InLights and Gameotivity respectively. The Top Performer Startup Award conferred Bendecrete.



Rector NUST conferred PEC Excellence Award

In recognition of his meritorious contributions to the field of Engineering and S&T development in Pakistan, Rector NUST Engr Javed Mahmood Bukhari has been conferred the Pakistan Engineering Council (PEC) Excellence Award-2021 (Lifetime Achievement) by the President of Pakistan Dr Arif Alvi.

A graduate of Cranfield University (UK), Quaid-e-Azam University (Islamabad), University of Balochistan (Quetta) and Military College of Engineering (Risalpur), Engr Javed Mahmood Bukhari has held many prestigious positions during his illustrious career spanning over 35 years. During Engr Bukhari's continuing stint as Rector NUST, the university has made monumental strides forward as a leading hub of science & technology in Pakistan. His major contributions as Rector NUST inter alia include expansion of Pakistan's first S&T Park - the National Science & Technology Park, establishment of School of Interdisciplinary Engineering & Science (SINES), School of Health Sciences (under construction), introduction of new programmes of study, labs, etc.



Pro-Rector Academics awarded *Tamgha-e-Imtiaz*

To acknowledge his outstanding services and accomplishments as an educationist, academic and researcher, Dr Osman Hasan has been conferred various coveted awards and honours in the year 2022.

H.E. President of Pakistan, Dr Arif Alvi, bestowed *Tamgha-e-Imtiaz* (one of the highest civil awards) upon Dr Osman, in recognition of his exceptional contributions to the field of higher education. In addition, Dr Hasan has earned the HEC Best Researcher Award for his impactful research in the domain of Physical Sciences, Engineering, Technology, Computer Science, Statistics, and Mathematics.

Dr Osman is a celebrated academician with a proven track record in academic leadership, teaching & research, industry outreach & commercialisation. His research interests broadly are in the areas of Formal Verification, Digital Design and e-health. He has been able to acquire research grants worth over PKR 125M from various national (HEC, PSF and Ignite) and international (DAAD, Germany, British Council, UK, QNRF, Qatar, UAE ICT Fund) agencies.

Meanwhile, His Excellency President of Pakistan Dr Arif Alvi has appointed Dr Hasan as Member Benazir Income Support Programme (BISP) for the latter's contributions to poverty alleviation from Pakistan.



Dr Yasar Ayaz conferred Pride of Performance Award

Prof Dr Yasar Ayaz, Chairman National Centre of Artificial Intelligence (NCAI) and Founder of Department of Robotics at NUST School of Mechanical & Manufacturing Engineering (SMME), received Pride of Performance from the President of Islamic Republic of Pakistan, on March 23, 2022, for his countless services to the nation in the field of AI and Robotics.

He has also been awarded the PEC Excellence Award by Pakistan Engineering Council (PEC), in recognition of his 'extraordinary contribution and services to the engineering profession.'

Dr Yasar Ayaz is the Founding Head of the Department of Robotics and Artificial Intelligence at NUST. He is the P.I. of the Robotics and Intelligent Systems Engineering (R.I.S.E.) Lab of NUST. He has authored over 130 international publications and has 3 product design patents registered, with several more in the review process.



NUST and Cranfield University ink multi-pronged MoU

NUST signed a Memorandum of Understanding with the prestigious Cranfield University, UK in September. Rector NUST, himself a graduate of Cranfield University, led the NUST delegation to CU for signing of the agreement that would have far-reaching positive dividends for both sides.

Chief Executive and Vice-Chancellor of CU Professor Karen Holford FEng CBE, accompanied by Pro-Vice-Chancellors Professor Simon Pollard and Professor Dame Helen Atkinson and senior executives from CU, warmly received the delegates.

The cooperation will go a long way in providing opportunities to NUST students to benefit from CU's expertise and facilities, while CU will gain access to a large pool of motivated and capable researchers of NUST. Under this multi-pronged partnership, CU and NUST will collaborate in multiple thematic areas through different initiatives. The partnership will also cover joint research and publications, student exchanges, faculty mobility, capacity building, etc.



Tesla becomes innovative partner of Formula Electric Racing NUST

Formula Electric Racing NUST (FERN) has earned technical sponsorship of Tesla, one of the most valuable automotive brand that is spearheading the world's transition to sustainable energy with electric cars as well as solar and integrated renewable energy solutions. Tesla awards this sponsorship to Formula Student teams from around the world, and FERN is the first and only team from Pakistan to have been conferred this award. Apart from extending technical sponsorship, Tesla will also grant a discount of 5000€ to FERN on enepaq tinybms, ADI & TI, bms chips and devboard.



NUST honours its partners in nation building

NUST paid glowing tribute to its friends and partners for their contributions to nation building under the landmark NUST Endowment for Educational Development (NEED) initiative. The ambitious programme is aimed at making NUST accessible to deserving students from low-income backgrounds and is bolstered by the university's own resources and external funding.

The exclusive celebratory event was attended by industrialists, academicians, and distinguished individuals from different walks of life, who have been the backbone of this initiative since its commencement in the year 2015.

In his remarks, Engr Javed Mahmood Bukhari, Rector NUST, highlighted that despite the fact that NUST has a very affordable fee structure as compared to other reputed national universities, over 50% of student populace, who manage to get enrolled at NUST, hail from lower-income households. It is that segment of the society, he maintained, that we are tapping with the courtesy and unstinting support of philanthropists and friends of NUST. Lt Gen (Retd) Muhammad Asghar, former Rector NUST, emphasised that universities ought to develop mechanisms of civic engagement that teach practical wisdom for constructive social change. He also praised the industry for realising their social responsibility and partnering for a progressive Pakistan.



NUST, Polyclinic Hospital ink Partnership

In a landmark development, NUST and Federal Government Polyclinic (FGPC) Hospital have reached an understanding, whereby FGPC hospital would serve as the undergraduate teaching hospital for the newly established NUST School of Health Sciences (SHS). The chief guest at the signing ceremony was Mr Abdul Qadir Patel, Minister for National Health Services Regulations & Coordination (NHSR&C). Prominent among others present at the occasion were Engr Javed Mahmood Bukhari, Rector NUST; Mr Ghulam Muhammad Memon, Secretary MoST; and senior consultants from FGPC hospital. The agreement was signed by Dr Osman Hasan, Pro-Rector Academics NUST and Dr Inayat Ullah Baig, ED FGPC hospital.

Speaking at the occasion, Minister for Health Mr Abdul Qadir Patel extended his felicitations to NUST and FGPC hospital on this joint initiative, which, he believed, would augur well for the health sector of Pakistan.



NUST becomes first Pakistani university to join DCO

Digital Cooperation Organization (DCO), a global multilateral based in Saudi Arabia, has welcomed abroad NUST as an official observer. The DCO, with its focus

on digital economy initiatives supporting the youth, entrepreneurs and women globally, will work with NUST to foster research and innovation capability within Pakistan and other DCO member state countries. The DCO represents over half a billion people, 70% of them being under the age of 35.

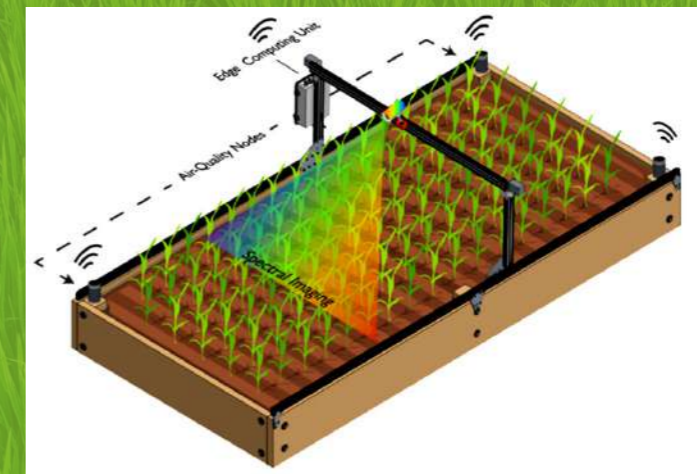
Commenting on the new partnership, Engr Javed Mahmood Bukhari, Rector NUST, said that NUST has built the processes and procedures, which steer NUST ecosystem towards digital transformation. The university is therefore already on its way to becoming a digitally transformed university.

The DCO agenda includes programmes to enhance cross-border data flows, support for market expansion for small and medium-sized enterprises, empowerment of digital entrepreneurs, and advancement of digital inclusion among women and youth.



NUST wins over PKR 70M research grant from HEC

The agricultural sector of Pakistan is indispensable to the country's economic growth and food security. The project titled, "Multifaceted Crop Scouting using Industry 4.0", is a synergistic research approach that brings together leading research institutions and industry in developing a smart and sustainable farming solution using latest precision agriculture practices. SEECS faculty member, Dr. Rafia Mumtaz, and NCAI Team (Prof Dr Yasar Ayaz (SMME-NUST), Prof Dr Faisal Shafait (SEECS-NUST), Dr Gul Muhammad Khan (UET, Peshawar), Dr Muhammad Khurram, (NED Karachi)) jointly won the grant worth Rs 74 million under HEC CoE grants. Principal Investigator of the project, Dr Rafia Mumtaz is a renowned researcher of SEECS in the field of precision agriculture using IoT and ICT technologies. The industrial partner of this project include Chatta bio care, Concave Agri, and Crop2X pvt limited.



National Engineering Robotics Contest 2022

NUST, STEM Careers Program HEC and National Centre of Robotics & Automation (NCRA) organised the 18th Annual National Engineering Robotics Contest (NERC) 2022 at NUST College of Electrical & Mechanical Engineering (CEME). The four-day event had eight categories. The prize money of these categories was sponsored by NUST, STEM Careers Program, HEC, MRS Technologies, Headstart School, Brightlink Prep, Eighteen Pakistan and Link Pakistan. Over 150 teams from across Pakistan participated in the competition.

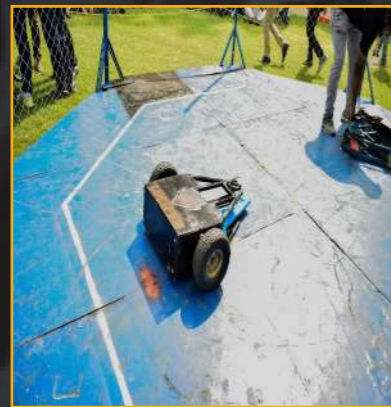
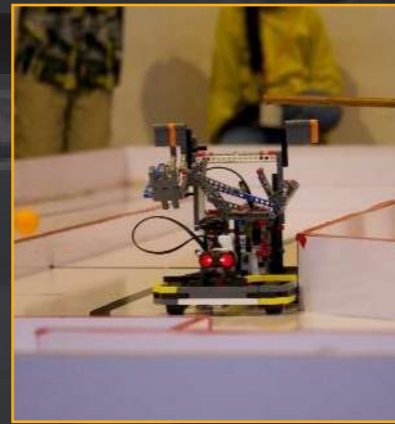
It is a pioneering and one of the most celebrated contest in the country which attracts participants from all over the country. In his address the chief guest, Mr Asim Shahryar Husain said that NERC is a platform that provides students of Pakistan with an opportunity to get complete Engineering experience.

Winner NERC 2022 Shield with cash prize of PKR 100,000 was awarded to team Tuk Tuk from NUST College of Electrical and Mechanical Engineering.

Winner NERC 2022 Modular Category (Universities) was team Wall-E from Lahore Garrison University, while winner of NERC 2022 Modular Category (Schools) was team HS_Team7 from Headstart School.

Afterwards, awards were given to winners of 3rd Robotics and Startup Challenge, which was organised by NCRA.

Winner for the theme "Indigenous product development to provide automation solution to any local industry" was startup "Actuated Toilly Wheelchair." Whereas, winner for the theme "Indigenous product development for solving social problem(s) using robotics and automation" was startup namely "Automated Gait Rehabilitation." Each of the two winning teams was awarded a cash prize of PKR 300,000/.



High Achievers Ceremony

To celebrate the achievements of students who excelled in different national and international competitions, NUST organised a high-achiever award ceremony at the Islamabad Campus on June 8, 2022. As many as 231 students were presented certificates at the occasion.



NUST becomes first Pakistani varsity to launch Air Quality Monitoring Station

Adding to its list of firsts, NUST has become Pakistan's first university to launch a state-of-the-art Air Quality Monitoring Station. NUST, in collaboration with local technicians and engineers, has completed the leading-edge project by developing a locally made conventional air quality measuring gadget.

Expressing his views on this crowning achievement, Dr Muhammad Fahim Khokhar, Lab Incharge and Head of the Department at NUST Institute of Environmental Sciences & Engineering (IESE), said that it took a decade of determined efforts to culminate the project into establishment of an international standard Air Quality Monitoring Station at the varsity.

Besides import of Japanese air quality monitors worth around PKR 50 million, Dr Khokhar said that the US Department of State through the Duke University had donated six low-cost sensors to NUST under the project.



Finding Innovative & Creative Solutions for Society (FICS '22) concludes at NUST

Grand Finale & Prize Distribution Ceremony of Finding Innovative & Creative Solutions for Society (FICS 2022), a platform to foster social entrepreneurship, was held at NUST. The overall winner of FICS '22 was team "Mine Information Modelling (MIM)" from NUST Institute of Geographical Systems, NUST School of Civil & Environmental Engineering. The team stood first amongst 395 project ideas pitched during the three-stage competition. The winning project revolves around integrated BIM-GIS application that can be effectively used for asset management, having detailed and intelligent design incorporating various aspects of an asset. The winning team was awarded a cash prize of PKR 250,000/-, sponsored by National Radio Telecommunication Corporation (NRTC). Team "Environmental Prediction through Satellite" from Egypt stood first amongst the international contestants and was awarded a Global Champion Award of USD 1000, sponsored by Walled City Co. The winning teams have also been awarded 6-month free incubation space at TechOne – NUST's Incubation Centre.



Establishment of Walee-NUST Center of Excellence

The Inauguration ceremony of Walee-NUST Center of Excellence for Advanced Social and Digital Media Technologies was held at NUST School of Electrical Engineering & Computer Science (SEECs) on June 30, 2022. The center aims to bridge the gap between students and professional markets, by training them on emerging technologies in digital and social media. The initiative will help the institution improve global visibility through published collaborative research, training, and workshops.



Dr Rafia receives University Best Teacher Award

Dr Rafia Mumtaz of School of Electrical & Computer Sciences (SEECs) was the University Best Teacher for the year 2021-22. She is also the first female to win this award at NUST.



NUST bids farewell to international interns

NUST bade farewell to international interns who attended NUST Internship Programme for International Students (NIPIS '22) from July 4 till July 29, 2022. Pro-Rector Research Innovation & Commercialisation, Dr Rizwan Riaz, awarded certificates at the closing session to as many as 23 interns, including 21 from NIPIS and 2 from Association for the International Exchange of Students in Economics & Commerce (AIESEC), 16 interns had virtually joined the programme. These interns represented 7 countries including Afghanistan, Egypt, Germany, Libya, Sudan, the United States of America (USA) and the United Kingdom (UK).

NIPIS '22 included academic and recreational activities arranged by NUST Placement Office in collaboration with AIESEC and various NUST schools. Reflecting on their internship experience in Pakistan, Alexis Aaron Vargas from the USA expressed his gratitude to highly qualified and seasoned faculty members of NUST for guiding him well in his research. Bavy Atef from Egypt termed the internship very rewarding for him as he gained hands-on experience with some hardware and learnt new software. Mahmud-ul-Hasan from the UK said that the experience at NUST was a positive one and he learnt everything he expected from NUST.



NUST Convocation Week

The second convocation week of NUST commenced at the university's main campus. On the inaugural day, medals were conferred upon distinction holders in undergraduate and postgraduate programmes. All Bachelor's, Master's and PhD students received degrees during the convocation week that lasted till December 9, 2022. Degrees were awarded to over 3400 graduates from all NUST Schools at the main campus.

In his convocation address, the chief guest Engr Javed Mahmood Bukhari, Rector NUST, extended his heartfelt felicitations to graduates, for having successfully passed through one of the most rigorous and comprehensive knowledge ecosystems. The Rector also paid glowing tribute to faculty for their dedication and playing immeasurable role in the all-round grooming of the graduates.





A Guidebook for establishing a Science Park

NSTP stands tall in the innovation landscape of Pakistan. It took NUST around a decade to actualise this game-changing project that will have far-reaching dividends for the country and the region at large. At a time when several technology parks are emerging on the national horizon, NUST strongly believes that sharing the lessons learnt is imperative for collective success. In line with the same spirit, this guidebook is an effort to put together statistical data, relevant policies, and knowledge and experience gained from the concept stage to inception and subsequent growth of NSTP. It is hoped that this endeavour of ours will be a handy resource in navigating challenges and making informed decisions vis-a-vis establishment of similar S&T Parks across the length and breadth of the country.

Order your copy now free of charge at mgr.ops2@nstp.pk.



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Destigmatising Mental Health - Revealing the Real Wealth

Since our childhood, we have often heard the axiom "health is wealth." By my reckoning, no one can ever deny this age-old aphorism. In writing this article, I have no intention to reinvent the wheel but to talk about a new dimension or, one can say, see it from another lens.

To put it simply, our mind is the control room of our body. When talking about mental wellness, my argument is that if we have fever, flu or any other ailment, we are not adamant on seeing a doctor. However, when it comes to mental health or visiting a mental health practitioner, we hesitate and think about it again and again. The usual first reaction is that "are you out of your mind?" ("Paagal ho Gaye ho Kya?" – to be more precise in our national language). If it is okay to have an injection or use medications in case your pancreas is not making enough insulin (as in diabetes), why is it not okay to maintain your serotonin levels by using medicine? Or even consult a practitioner/psychologist to help you figure out your problem?

Stigmas associated with the mental health issues come from the misguided views that these individuals are "different" from others. Society and media have stereotyped views about mental illness and how it affects the people. The news reports that prop up in media depict mental illness by equating it to violence or portray the mental health patients as dangerous or disabled. At the social level, adolescents are targeted for such tendencies by their own family, peers, staff at school etc., whereas, adults are prone to such attitude from friends, family, coworkers, employers etc. Some of the common stigmas (mostly without empirical evidence) are: People who are mentally ill are dangerous; mental health problems do not affect children or teens; people can just "snap out of" depression, and so on.

Coming to the wealth part of our mental health, we have to understand what our mind is and how it is connected to our body. The biology and chemistry of the body has a profound effect on our mood, emotions, thoughts and beliefs, and vice versa. Brain chemicals, i.e., neurotransmitters, such as Serotonin, which is helpful in reducing the symptoms of depression and Dopamine, which make us "feel good," play an important role in our day-to-day experiences. If you've ever felt your stomach loosen up when you were anxious, then you have experienced the mind body connection.

The other important factor affecting mental health is the thoughts that invade us from our past or future. Our brain chemicals and hormones play a great role in either numbing us down or placing us in a state of constant hyperactivity. Because of this, we are unable to be completely present and are stuck either in our past or our future. According

to Eckhart Tolle (German teacher and Philosopher), who explains in his book "The Power of Now" that when we are continually thinking about the past or the future, we are giving space to stress, sadness, regret and anxiety instead of peace and joy. Living in a place other than the "here and now" robs one of the opportunities to be truly 'alive'. The only important moment is the present moment and is the most important wealth a person can have. In line with this, David D. Burns (Psychiatrist) and Aaron T. Beck (Psychologist) focusing on the cognitive aspect of mental health, explain depression and anxiety as illogical and negative thinking patterns where they constantly occupy our mind with negative evaluations of ourselves, the environments and fears of the unknown. All our emotions are linked with "cognitions" or thoughts if we look at them through the cognitive behavioral approach.

I would like to clarify here that feeling low or anxious is not a matter of concern even by the evolutionary perspective in psychology, rather they are normal emotions which more or less all human beings encounter at some point in time. The cause of concern comes once these thoughts become persistent and impact our day-to-day functioning. In such cases, the mental condition becomes precarious and it can seriously affect the health of an individual. David D. Burns writes in his book ('Feeling Good') that depression can be considered as a mental flu, however if not treated properly, it can go on and can turn into the cancer of hopelessness and end your life.

The modus operandi to handle a prolonged episode of depression or anxiety (roughly persisting continuously from two weeks to a month) is to consult a mental health practitioner /counsellor. The trained professionals facilitate your journey towards wellness through psychotherapy if the concerns are rooted in social/psychological factors. If need be, they can also refer you to a psychiatrist if the concerns stem from biological factors and can advise you on medicine to strike a balance between the chemicals in your brain.

The modern-day medicines have fewer side effects than those of previous generations. As per a report published by UK's National Health Services (2021), the recent breakthrough in the SSRI (Selective Serotonin Reuptake Inhibitors) as antidepressant medicines have revolutionized the mental health realm. Secondly if medication is taken properly in conjunction with psychotherapy, they can be tapered off to limit the possibility of dependence.

They say having a mind in place and at peace is the best thing that can happen to you. You thrive with work, relationships and pursue your passions in the real spirit and increase your life score. Come to think of it, you have one life, that too for a specified time, hence each hour is priceless. Let's act instead of suffering and discover the real wealth.....which is mental health.



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Director Centre for Counselling & Career Advisory (C³A)

RESEARCH & INNOVATION

Pakistan's first indigenously designed embedded Microprocessor Chip *Pg 20*

Research & Innovation Showcase of Excellence Expos 2022 *Pg 23*

IDEAS 2022 *Pg 28*

Digital Pakistan Fellowship Programme *Pg 30*

NUST honours its top-performing researchers, innovators

To pay tribute to the faculty members excelling in research and innovation, NUST held the annual Research & Innovation Excellence Awards Ceremony on December 26, 2022. Rector NUST Engr Javed Mahmood Bukhari conferred cash prizes and certificates to as many as 53 awardees for the Year 2020 and 2021 for winning Best Researcher, Best Innovator and Top Performer awards. In his address, Rector NUST emphasised that the faculty members are integral part of the university, who are continuously contributing towards achieving research and academic excellence, which is reflected in international rankings and increased national and international collaborations.



Robothon Grand Challenge

PAKBOT Team from NUST College of Electrical and Mechanical Engineering (CEME) in collaboration with SERVICES SYNDICATE participated in Robothon Grand Challenge in Germany that went on from April 29-June 21, 2022. Many robots compete to carry out intricate tasks in a short span of time in this compelling challenge.

A total of 27 teams from across the world applied from which 20 teams qualified to participate. 15 of them reached the final round and Top 3 teams won cash prizes. Team PAKBOT from National Centre of Robotics and Automation (NCRA), NUST CEME was ranked 8th in the world and 2nd in Asia.

CERTIFICATE OF PARTICIPATION



This is hereby given to

Team PakBot

M. Usman Younis, Tayyab Shahid, Rizwan Ullah Khan, M. Umar Anjum

in recognition of their participation
in the international robot manipulation competition:
"Robothon® – The Grand Challenge 2022"
from April 29 – June 21, 2022



Pakistan's first indigenously designed embedded microprocessor chip

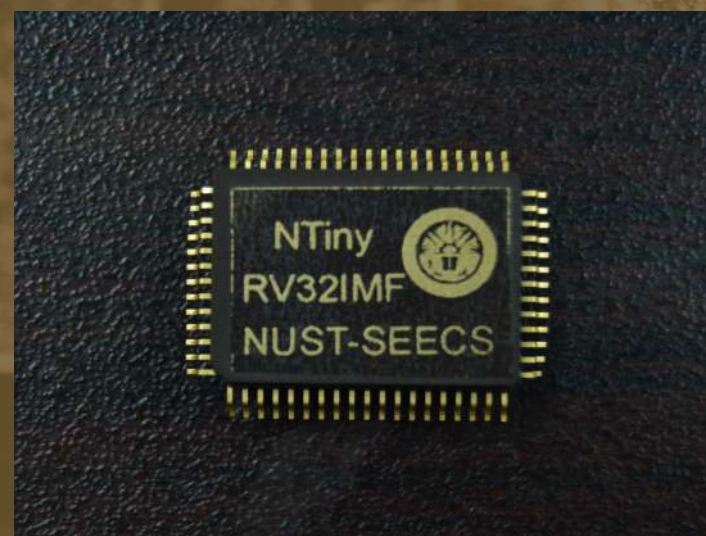
NUST researchers have successfully completed functional testing of the country's first indigenously designed microprocessor chip, 'NTiny-E.' The embedded chip has been designed by the research team of NUST School of Electrical Engineering & Computer Science (SEECS), led by Dr Rehan Ahmed. The team members include Mr Shaheer Sajid, Mr Qazi Shahid Ullah, Mr Abdul Moeed and Mr Syed Talha Imam from SEECS.

Semiconductor chips are the heart of all electronic devices and consumer appliances of every day use. NUST, in line with its vision of undertaking, applied research and innovation, embarked upon the journey to make Pakistan self-reliant on this critical technology.

The unique aspect of the project is its complete in-house design making NTiny-E a truly indigenously product that provides the design team with complete leverage and control over all aspects of the chip.

NUST team has not limited itself to the design of the chip itself but also developed a complete ecosystem required for chip testing and its incorporation into end products. The printed circuit board for chip testing and prototyping of end systems has also been indigenously developed along with associated software and development tools. The target market for NTiny is embedded systems, IoT devices, consumer electronic products, etc.

Against the backdrop of global shortage of semiconductor chips and export restrictions, the contributions of NUST researchers will help reduce dependence on foreign imports in the long run.



Lincoln Corner, NUST

Lincoln Corner was inaugurated at the Islamabad campus of NUST on July 14, 2022. At the occasion, Engr Javed Mahmood Bukhari, Rector NUST, and US Ambassador to Pakistan Mr Donald Blome signed a Memorandum of Understanding and inaugurated the Corner established in NUST Central Library.

In his remarks, Ambassador Blome said, "The people-to-people ties between the two countries are our greatest strength. The inauguration of this new Lincoln Corner will continue to advance these ties."

At the occasion, Rector NUST said, Lincoln Corner will be used by not only students and faculty of NUST but also Pakistani civil society at large.

Lincoln Corners are event spaces and resource centers that connect young leaders with the US. The Corner will host online and in-person educational programs. It includes a Maker Space equipped with a 3-D printer and virtual reality setup, a comprehensive book and magazine collection, resources on pursuing higher education in the US, digital information resources, and an Americana-themed event space.



Orbit raises \$500,000 from Silicon Valley Investor

NSTP-based startup, Orbit, raised investment from Silicon Valley investor, Boost VC, bringing their total pre-seed funding to \$800,000. Through a gamified learning platform with components of virtual and augmented reality (AR/VR), the founders Navera Waheed and Wajiha Habib are redefining workplace training.

According to the founders, OrbitEd will help millions of people grow personally and professionally, fostering economic mobility throughout the region. Through their data-rich platform, they can deliver learning insights that enterprises have never discovered before.



PriceOye raises \$7.9 million

NSTP-based eCommerce platform PriceOye.pk raised \$7.9 million in a series of seed funding rounds to consolidate its position as the leading electronics marketplace in the country. The round was led by the US-based JAM Fund, which is Peter Thiel's first investment in Pakistan. The company has grown exponentially, posting 500% revenue growth year-on-year, making it one of the leading B2C eCommerce players in Pakistan.



Four startups win Innovator Seed Fund Award

Four start-ups from NSTP Incubator, TechOne won seed funding of \$35,000 each under the Innovator Seed Fund at a ceremony held on November 24, 2022. The startups were shortlisted from a pool of 186 applicants by a jury panel. Startups that won seed funds include Ez Geyser, mimAR, TruID, and Funkshan. Innovator Seed Fund (ISF) is an initiative of HEC's Higher Education Development Programme (HEDP) that aims at engaging entrepreneurs and upcoming aspirants who want to convert their business ideas into action.



First National IP and Brand Protection Summit

NUST hosted first-ever National IP & Brand Protection Summit on Changing Contours of Innovation in Pakistan on June 27, 2022. The event brought together different stakeholders to identify avenues for creating synergies among academia, industry and the Government to spur innovation economy in Pakistan. NUST invited top industry experts, executives, representatives of government organisations, law firms, policymakers and foreign dignitaries.

As many as 37 innovative projects and technologies of NUST were showcased at the exhibition. Rector NUST Engr Javed Mahmood Bukhari, and Executive Director Higher Education Commission of Pakistan, Dr Shaista Sohail, along with other senior guests visited the stalls.



3rd series of STICKS

The 3rd series of STICKS - Strategic Talks on Innovation & Commercialisation for Knowledge Sharing, was held at NUST on October 26, 2022. The objective of the event was to focus on enhancing commercialisation of research projects and technologies, bridging the gap between industry and academia. Top industry experts and executives from an array of fields showed up at the talks.



Research & Innovation Showcase of Excellence (RISE) Expos 2022

NUST organised Research Excellence Expos 2022 at Lahore and Sialkot on March 14 and August 29, 2022, respectively. The event was geared towards exhibiting market-ready innovation, research capabilities and technologies of NUST and forging deeper and meaningful NUST-industry partnership. During the Expo 2022, prototypes and products produced as an outcome of various research projects were showcased for commercialisation. Mr Mian Muhammad Mansha, CEO of Nishat Group, was the chief guest of RISE Lahore. Members of Lahore Chamber of Commerce and over 250 C-level executives from Lahore, Sialkot, Faisalabad, Gujranwala, and Gujrat visited and showed interest in these prototypes and products.

Mr Khawaja Muhammad Asif, Federal Minister for Defence, was the chief guest of RISE Sialkot. Members of Sialkot Chamber of Commerce and over 100 top exporters from Sialkot industry were also present. Mr Khawaja Asif commended the efforts of NUST and stressed on the need for taking such initiatives and develop indigenous solutions to current and impending problems. Towards the end, a Memorandum of Agreement was signed between NUST and the Lahore Chamber of Commerce and Industry (LCCI).

The assortment of high-impact projects from NUST showcased at the events catered to many diverse fields such as Health Tech, Sports Tech, Agri Tech & Energy also NUST's entrepreneurial ventures emerging from its incubation spaces as well as the country's first Science & Technology Park, the National Science & Technology Park (NSTP) based in NUST.



Startup InLights

InLights is a startup from National Science & Technology Park (NSTP), NUST working with Capital Development Authority (CDA) to upgrade traffic signals infrastructure of the capital using state-of-the-art technology.

A comprehensive Intelligent Transportation System with the ability to calculate optimised signal timings in real-time, depending on traffic volume has been developed. The system would reduce waiting time and congestions and will also be able to give priority way to ambulances and include signals for pedestrian crosswalks. InLights

also made it to the podium in the 2022 edition of FICS -NUST's flagship initiative that challenges students to come up with innovative ideas and solutions vis-a-vis socio-economic needs of the country.



Manufacturing of Prototype Smart Leather Glove

Innovation & Commercialisation Office of NUST (ICON) has signed an MoA with HANSA Leather Garments Pvt Ltd, to work together in developing smart wearable accessories directed specifically toward the biking community.

A delegation, led by Mr Salman Hanif Khan, Director at HANSA, visited NUST to discuss avenues for collaboration with regard to development of technologies and their commercialisation. Dr Ali Hasan, Dr Aqib Pervaiz, along with their team of students, presented the prototype of the smart leather glove.



Autonomous Underwater Vehicle

Underwater Autonomous Vehicles are a valuable resource when it comes to marine applications that involve high risk or require access to places that are otherwise inaccessible for humans or other machinery. These vehicles have applications such as shallow water exploration and underwater inspection.

The vehicle demonstrated abilities such as being able to operate at limited depth and followed a pre-programmed trajectory. The trajectory was based on a computed speed with set time intervals for each part of the navigation. The vehicle also demonstrated functionality with speed control for the drive motor, and motion of control surfaces for change in direction as well as depth. In the final and conclusive phase, the project required development of a full scale autonomous underwater vehicle. The vehicle matched the size, range, endurance and navigation capabilities that are equivalent to the commercially available autonomous underwater vehicles under use by various navies.

Petra Smart Agriculture Management System

The NCBC-funded project PETRA Smart Agriculture Management System has been installed at FFC Research Center, Faisalabad. The sensors measure soil humidity and weather conditions as well as availability of water in the storage tanks. The data, relayed through a novel SMS based communication system, was processed at the local server installed at the CEME, and was uploaded to the website for live monitoring.



CureMD Young Inventor Award

Sarmad Shoaib Ikram, a student of CEME, participated in CureMD's Young Inventor Program (YIP) and won the title of Young Inventor, securing overall 2nd place out of a pool of 1100+ candidates. He has been rewarded with a full scholarship for final year of his Bachelors degree, a final year project grant of PKR 150,000, a paid internship, and a guaranteed job placement at CureMD upon graduation.

Vibrations and Instrumentation Lab

Department of Mechanical Engineering at NUST College of Electrical & Mechanical Engineering (CEME) has established a "Vibrations & Instrumentation Laboratory" keeping in view that mechanical vibrations and instrumentation measurement are highly specialised and sophisticated areas of Mechanical Engineering education and practice, requiring thorough hands-on training of students using modern and up-to-date laboratory and training equipment.



Developing Earthquake Resistant Concrete

Students, Sikandar Ali Khokhar and Touqeer Ahmed along with their advisor Dr Rao Arsalan Khushnood and Dr Fawad Ahmed Najam at NUST Institute of Civil Engineering have developed an innovative concrete called Bendable concrete.

Special properties of Bendable concrete make it possible to build highly safe, cost-effective, and long-lasting earthquake-resistant construction with lower carbon footprints. ECC can help reduce 30-40% steel reinforcement and 25-30% concrete volume in the structure reducing the overall cost of the project by 20-30%.

The team is currently working at National Science & Technology Park (NSTP) with the start-up named "Bendcrete Engineering services (Pvt.) Ltd."

This idea has been recognised at multiple national and international forums:

1) American Concrete Institute

The team presented their project at the American Concrete Institute (ACI) Concrete Solution Competition Spring 2022 held in Orlando, Florida, USA. The team won 2nd Best Project title after competing with 80 student teams representing top-ranked international universities from 53 different countries worldwide.

2) National Competition on Design of long span buildings

The team also won the "1st National Competition on Sustainable Design of Large Span Buildings" organised by NED University of Engineering and Technology, Karachi, supported by the Institute of Engineers Pakistan, Karachi.

3) Finding Innovation and creative solutions for Society 2022

Bendcrete won 3rd position at Finding Innovation and Creative Solutions for Society 2022, NUST.



Establishment of Advanced Manufacturing Lab

With the mission to impart high quality education through excellence in teaching, research, and promotion of a culture of entrepreneurship, the Department of Mechanical Engineering at CEME has established "Advanced Manufacturing (AM) Lab". The lab is equipped with state-of-the-art equipment such as 3D-printers, CNC Laser Cutting Machine, CNC Lathe, Wire EDM, Mini CVD Tube Furnace 1100°C, Sintering Tube Furnace, and Metallographic sample preparation setup.

One of the accomplishments attributed to the lab is the in-house development of spin coating machine by the undergraduate students of Mechanical Engineering.



Inauguration of Industrial R&D Lab at ASAB

ICON led the inauguration of Industrial R&D lab established by PMA Healthcare Pvt. Ltd at NUST Atta ur Rehman School of Applied Biosciences (ASAB). Pro-Rector (RIC), Dr Rizwan Riaz, inaugurated the lab where the industrial partners from PMA Healthcare Pvt. Ltd were also present. The lab was established after signing of an agreement with PMA Healthcare, worth PKR 25M for the lab and the ongoing projects from industrial partners. This industrial research and development lab will be utilised for developing diagnostic kits for a number of diseases and will facilitate the researchers in other projects.



Optikey Project

Optikey is an on-screen keyboard designed to help Motor Neuron Disease (MND) patients interact with Windows computers. When used with an eye-tracking device, OptiKey's on-screen keyboard allows MND patients to complete tasks, such as email composition, using only their eyes.

NSTP resident, Assistech, launched 'Optikey Project Pakistan' under the tutelage of CEO Optikey, Mr Julius Sweetland. As part of the programme, Assistech and Xylexa Distributed laptops, eye-tracking devices, and Optikey devices to a total of 25 participants.



Inauguration of Alternative Fuel Energy Lab

A state-of-the-art Alternative Fuel Energy Lab was inaugurated at NUST School of Chemical and Materials Engineering (SCME) on August 12, 2022. The lab is a joint venture of Tufail Group of Chemicals, SCME, ICON and University Advancement Office (UAO). Dr Salman Raza Naqvi, Principal Investigator of the lab has been awarded a funding of PKR 2.5 M by Tufail Group. Other members of the lab include Dr Umair Sikander, Dr Zaib Jahan, Dr Taqi Mehran, Dr Noman Aslam Khan, Dr Ameen Shahid, Dr Noman Ahmed and Dr Rafay Jaffery.

The laboratory will produce proof of concept for innovative products and sustainable solutions in circular economy.



IDEAS 2022

The International Defence Exhibition and Seminar (IDEAS) is a premier defence industry show and the region's best platform for international defence systems promotion. IDEAS brings together international manufacturers and suppliers of products and services to explore opportunities for cooperation in the field of defence production through joint ventures, outsourcing, and collaboration. The show went on from November 15-18, 2022. Team NFST, FERN, AirWorks, NRT and Envision represented NUST Pakistan Navy Engineering College (PNEC) and displayed their work. NUST-PNEC was recognised by the exhibition hosts as the Best Exhibitors at IDEAS 2022.



Innovation Inside

NSTP launched Innovation Inside in 2022 to educate students from NUST and other universities who are interested in understanding Innovation and startup ecosystem of Pakistan. The events are interactive in nature where the students are provided with insights into the industry and get a chance to connect with NSTP team and its innovation ecosystem. Till date over 4500 students of NUST have visited NSTP.



Projects Submitted

NUST submitted a total of 345 R&D projects worth PKR 17,868M to different national and international funding agencies.

Research Articles Published

NUST has published 15,491 documents, according to Web of Science until November 30, 2022, from which 8,886 documents are impact factor publications. Among these Web of Science documents 51% are with international collaboration, 20.2% are with national collaborations, 25.2% are with organisation only collaborations, 0.5% are with industrial collaboration and 3.1% are sole authorship.

Projects Approved

NUST has secured 114 R&D projects worth PKR 787M from National funding agencies such as HEC, SUPARCO, PSF, PIDE RASTA, PCRWR, etc. and International funding agencies such as CureMD Fellowship (USA), DAAD Germany, The Royal Society of UK, Erasmus+ , UK, etc.

Projects Completed

NUST has completed 45 R&D projects worth PKR 180M funded by National funding agencies such as HEC, IGNITE, PSF, etc. and international funding agencies such as DAAD Germany, British Council etc.

R&D Activities

Research Dte hosted 8th UCRIP on June 20, 2022. Three working papers were prepared, finalised and approved by 63rd Academic Council Meeting (ACM). List of working papers presented for approval from both forums were conduct of Research Seminar at NUST Schools/Colleges, 1st Revision of NUST Journals Policy, and 3rd Revision of Best Researcher Award Policy

RESEARCH & DEVELOPMENT

Formation of Spinoff Companies

NUST has achieved another landmark by launching one of Pakistan's largest batches of 41 spin-offs emerging from the country's premier R&D university and established by its faculty members. To appreciate them, ICON held an award distribution ceremony on October 20, 2022. These spin-offs will contribute to bringing new innovations and intellectual property to the ecosystem of knowledge transfer and commercialisation.



Digital Pakistan Fellowship Programme

NUST has signed an MoU with Jazz, to launch Digital Pakistan Tech Fellowship Program. The Fellowship is designed to engage the youth in meaningful discourse around tech-based innovation. It will equip participants with tech insights, and enable them in playing a pivotal role in building the creative economy. Mr Aamir Ibrahim, CEO Jazz, highlighted that the partnership with NUST is founded on collective desire to bring about national development through leveraging Information & Communication Technology.



Committee Meeting of NSTP Special Economic Zone

After the launch of NSTP at NUST on Dec 9, 2019, NSTP received its Special Economic Zone (SEZ) status to begin colonisation of both local and foreign R&D-based enterprises. In the committee's second meeting, chaired by Dr Rizwan Riaz, Pro-Rector RIC NUST and VP NSTP, approved SEZ status for 23 enterprises. These companies will be investing more than 2.5 billion PKR in Research and Development to work on their respective products/solutions. 1400+ direct and indirect jobs have been created by these companies which will be adding \$12 million to overall country's export.

NUST journals get indexed in COPE and DOAJ

NUST Journal of Engineering Sciences (NJES) (ISSN: 2070-9900) which is a HEC Y category journal has been indexed in Director of Open Access Journal, which is an international agency for indexing Open Access Journals. Up till now NJES has received 260 citations from various journals according to Scopus. NUST Journal of International Peace & Stability (NJIPS) (ISSN: 2616-4434), a HEC Y category journal has been indexed in Committee of Publication Ethics, which is a regulatory body responsible for publication ethics policy formulation and monitoring.

CONFERENCES & WORKSHOPS

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NUST organised session on AI and IoT for Smart City and Sustainable Society

NUST Institute of Policy Studies (NIPS) and NUST China Study Center (CSC) co-organised the session on 'AI and IoT Technology for smart city and sustainable society' March 03, 2022. Keynote speaker from the world-renowned Chinese Academy of Sciences (CAS), Dr Wu Jun, discussed opportunities for Pakistan and China in the new era of artificial intelligence, technology and internet integration for building sustainable and smart cities. He elaborated that the concept of smart city was premised on an efficient and effective way of using AI system for surveillance to manage identification and safety measures in streets. The system helps protect safety of citizens besides providing management solutions for manpower and cost management.

Further application of AI can be implemented in smart cities in different sectors like smart government, military, organisations, hospitals, prisons, education, agriculture and commerce to analyse data and hardware assimilation with software technology in communities where convenient access of data and information can be shared by all departments.

While mentioning 500 plus smart cities in China since 2014 under China's strategic planning to promote industrialisation, information and urbanisation, he introduced smart city IoT as big neural network and brain data management platform connecting all hardware and sensors from street and traffic lights, cameras, Wi-Fi, electricity and real time data.

In his concluding thoughts, Director General NIPS, Dr Ashfaque Hassan Khan, recommended stronger China-Pakistan collaboration on surveillance infrastructure and smart cities in Pakistan. The session was co-moderated by Director NIPS, Brigadier Amir Yaqub (Retd), and Director CSC, Ms Xiang Yang.



“Pakistan’s diplomacy committed to fostering national interests”

NUST Institute of Policy Studies (NIPS) organised a keynote address of then Foreign Minister, Makhdoom Shah Mahmood Qureshi, on February 3, 2022. The address focused on major contributions of Pakistan's multidimensional diplomacy towards durable peace, inclusive growth and shared development.

The then Foreign Minister shared that the collective and consultative pursuit of geoeconomics had grown to become the predominant objective of Pakistan's foreign policy. He stated that this major foreign policy goal was currently being realised through proactive global operationalisation of economic diplomacy, public diplomacy, cultural diplomacy, science diplomacy and digital diplomacy. The address was followed by an extensive interactive session moderated by Director NIPS, Brig (Retd) Amir Yaqub, in which the then Foreign Minister responded in detail to various questions and comments from the audience.



Expert colloquium on “Perspectives on Russia-Ukraine Crisis” held at NUST

An expert colloquium titled, “Perspectives on Russia-Ukraine Crisis” was organised on February 17, 2022 by NUST Centre for International Peace & Stability (CIPS). The principal aim of the session was to explore the vital role of Ukraine in the global security order under the shadow of 'renewed' great-power rivalry. Themes under discussion addressed NATO's strategic reorientation amid trans-Atlantic disunity, particularly in the aftermath of the Afghan withdrawal, and political considerations at play in shaping key stakeholder responses to events in Eastern Europe.

Prominent amongst the participants were Maj Gen (Retd) Athar Abbas, Former Ambassador of Pakistan to Ukraine; Mr Qazi M Khalilullah, Executive Director Center for International Strategic Studies Sindh (CISSS) and former

Ambassador of Pakistan to Russia, Cuba, and Myanmar; Mr Leonid Savin, Geopolitical Analyst and Chief Editor of Geopolitica.ru; and Dr Adam Saud, Dean Faculty of Humanities & Social Sciences, Bahria University, to name a few.



Improving Economic, Social and Political Relations between Türkiye and Pakistan

An international conference on the theme of "Past, Present and Future of Silk Road: Improving Economic, Social and Political Relations between Türkiye and Pakistan" was jointly organised by the Ankara Center of Thought & Research (ADAM-ACTR) and NUST on June 25, 2022. Themes under discussion addressed the history of Türkiye-Pakistan relations and the social and cultural ties between the two states, as well as opportunities for commercial and international cooperation with a focus on the role of such factors as Islamic finance.

Prominent amongst the attendees were Turkish Charge d'Affaires, Her Excellency, Esra Dere, Lt Gen (Retd) Javed Mahmood Bukhari, Rector NUST, and esteemed academicians from the Istanbul Sabahattin Zaim University, Hatay Mustafa Kemal University, Van Yüzüncü Yıl University, Ankara Sosyal Bilimler University, Ankara Yıldırım Beyazıt University, Recep Tayyip Erdoğan University, İbn Haldun University, and Ankara Hacı Bayram Veli University, and leading scholars from some of the most prestigious higher education institutions of Pakistan.

In his opening remarks, Dr Rizwan Riaz, Pro-Rector Research, Innovation & Commercialisation at NUST, highlighted the need for enhancing academic and economic connections between the two friendly countries, while drawing inspiration from the opportunities afforded by emergent geo-economic trends.



Webinar on Pakistan-Nigeria relations

NUST Institute of Policy Studies (NIPS) held a high-level webinar on Pakistan-Nigeria relations on January 18, 2022, to discuss in-depth prospects of bilateral cooperation in collaboration with Nigerian Institute of International Affairs (NIIA). The roundtable was moderated by Mr Amir Yaqub, Director NIPS, and Professor Eghosa Osaghae, Director General NIIA, and arranged as part of the NIPS Roundtable Series.



Roundtable on Climate-Security Nexus in Balochistan

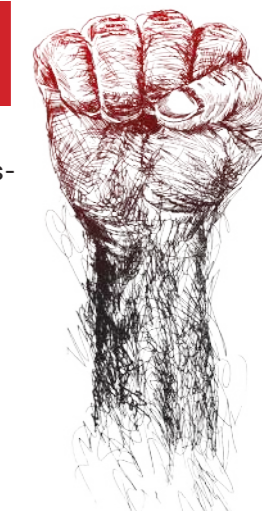
NUST Centre for International Peace & Stability (CIPS) and Hanns Seidel Foundation jointly held a roundtable on "Understanding Climate-Security Nexus in Balochistan" on November 25, 2022. Lt Gen Inam Haider Malik, Chairman NDMA, graced the occasion as chief guest. The aim was to understand the driving factors behind the climate-security nexus and pathologies linking climate change to conflicts.

During the concluding remarks, Maj Gen Muhammad Salim Raza, Principal NIPCONS, appreciated the participants for their valuable contribution to understand 'climate-security' nexus in the context of Balochistan.



NUST observes Kashmir Solidarity Day

NUST observed the Kashmir Day to express solidarity with the oppressed people of Indian-Occupied Kashmir (IoK). NUST Institute of Policy Studies (NIPS) organised an event to sensitise the community of students and scholars to the terrible plight of Kashmiris under the Indian state tyranny and terrorism in the IoK. The participants paid tribute to the Kashmiris for their countless sacrifices and unassailable resistance to India's unending reign of terror. They condemned the grave human rights violations and reiterated Pakistan's unwavering support to the Kashmiris in their just struggle for the right to self-determination, in line with the United Nations Security Council Resolutions. Students from NUST also participated in a Kashmir solidarity event organised at Muzafarabad, marking the inauguration of *Yadgar-e-Shuhada* by the President of Pakistan, Dr Arif Alvi.



2nd International Conference on Water Energy and Environment

The 2nd International Conference on Water, Energy, and Environment for Sustainability (IC-WEES) 2022 was organised by NUST Military College of Engineering (MCE) at USPCAS-E, NUST from August 17-18, 2022. The conference focused on climate change, water, environment, and Disaster Risk Reduction and their relationship with each other.



How Blockchain is Revolutionising the future?

Blockchain is an early-stage technology the decentralised and secure storage and transfer of information. It is becoming a powerful tool for tracking and transactions that can minimise friction, reduce corruption, increase trust and empower users. NSTP in collaboration with MoST, arranged an engaging panel discussion on how blockchain is changing the future on January 19, 2022.



International Multidisciplinary Colloquium on Landscape and Architecture Heritage

The Architecture Department of NUST School of Art, Design & Architecture (SADA), in collaboration with Universiti Teknologi Malaysia (UTM), virtually hosted an international multidisciplinary colloquium on Landscape & Architecture Heritage on November 1, 2022.



NIPS Lecture on South Asia and Evolving Geopolitics of Indian Ocean

NIPS organised a high-level lecture on "South Asia and Evolving Geopolitics of Indian Ocean" on April 28, 2022. General (R) Daya Ratnayake, the former Chief of the Sri Lankan Army, was the keynote speaker. He explained the strong potential of small states for promoting greater regional stability, peace, and cooperation.



Seminar at NUST Balochistan Campus

NUST Balochistan Campus held an informative seminar with CEO BBOIT and Director NAB attending the event as guests of honour. Director NAB briefed the students about corruption and ways to eliminate corrupt practices in the system. CEO BBOIT gave ideas regarding launch of new startups and shared his personal experiences and hardships as a self-made businessman from Balochistan.



Invited Talk of Dr Hira at University of Kotli

Dr Hira Amjad, Assistant Professor at IESE delivered a talk on "Microplastics in Environment" at University of Kotli (UoK), Azad Jammu & Kashmir on May 13, 2022, under the umbrella of MoA signed between NUST and UoK. She was also evaluating thesis at the university and took viva of M.Phil students.



Environmental and Regional Approaches to Air Quality

NUST Professional Development Centre (PDC), in collaboration with Pakistan US Alumni Network (PUAN), conducted a three-day Training Programme on Environmental & Regional Approaches to Air Quality. The training was delivered by senior faculty members from the NUST Institute of Environmental Sciences & Engineering (IESE). Diplomats from the U.S. embassy including Mr Ray Castillo (Country Public Affairs Officer) and Mr Paul Robert Giblin, (Public Diplomacy Officer) also spoke to the participants.



5 NSTP startups attend LEAP 2022

A total of five startups from National Science & Technology Park (NSTP) participated in the LEAP's '22 startup competition hosted by Saudi Arabia in Riyadh. The conference engaged 350 speakers from 80 countries, as well as 700 innovators and start-ups from around the world with 40,000 visitors. NSTP startups pitched their ideas to a panel of judges, angels, VCs, and government stakeholders at "The Rocket Fuel Startup Competition". Startups selected from NSTP include mimAR, LearnOBots, XpertFlow (SUP 21' - Build2), Zaheen Systems, and Chatta Bio Care.



NSTP Talks

NSTP launched series of NSTP Talks from March 2, 2022 Inspirational personalities like Meenah Tariq (Co-Founder & CEO Metric and Partner at Karavan), Vladimira Mesko Bristenska (Founder of Neem Exponential & Founder and CEO at The Future Farm), Navera Waheed and Wajiha Habib – founders of Orbit-Ed and Faisal Aftab (Co-Founder & Managing Partner Zayn Captial) were invited to interact.



Members of Industrial Advisory Board at NBC

NUST Balochistan Campus (NBC) conducted an interactive session with Industrial Advisory Board. The board members interacted with the students and addressed their queries.



Future of Conflict

Prof Dr Tughral Yamin participated in HSF "The Future of Conflict and Conflict Settlement in Asia" held in Bangkok.



CJCS delivers keynote address

NUST Institute of Policy Studies (NIPS) organised a high-level seminar on "Regional Environment & Imperatives of Security" on June 6, 2022. Then Chairman Joint Chiefs of Staff Committee, General Nadeem Raza, NI (M), delivered a keynote address at the seminar. He highlighted that Pakistan's nuclear programme enjoys across-the-board support of all political parties and the people of Pakistan.



Pakistan and Evolving Geopolitics of the Region and Beyond

An exclusive session on "Pakistan and the Evolving Geopolitics of the Region and Beyond" was organised by NIPS on August 25, 2022. The session focused on multiple challenges facing Pakistan amidst a rapidly evolving regional and global geopolitical landscape.



Afghan Capacity Building Programmes

Two batches of professors from different universities of Afghanistan attended capacity-building courses at NUST from July 18-29, and November 14-December 3, 2022. The course was part of an extensive programme. The capacity-building programme will help the faculty replicate best academic and research practices in their respective universities. In addition, an interactive session with Centre for Counselling and Career Advisory (C3A) was held to familiarise them with the ways of dealing with at-risk students and more.



CIPS-NBC Security Workshop

CIPS-NBC Security Workshop was organised by NUST Centre for International Peace & Stability (CIPS) at the NUST Balochistan Campus (NBC), Quetta from October 26-27, 2022. The workshop was designed to constructively engage the youth of Balochistan and initiate interactive learning practices to understand aspirations and challenges of local communities.



Women in Engineering holds TechnoSquid

Women in Engineering (WIE) NPSC conducted a highly anticipated multi-module competition, TechnoSquid on March 12, 2022. The mega tech-fest took place at NUST Pakistan Navy Engineering College (PNEC), over 200 students from universities all across Karachi attended the event.



UN Women Peace and Security Agenda aims to ensure women's priorities to peace building: UN Women

UN Women leads the mandate on implementing UNSCR 1325 relating to Women, Peace and Security Agenda (WPS) that aims to ensure women's priorities are central to peacebuilding at all levels
ISLAMABAD

UN Women Pakistan and the Centre for International Peace and Stability (CIPS) at National University of Sciences & Technology (NUST) signed an MOU to collaborate on advancing gender-responsive peacekeeping operations. The signing ceremony took place at CIPS. It was signed between Ms. Sharmeela Rassool, Country Representative UN Women Pakistan and Major General (retd.) Muhammad Salim Raza, HI (M), Principal NIPCONS, NUST. The MOU aims at strengthening organizational collaboration on issues relating to Gender Equality and Diversity through reciprocated partnership and training mechanisms for peacekeepers. Pakistan is the largest and longest troop-contributing countries for UN

peacekeeping forces around the globe, having deployed 200,000 forces since 1960. Pakistan also became the first country to achieve the goal of deployment of 15% female staff officers as nearly 450 women have served in UN missions. "UNSCR 1325 is the cornerstone of our peacekeeping operations. We recognize the differential role played by women in making communities more peaceful and resilient," said Brig @ Mirza Saleem Beig, HOD UN Peacekeeping Training. UN Women leads the mandate on

implementing UNSCR 1325 relating to Women, Peace and Security Agenda (WPS) that aims to ensure women's priorities are central to peacebuilding at all levels. To achieve this goal, it addresses social, cultural and political barriers and protection risks that limit women's full participation in achieving and sustaining peace. In the peacekeeping sphere, women involvement ensures greater access to marginalized communities, helps in promoting human rights and the protection of civilians, and encourages women to become a meaningful part of peace and political processes. "UN peacekeepers from Pakistan embody the spirit and values of Pakistani society as peace ambassadors. This MOU is a first step in strengthening integration of gender perspective in the training curriculum and further increasing women's participation at all levels of peace processes," said UN Women Country Representative Ms. Sharmeela Rassool.



SolidWorks Workshop

With a view to teaching skills and enhancing abilities of the students on the most widely used CAD software in the world, Institute of Mechanical Engineers (IMEchE) at NUST PNEC held a SolidWorks Workshop on October 7, 14 & 21, 2022.



SECDIV - NIPS International Conference 2022

Strategic Export Control Division (SECDIV) of Pakistan's Ministry of Foreign Affairs and NUST Institute of Policy Studies (NIPS) jointly organised an international conference on "Promoting Strategic Trade Controls through International Cooperation" from September 5-6, 2022. The inaugural session was graced by the Minister of State for Foreign Affairs, Ms Hina Rabbani Khar.



Lecture on Emerging Cyber Security Threats and their Counter Strategies

The impact of Information & Communication Technologies (ICT) to enhance the quality of life and services has made Cyber an important component in today's world. The growing progress of digital transformation has led to the new cybersecurity challenges and threats across the globe. Countries all over the world are magnanimously investing in ICTs in which Government services, social infrastructure, financial/ healthcare sector, and academic institutions are all interconnected irreversibly. In this context, a lecture on "Emerging Cyber Security Threats in Contemporary Countries and their Counter Strategies"

was delivered on October 26, 2022 at MCS by guest speaker Ms Zaheema Iqbal, Senior Cyber Security Policy Researcher and Adjunct Faculty Member of Bahria University, Islamabad.



NSTP team represents Pakistan at IASP Conference

An NSTP team comprising Mr Adil Murtaza, General Manager Operations, and Mr Yaruq Nadeem, Manager Innovation represented Pakistan at the annual IASP World Conference 2022 for Science Parks and Areas of Innovation in Spain. They presented their internationally acclaimed paper on Developing Sustainable Smart City Solutions. Mr Adil Murtaza emphasised how sustainable Innovation can lead to better socio-economic development. He said that NSTP is focused on enhancing an innovation ecosystem that is aligned with UN SDGs. Mr Yaruq highlighted the importance of the topic by pointing to the devastation

caused due to the adverse effects of global warming in the form of heavy floods in Pakistan.



Materials World and the Importance of R&D

School of Chemical & Materials Engineering (SCME) and Research Directorate in collaboration with Cranfield University organised a one-day workshop on "Material World and the Importance of R&D" on May 23, 2022. The workshop was conducted by Dr. Adnan Syed from Cranfield University, UK and Dr Nasir Mehmood from SCME. 10x speakers from Cranfield University enlightened the NUST audience with the research that is being conducted at their parent institution. The workshop was themed to focus on materials sustainability, material degradation processes, coating protection, nanotechnology, sensor technology, and Imaging systems.

The facilities available at Surface Engineering & Precision Center (SEPC) at Cranfield University and NUST were also brought into attention to increase the level of cooperation between NUST and SEPC-Cranfield University.

At the end of the conference, a discussion round was held between stakeholders at NUST and Cranfield University to explore avenues of cooperation in the future.



Responsibility to Protect: The Human Rights Doctrine

A webinar titled, "Responsibility to Protect: The Human rights Doctrine" was organised by Dr Humaira Shafi, Assistant Professor at CIPS on February 16, 2022.

The session started with the introductory speech by Prof Tughral Yamin, Dean CIPS. He explained the key terms relevant to R2P along with the misconceptions the world at large has about R2P. Dr Yamin highlighted that the conceptual and operational development of the responsibility to protect has multiple origins and contributions by member states from the global south.



NCSAEL's Achievement in P@SHA ICT Awards 2022

Pakistan Software Houses Association for IT & ITES (P@SHA) is the trade association representing Pakistan's IT & ITES sector. The P@SHA ICT Awards honors companies at the cutting edge of technology innovation. The awards recognise the achievements of home-grown Pakistani innovators hence, acknowledging creativity, innovation and excellence in Pakistan's Information and Communications Technologies sector. This year P@SHA announced 5 Head Categories (Consumer, Inclusion & Community, Industrial, Public Sector and Business Services) for the awards. National Cyber Security Auditing and Evaluation Lab (NCSAEL) applied in the Security Solutions Category, which comes under Business

Services. The presentations were held on October 22, 2022. NCSAEL's Hardware Security Toolkit i.e., "Firmware Extraction, Analysis, & Security Assessment Toolkit (FEAST)" was presented by Team Lead- Maliha Safdar, headed by Director NCSAEL- Dr Haider Abbas. The company stood first in the aforementioned category and managed to win the Gold Award.

P@SHA ICT Awards 2022 ceremony was held on November 2, 2022. Punjab IT Minister Dr Arsalan Khalid visited the event as chief guest and distributed the awards.



Second expert colloquium on Russia-Ukraine Crisis

In view of the Russian invasion of Ukraine on February 24, 2022 a second colloquium on Russia-Ukraine Crisis was organised by the Centre for International Peace and Stability (CIPS), on March 1, 2022. The objective was to discuss the outbreak of hostilities in Ukraine and the response by the global community. The discussion was moderated by Prof Dr Tughral Yamin.

The session was graced with the presence of discussants; Ambassador (Retd) Syed Tariq Fatemi; Ambassador (Retd) Aizaz Ahmad Chaudhry; Maj Gen (Retd) Wajahat Ali Muftee; Dr Przemysław Osiewicz; and Dr Muhammad Riaz Shad.



BS Tourism & Hospitality Management

NUST Business School has another feather in its cap with the successful launch of its BS Tourism & Hospitality Management Programme. An overwhelming number of students applied for the programme. However a total of 43 students have been enrolled as part of the first cohort.



NIPS holds high-level roundtable on Gilgit-Baltistan

NUST Institute of Policy Studies (NIPS) organised a high-level roundtable on Gilgit-Baltistan on January 31, 2022. The participants discussed GB's strategic significance, its rich history, critical placement in the Belt and Road Initiative, constitutional and political evolution, linguistic diversity, socio-ethnic harmony and resourceful human capital. Prof Atta Ullah Shah, Vice Chancellor, Karakorum International University (KIU), GB, highlighted the region's importance as the gateway to CPEC. Mr Faiz Ullah Faraq, spokesperson of GB government and faculty member at KIU, talked about the critical role of youth in the development of Gilgit-Baltistan. Mr Ghulam Shahzad, Member, Gilgit-Baltistan Assembly, highlighted that granting provisional provincial status to GB would promote and streamline human resource development of GB. Ambassador (Retd) Riaz Khokhar, former foreign secretary, cautioned against the negative role of external forces in GB, which, he considered, required prudent domestic political management and masterful diplomacy simultaneously. The roundtable was chaired by Dr Ashfaq Hassan Khan, DG NIPS and Principal NUST School of Social Sciences & Humanities (S³H).



Belt & Road Transportation & Logistics Conference

The first China-Pakistan "Belt & Road Transportation and Logistics Conference" was held in a hybrid mode within the sphere of Shanghai Cooperation Organisation. A joint venture of NUST, Shandong Jiaotong University and Kashgar University, China, the conference was held in the background of rapid development of world logistics and significant progress in the development of China Pakistan Economic Corridor. China Study Centre at NUST played an instrumental role in the conduct of conference.

Keynote addresses were delivered by renowned researchers from the Research Institute of the Ministry of Transport, China, and academics from other notable universities. The session was also attended by senior management from Shandong Jiaotong University, Xinjiang Kashgar University.

Meanwhile NUST China Study Centre (CSC) arranged Dragon Boat Festival with the aim to promote cross-cultural activities between Pakistan and China. Besides senior academics and students from the two countries,

guests included CPEC dignitaries, reps from Chinese Study Centres and famous Chinese companies such as Three Gorges, Tang International Education, etc.



2nd International Conference on Business, Management and Social Sciences

The 2nd International Conference on Business, Management and Social Sciences: Wellbeing – An Interdisciplinary Perspective was inaugurated at NUST on February 8, 2022. NUST School of Social Sciences & Humanities (S³H) in collaboration with the Department of Psychiatry, Michigan State University (MSU), USA and co-hosted by NUST Business School (NBS) & NUST Center for International Peace & Stability (CIPS) organised this conference. Lt Gen (Retd) Muhammad Asghar presided over the event as the chief guest and keynote speaker while Lt Gen Dr Nigar Johar graciously joined as the guest of honour by means of a recorded address.

Chief Guest Lt Gen (Retd) Muhammad Asghar delivered the keynote address in which the multifaceted aspect of wellbeing by drawing a comparison between Western & Islamic civilisation was highlighted.

In her message, Lt Gen Dr Nigar Johar highlighted Quaid's message on promoting wellbeing to ensure nations prosperity. She emphasised the multiple domains of wellbeing which must be evaluated to ensure that the individual and the nation flourish.

Principal S³H, Dr Ashfaq Hassan Khan emphasised the importance of arranging an international interdisciplinary conference on wellbeing with the hope that the conference proceedings will aid in arriving at plausible solutions to integrating wellbeing in all areas of human life.

The International Conference continued online on February 9-10, 2022 on various themes exploring wellbeing from an interdisciplinary perspective.



UN Certification

CIPS has been awarded the UN Recognition Certificate for its Pre-Deployment Peacekeeping Training. Trained personnel from CIPS are deployed by the United Nations in its Peacekeeping missions all over the world.



UN Courses



UN Staff Officer Course-35 (May 23-June 03, 2022)



UN Staff Officer Course-36 (August 1-12, 2022)



UN Staff Officer Course-37 (October 7, 2022)



UN Military Observers Course (September 5-6, 2022)



UN Female Engagement and Gender Advisor Course (July 15, 2022)



UN Pre-Deployment Training & Contingent Commanders Course (May 09-20, 2022)



UN Delegation (July 25, 2022)

UN Military Observers Course-30 & UN Logistic Officers Course-23

UN Military Observers Course-30 and UN Logistic Officers Course-23 were conducted at CIPS from June 13-24, 2022. Certificate award ceremony was organised at CIPS on June 24, 2022.

Delegations visit CIPS



Armed Forces of Republic of Kazakhstan (April 11, 2022).



National Security & War Course (NSWC), Saudi Arabia (May 17, 2022).



AVM Michael Tedzani MOYO Vice Chancellor and Commandant (June 20, 2022).



Brig Muhammad Shoaib, DMO Plan (C) (September 22, 2022).

C³A Interactive Sessions

Under the internship programme of Red Crescent Pakistan, Centre for Counselling & Career Advisory (C³A) held interactive sessions on "Career Awareness & Guidance" and "Stress & Anger Management" with students of Department of Behavioural Sciences from August 17 to 18, 2022.



Career Guide Expo 2022 for Youth

Government of Pakistan, Ministry of Education & Professional Training arranged a three-day Career Guide Expo 2022 at Pak-China Centre from March 11 to 13, 2022. The FEST envisaged providing students of years 10-12 with the information to understand trends in the job market at National, and International levels. More than 35 Universities and Industries participated in this Mega Event. Dr Arif Alvi, the President of Pakistan, inaugurated the event. NUST participated in the Expo to showcase its institutional capacity. Dr Noreen Akhtar, Deputy Director C³A, and Ms Sidra Azhar, Senior Career Counsellor, from C³A, Dr Azhar Masood Qureshi, Deputy Director Registration, Registrar Directorate, and Assistant Professor Ms Nadia Jahan from S³H represented NUST at this event.



Engaging University Faculty for Mental Health Wellbeing of Youth

C3A team attended and participated in the training titled 'Engaging University Faculty for Mental Health Wellbeing of Youth' organised by COMSATS University, Islamabad.

The objectives of the training were to create awareness and highlight importance of mental health among the faculty members, and educate them on how to identify red flags indicating mental illness in students and orient them on ways to handle behavioural disturbances in students.

Faculty members from FAST, Islamic International University, Bahria University & COMSATS participated in the training.



Lectures on NUST Harassment Policy

NUST practices and promotes zero tolerance against harassment. NUST C³A functions as Harassment Complaint Cell. The centre planned sensitisation trainings for all the Directorates of NUST. Three sessions were conducted for faculty and staff during the month of September. The objective of these sessions was to familiarise the participants with the policy and its implementation at NUST.

The Centre also delivered a series of lectures on 'NUST Harassment Policy' to the students at all Schools and NUST constituents from March 2022. The objective was to help students to develop an understanding of the Anti-Harassment policy, its implementation and explain the procedure of lodging complaints without fear of being harassed further due to the stringent policy of confidentiality.



C³A Orientation Lectures

C³A organises orientation lectures for freshmen every year. The objective is to acquaint and familiarise UG and PG students with psychological and career counselling facilities offered at the centre.



Professional Ethics

Human Resource Development (HRD) in collaboration with C³A conducted a training on "Professional Ethics" with employees and faculty members on May 12, 2022. The objective of the session was to apprise participants with the code of ethics and to equip them with knowledge to make responsible decisions in their professional practice. Dr Noreen Akhtar, Deputy Director C³A and Ms Shaista Zafar, Psychologist conducted the training.



Emotional, Behavioural & Psychological Impact of Covid-19 in Academia

C³A organised a panel discussion on "Emotional, Behavioural and Psychological Impact of Covid 19 on Academia: Addressing the fear of Uncertainty" on February 22, 2022. Brig (Retd) Zulfiqar Ali Baig, Director Administration was the chief guest of the event. Mr Ali Hasnain Sayed, Dir C³A, reflected on the challenges and how it has affected our overall lives. Members of the panel, Professor Dr Mowadat Hussain Rana, Professor Dr Salma Siddiqui, and Dr Rakshinda Perveen graced the occasion with their presence.

The aim of the session was to understand the multi-dimensional impacts of COVID-19 on overall psychological well-being. It also addressed the challenges faced by faculty and students in adapting to the hybrid mode of education and the role of media in the "New Normal".



Mentoring & Coaching at Workplace

C³A conducted training session on "Teacher as a Mentor" with newly inducted faculty arranged by NUST Centre for Teaching and Learning (NCTL) under the chairmanship of Pro-Rector (Acad) Dr Osman Hasan.

C³A also conducted training sessions with faculty, staff and NG staff on "Mentoring and Coaching at Workplace" in collaboration with Human Resource Development (HRD). Ms Ayesha Mujeeb, Psychologist and Ms Maham Rizwan, conducted these trainings.



NIPS-ORSAM Joint International Webinar

NUST Institute of Policy Studies and ORSAM, Centre for Middle Eastern Studies (Turkiye), a leading Turkish think tank held a bilateral webinar on, "Russia Ukraine War - Future of Eurasian Geopolitics", on October 27, 2022. The webinar was attended by senior security analysts, veteran diplomats, experts, and students from Pakistan and Turkey. Speakers discussed the impact of the ongoing conflict on the Middle East and identified irreconcilable positions of great powers as one of the main causes of the current war. They stated that the failure of the United States, NATO, and Russia to come to a shared understanding about regional security, and disregard of the assurances given to Russia in the aftermath of the Cold War produced the set of conditions that eventually culminated in the current conflict.



NUST hosts Book Donation Ceremony under “Read Japan” initiative

Under the Nippon Foundation initiative “Read Japan” that aims at promoting understanding of Japan through donation of Japan-related books written in English, NUST Placement Office (NPO) hosted a Book Donation Ceremony. At the occasion, Ambassador of Japan to Pakistan, H.E. Mitsuhiro Wada presented a Book Donation Certificate to Rector NUST Engr Javed Mahmood Bukhari. NPO held the ceremony in collaboration with the Embassy of Japan (Pakistan) and the Nippon Foundation. The Ambassador appreciated NUST for having developed a knowledge ecosystem that has earned it a respectable niche in the global academia. Hoping that the newly formed collaboration between NUST and Nippon would go a long way, he further added that the Embassy of Japan would facilitate NUST in all initiatives towards familiarising NUST students and faculty with Japanese culture and industry.

The first-ever Pak-Japan Center was established at the National Science & Technology Park in May 2022. The Center primarily focuses on promoting exchanges between Pakistan and Japan to foster cooperation in the fields of human resource development and joint research, especially in the IT sector.



Revitalising Higher Education Institutions in Afghanistan and the Role of Pakistan

An expert colloquium titled “Revitalising Higher Education Institutions in Afghanistan and the Role of Pakistan” was organised by CIPS in January, 2022. The principal aim of the session was to understand the role of higher education in post-conflict or transitional societies towards ensuring a durable peace, given its impact on socioeconomic recovery, development and societal cohesion.

Prominent among discussants were Ambassador (Retd) Syed Abrar Hussain, Vice-Chairman Institute for Policy Studies; Dr Saima Hamid, Vice Chancellor Fatima Jinnah Women University; Dr Masoom Yasinzai, Rector International Islamic University Islamabad; Dr Zahid Majeed, Director, International Collaboration & Exchange Office, Allama Iqbal Open University, and Ms Scarlet, Director of the Chinese Studies Centre at NUST.



SCME organises CoMSID '22

NUST School of Chemical and Material Engineering (SCME) organised Conference on Materials for Sustainable Industrial Development 2022 (CoMSID22) on March 14, 2022. The inaugural started with opening remarks by Principal SCME Prof Dr Amir Azam Khan and CEO WEmpower Pakistan Dr Tabassum. The ceremony included special talks by Guest of honour Prof Dr Mohammad Mujahid Rector Pak-Austria Fachhochschule

and Chief Guest VC Abbottabad University, Prof Dr Tahir Irfan Khan.



Molecular Biology of Pathogen Surveillance

The International Workshop on Molecular Biology of Pathogen Surveillance was hosted by NUST on May 23-24, 2022. The workshop was organised under the flagship of the GastroPak project, which is an international project sponsored by GCRF and MRC, UK, and is titled as, “Quantifying the transmission routes of Gastroenteritis in Pakistan and developing targeted interventions”. The major aim of the workshop was to develop expertise at local scale with respect to the Molecular Biology of Pathogen Surveillance, DNA extraction, qPCR Analysis, Genome Sequencing and Genomic Epidemiology. The representatives from various research institutes and universities such as University of Agriculture, Faisalabad, PCRWR, Thal University, Bhakkar actively participated in this event and shared their insight regarding the current state of water quality in Pakistan. The workshop was followed by a three-day International Lab Training on “Molecular Biology of Pathogen Surveillance” held on May 25-27, 2022, in which highly qualified researchers and scientists from UK successfully trained a team of young researchers at NUST, with respect to the modern techniques in pathogen identification and surveillance. The event served as a joint collaborative effort by relevant stakeholders for the development of a strong linkage among various sectors including Academia, Industry and Public and served as an opportunity for International Research based Strategic Learning.



Research Seminar

Mr Usman Attique, a PhD student of DME, presented his research on Numerical Analysis of Formability Characteristics of Steel Tailor Welded Blanks Formed through Single Point Incremental Forming. He talked about the design, numerical analysis, and challenges of this method.



Risk Factors for Adverse Outcomes with COVID-19 Infections & its Management

Dr Farhan Abdul Rauf, an expert in public health and rehabilitation, was invited at IESE-SCEE, to interact with the students and the faculty on February 15, 2022. It was deemed necessary to educate students regarding the basic information about how to keep themselves, their families, and their communities safe and well. The meeting concluded with a discussion on potential strategies to cope with fear and anxiety created by pandemic and how to move forward with a healthy attitude for dealing with post-pandemic problems.



EMC Workshop 2022

NUST School of Electrical Engineering and Computer Science (SEECS) prides itself in imparting advanced skills to students and professionals in contemporary technologies, especially related to the needs of local industry. A one-day workshop for industry personnel was arranged on Electromagnetic Compliance/Interference (EMC/I). The workshop was held on September 21, 2022 which was attended by professionals from Bcube, PTA, Digit and subsidiaries of Public sector organization. Using the latest equipment and EMC/I lab facilities available to SEECS, the workshop introduced the participants with the theoretical and practical aspects of EMC/I. The workshop ended with EMC tests' demonstration here are at EMC/I Lab SEECS-NUST.



Training for SECP & NLC

In 2022, NUST Professional Development Centre (PDC) conducted the second batch of a Graduate Trainee Programme for newly inducted officers at the Securities & Exchange Commission of Pakistan (SECP). PDC also conducted trainings for the National Logistics Cell (NLC) such as the "Transition Management Programme" and various other training on the topic of Management and Primavera Project Management tool, and for Touchstone Communications on the topics of LEAD Management.



Trainings with SCME on Energetic Materials Engineering

PDC in collaboration with NUST School of Chemical & Materials Engineering (SCME) has been successfully conducting various training on Energetic Materials

Engineering, which are being attended by officers from Pakistan Armed forces and Strategic Organisations.



SCME, PDC organise workshops on Energetic Materials

School of Chemical and Materials Engineering (SCME) arranged two workshops on Energetic Materials in collaboration with Professional Development Center (PDC). The first, one-week workshop titled "Aging studies of energetic materials (propellants and explosives)" was conducted from June 13-17, 2022 and 37 participants attended. The second, one-week workshop titled "Modifications in the formulations of energetic materials and their effects" was arranged from August 29-September 2, 2022 with 18 participants.



“We are what we repeatedly do. Excellence, then, is not an act, but a habit

Aristotle

PARTNERSHIPS FOR IMPACT

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NUST joins hands with Army
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UN Women and CIPS Agreement Signing

NUST Centre for International Peace and Stability (CIPS) inked an agreement with UN Women Department for Gender Equality and Women Empowerment on June 24, 2022. The agreement was signed by Principal NIPCONS Major General Muhammad Salim Raza (Retd) and UN Women Country Head Ms Sharmeela Rasool. The broader aim of the agreement is to build a conducive environment for collaboration and integration of CIPS training pursuits with UN agencies and functionaries. The collaboration is also a step towards achieving the agenda of UNSC Resolution 1325 on Women, Peace, and Security.



First France-Pakistan Alumni Conference

NUST International Office hosted French Alumni Event and International Conference on "Environment and Climate Change: Global Issues with local impacts" on November 2, 2022. The event was organised in collaboration with French Embassy and attended by H.E. French Ambassador to Pakistan, Mr Nicolas Galey, Attachés, representatives of French universities, French Alumni, and representatives of local universities. Three panel discussions followed by Q&A sessions were held. The conference was concluded with closing remarks by Ms Sabine, Scientific and Higher Education Attaché from Embassy of France in Pakistan.



ROK-PKO and CIPS MoU

CIPS and the Republic of Korea, Peacekeeping Operations Centre (ROK-PKO Centre), housed at the Korea National Defence University (KNDU), had a virtual MoU signing ceremony for furthering joint collaboration in PKO training and critical research engagement. His Excellency, Ambassador Nabeel Munir, Pakistan's Ambassador to the ROK, signed the MoU on behalf of CIPS.



NUST leadership's visit to UK leads to enhanced linkages

A high-powered delegation led by Engr Javed Mahmood Bukhari, Rector NUST, visited the United Kingdom to further international linkages by forging meaningful and multi-pronged partnerships with prestigious higher education and research centres and connect with the alumni in the region. The highlight of the visit was signing of a multi-tiered partnership with Cranfield University. The delegation also visited the Staffordshire University where they were welcomed by Professor Martin Jones, Vice Chancellor, Professor Kevin Hetherington, Deputy Vice Chancellor, and Professor Raheel Nawaz, Pro-Vice-Chancellor-Digital Transformation. The ensuing discussion focused on connecting nodes to enhance the academic linkages between the two universities. NUST University Advancement Team organised a Convention in London which was attended by more than 50 alumni and served as a platform for nurturing industrial partnerships. NUST delegation organised a business community meetup at the British Muslim Heritage Centre in Manchester, which was attended by the Counsel General of Pakistan, Members of the UK Parliament, including Mr Wajid Khan, Baron Khan of Burnley, and representatives of industry and academia based in the UK. The leadership also participated in a community event in London, organised by Mr Toaha Qureshi, a trustee of the NUST Trust Foundation in the UK.



Italian Ambassador to Pakistan

Italian Ambassador to Pakistan, H.E. Ambassador Andreas Ferrarese, visited NUST to deliver a talk on Pak-Italy diplomacy and interact with students & faculty members. He was greeted by Engr Javed Mahmood Bukhari, Rector NUST, Dr Muhammad Ajmal Khan, Principal SEECs, and Principal NIPCONS, Muhammad Salim Raza. Rector NUST and the Ambassador exchanged views on mutual interests of both countries related to science & technology. Dr Noshawan Shoab, Associate Professor at SEECs, delivered a speech on NUST and the background of the talk.



Visit of French Scientific and Higher Education Attaché

Ms Sabine Vermillard, Scientific and Higher Education Attaché, Embassy of France, visited NUST on March 31, 2022. She briefed about different opportunities available at France for Higher Education studies, scholarships, and research grants. Ms Sabine inaugurated the "Centre for Internationalization for Erasmus+ B-International Project" at the Central Library after the meeting.



Visit of Secretary General and Acting Chair CPA

Led by Mr Stephen Twigg, Secretary General of Commonwealth Parliamentary Association (CPA), a delegation including Hon Ian Liddell-Grainger, Acting Chairperson CPA, Ms Emily Davies, Head of Strategy and Engagement CPA, Ms Kanwal Shauzab, MNA, Mr Tahir Hussain, Secretary National Assembly, Syed Shamoan Hashmi, Additional Secretary SI, Mr Waseem Iqbal Ch, Director General IR, and Ms Salma Joveria, Deputy Director IR visited NUST on March 8, 2022.



Visit of British Council Delegation

A four-member British Council delegation including Ms Kate Joyce; Director Cultural Engagement, South Asia, Dr Nishat Riaz; Director Education, Ms Sarah Parvez; Head of HE & Skills and Mr Hamza Saleem Ahmed; Project Manager visited NUST on September 5, 2022.



DoU signing with Islamic University in Uganda

Prof Ismail Simbwa Gyagenda, Rector of Islamic University in Uganda visited NUST on March 28, 2022. NUST and IUIU, Uganda also inked Document of Understanding (DoU).



Cranfield University, UK

Prof Konstantinos Salonitis, Deputy Director Manufacturing & Materials Theme and Head of Sustainable Manufacturing Systems, Cranfield University, UK visited NUST from October 17-20, 2022. The delegate met with Rector NUST Engr Javed Mahmood Bukhari, Pro-Rector Academics Dr Osman Hasan, Pro-Rector RIC Dr Rizwan Riaz. The visit also entailed meetings with Principal and HoD Aerospace Engineering SMME and faculty members of SMME and College of E&ME.



INBOUND VISITS IN A SNAPSHOT



A three-member delegation from University of Essex, UK visited NUST on October 13, 2022.



A three-member delegation from Coventry University, UK visited NUST on September 13, 2022.



Dr Fiaz Hussain, Associate Dean Cardiff School of Art & Design from Cardiff Metropolitan University UK visited NUST on October 11, 2022.



A two-member delegation from University of Nottingham, UK visited NUST on March 11, 2022.



A three-member delegation from United States Education Foundation in Pakistan (USEFP) visited NUST on March 4, 2022.



A four-member delegation from British High Commission Islamabad visited NUST on September 30, 2022.



A three-member delegation from University of Brescia, Italy visited NUST on March 28, 2022.



The Ambassador of Denmark to Pakistan, H.E. Ms Lis Rosenholm visited NUST in July 2022. She met with Rector NUST Engr Javed Mahmood Bukhari and later interacted with students.



A two-member delegation from Islamic World Educational, Scientific and Cultural Organisation (ICESCO) visited NUST on January 12, 2022.



A two-member delegation from Moscow School of Management, Russia visited NUST on March 7, 2022.



Dr Ahmad Rahman Songip, Scholar from Universiti Teknologi Malaysia (UTM), Malaysia visited NUST on October 10, 2022.



NDU Zimbabwe Delegation, headed by Air Vice Marshal Michael Teozani Moyo, visited CIPS on June 20, 2022.



A four-member delegation from Universitas Airlangga, Indonesia visited NUST on September 19, 2022.



A team of researchers from Max Plank Institute Germany visited SCME on July 29, 2022.



A two-member delegation from University of Nottingham, UK visited NUST on October 7, 2022.



A four-member delegation from Edith Cowan University Australia visited NUST on October 31, 2022.

Fully Funded Scholarships by NUST Partner Universities

NUST actively collaborates with several International Universities that offer fully funded scholarships to our students and faculty. Yunnan University, Northwestern Polytechnical University (NPU), Beijing Institute of Technology (BIT), Middlesex University, Nottingham University, ASU, Coventry University, XJTU and Beihang University are some from the extensive list of partner universities.

Visit of Technical University Ilmenau (TUIL), Germany

Prof Matthias Hein, Head of RF & Microwave Research Group (HMT) from Technical University Ilmenau (TUIL) Germany visited NUST on September 29, 2022. DoU signing ceremony was held to foster collaboration between both the universities.

NUST International Office conducts Study Abroad Drive

NUST International Office (NIO) organises webinar series every semester as part of their Study Abroad Drive to provide guidance to students on international scholarship opportunities such as Fulbright, Erasmus, DAAD, Australian, New Zealand Government, and Turkish Scholarships. NIO conducted six successful week-long Study Abroad Drives each with 36 hour-long informative webinars.



HEC Visit for Documenting Sri Lankan Students

Mr Naveed Ahsan Khattak, Assistant Project Manager HEC visited NUST on March 11, 2022. He met with numerous Sri Lankan students selected under the Allama Iqbal Scholarships for Sri Lankan Students project who are studying at NUST. Under the scholarship scheme, students are offered full tuition fee waiver, maintenance allowance, hostel charges, book allowance, and one-time travel cost.

Champions for Scholarships

To establish strong linkages with scholarship offering agencies like DAAD, CSC, Commonwealth, British Council, Erasmus and USEFP etc. and to offer broad spectrum Fully Funded Scholarship opportunities to students, faculty focal persons have been designated as "Champions" for each of these funding agencies. These champions are available to counsel students & faculty at Central Library on multiple days at NUST Central library.

	Programme	Champion	School
1.	Association of Commonwealth Universities	Ms Kiran Javaid	S ³ H
2.	Fulbright (USEFP)	Dr Umair Hashmi	SECS
3.	DAAD, Germany	Dr Fazal Adnan	ASAB
4.	Chinese Scholarship Council	Dr Zeeshan Ali	SCME
5.	Erasmus Mundus	Dr Sarmad Shakeel	NICE - SCEE
6.	New Zealand /Australian Scholarships	Dr Muhammad Moazzam	NBS
7.	Turkish Scholarship	Dr Muhammad Qasim	SNS

Session on women empowerment held at UAE

Badiri Education & Development Academy, UAE partnered with NSTP to hold a session on women empowerment at UAE. The focus was on nurturing entrepreneurial

ambitions of women and empowering them with skills and knowledge to become contributors to the economy.



USAID HESSA Project inaugurated

USAID's Higher Education System Strengthening Activity (HESSA) project was inaugurated at NUST on February 17, 2022. HESSA is a project of the governments of the United States and Pakistan, launched from the platform of USAID. The five-year project will serve as an impetus to enhance graduate employability and improve relevance, adequacy and inclusivity vis-à-vis the higher education ecosystem of Pakistan. Speaking at the occasion, Dr Micheal Barber, Principal Investigator HESSA, said that NUST has always been the first choice to serve as the launch pad of and institutionalise this ambitious project.



Ajman University VC visits NUST

A high-level delegation from Ajman University, UAE, led by Vice Chancellor for Academic Affairs, Prof Khaled Assaleh, visited NUST on June 30, 2022. The delegation had a meeting with Rector NUST Engr Javed Mahmood Bukhari including Pro-Rector Academics, Pro-Rector RIC, Directors Research NUST & Ajman Universities.



Digital Pakistan Tech Fellowship Programme

NUST has signed an MoU with Jazz, the leading internet and mobile broadband provider, to launch Digital Pakistan Tech Fellowship Program. The Fellowship is designed to engage the youth in a meaningful discourse around tech-based innovation. It will equip participants with tech insights, thus enabling them to play a pivotal role in building the creative economy based on the digital Pakistan narrative.



NCSAEL joins hands with Army Centre for Emerging Technologies

The then Chief of Army Staff (COAS), General Qamar Javed Bajwa, NI (M) inaugurated the Army Centre of Emerging Technologies (ACET) and Cyber Division under Army Cyber Command. The inauguration of ACET was carried out on August 5, 2022, in NUST Military College of Signals (MCS). As a research and development partner, National Cyber Security Auditing and Evaluation Lab (NCSAEL), an affiliated lab of National Centre for Cyber Security (NCCS), showcased its indigenously developed products. Director NCSAEL, Prof Dr Haider Abbas along with his team briefed the COAS about the wide range of products and services. Other members of Army's top brass also graced the occasion with their presence.



First-ever Pak-Japan Center to strengthen bilateral cooperation inaugurated at NUST

First-ever Pak-Japan Centre was inaugurated in Pakistan at NUST on May 23, 2022 jointly by Engr Javed Mahmood Bukhari, Rector NUST, and H.E Mitsuhiro Wada, Ambassador of Japan to Pakistan. The facility has been established through the collaborative efforts of NUST & Plus W Inc. a Japanese company working on behalf of the Government of Japan. The event was also attended by the Ex-Ambassador of Pakistan to Japan H.E. Imtiaz Ahmad, First Secretary Economic & Development Section Embassy of Japan in Islamabad Mr Tsuchiya Taiji, and Ms Ismat Hassan Sial, the Charge d' Affaires, Embassy of Pakistan in Tokyo.

The Center will primarily focus on promoting exchanges between Pakistan and Japan to foster cooperation in the fields of human resource development and joint research, especially in the IT sector. It will also facilitate Japanese and Pakistani companies in setting up businesses in each other's country by familiarising individuals with respective cultures, business principles and basics of language.



STIR brings together industry leaders at NUST

NUST Professional Development Centre (PDC) in collaboration with Graana held a grand networking event STIR - Socialise, Transform, Ignite and Reskill, at NUST. The event brought together an overwhelming number of industry partners to interact, exchange ideas and experiences, and create a more conducive environment for inclusive growth. Chairman IMARAT Group and CEO of Graana.com, Mr Shafiq Akbar, graced the occasion as chief guest. Prominent amongst others present were NUST Pro-Rector Research, Innovation & Commercialisation, Dr Rizwan Riaz; Chief Ethics & Compliance Officer of Jazz, Mr Sarwar Salahuddin; Executive Director of SECP, Ms Musarat Jabeen; Executive Director of PAGE Ms Fajer Rabia Pasha; and Chief Digital Officer of Askari Bank Mr Shehryar Ali Shah.



Silk Road International Alliance of Architectural & Technological Universities

With the aim to forge meaningful partnership under the proposed "Silk Road International Alliance of Architectural & Technological Universities" and beyond, a high-level virtual meeting between senior management and faculty of NUST, Pakistan and Xi'an University of Architecture & Technology (XAUAT), China, was held on July 15, 2022. Engr Javed Mahmood Bukhari, Rector NUST, and Prof Wang Shusheng, President XAUAT also addressed the meeting. The proposed alliance has a mandate to build a knowledge library, information hub, and talent base in the fields of Architecture and Technology to extend support for the urbanisation of countries along the Silk Road.



IoBM and NUST to collaborate on research and innovation

Institute of Business Management (IoBM) and NUST signed a memorandum of agreement to develop academic cooperation and collaborate on research projects. The signing ceremony was held on September 1, 2022, at IoBM. The areas of interest for cooperation with NUST include Environment and Energy Management, IT, Finance, Business Management, Psychological Research, Education, and HR. The signatories were Mr Talib Karim, President IoBM and Dr Rizwan Riaz, Pro-Rector for Research, Innovation and Commercialisation, NUST.



CIPS, ISSI sign agreement

NUST Centre for International Peace & Stability (CIPS) and Institute for Strategic Studies Islamabad (ISSI) signed an agreement for cooperation on April 6, 2022. The agreement was signed by Principal NIPCONS, Maj Gen Muhammad Salim Raza (R), and Director General ISSI, Ambassador Aizaz Ahmad Chaudhry at a ceremony held at the CIPS. The purpose of the cooperation between the CIPS and ISSI is to enhance academic and research cooperation concerning regional and global strategic issues, affecting international peace and security.



MoA between NSTP and InnoVentures

National Science & Technology Park (NSTP) signed partnership with InnoVentures on June 17, 2023. NSTP will work with InnoVentures to launch Pakistan's first Deeptech (and DeepScience) Accelerator Programme. Dr Rizwan Riaz, Pro-Rector RIC NUST, Dr Salman, Director NSTP, Emmad Ahsan, GM Innovation at NSTP, and Humaira Sajjad, Programme Manager Incubation and Mr Athar Osama, Executive Director InnoVentures Global Pvt Ltd were present at the occasion.



Building Internationalisation in Pakistan (B-International)

In collaboration with the European Education & Culture Executive Agency (EACEA), NUST carried out a project "Building Internationalisation in Pakistan (B-International)." NUST hosted foreign delegates for capacity building trainings from June 20-24, 2022. After numerous virtual trainings and meetings in the past two years, the delegates from UK, France and Spain visited Pakistan to host the first face-to-face training at NUST. University representatives from NUST, COMSATS, LUMS and PIFD attended a two-day training on 'Academic Recognition and the Recognition of Staff Mobility' by University of Bologna and co-deliverers from Cardiff Metropolitan University. Ms Anna Dukes, Head of Global Outreach and Operations, Cardiff Metropolitan University; Ms Jael Rav-on, Global Outreach and Operations Manager, Cardiff Metropolitan University; Prof Dr Juan Luis Alonso Garcia, Director of the PhD program of Classical Philology and Ms Caroline Kerello, International Relations Department of Centrale Nantes, met with Rector NUST to discuss the impact of 'B-International' on higher education landscape in Pakistan and future projects with NUST.



Inauguration of SEECS-TUIL Virtual Lab

Professor Matthias A. Hein, Head of Department of RF & Microwave and the Director, Thüringer Innovationszentrum Mobilität at the TU Ilmenau, Germany paid a three-day visit to NUST School of Electrical Engineering and Computer Science (SEECS) from September 29-October 1, 2022. Professor Hien signed an MoU on behalf of TU Ilmenau for increasing cooperation on various facets of educational exchanges between the two universities.

A research lab named 'SEECS – TUIL Virtual Lab,' which was envisioned by Prof Hein during his first visit in 2019, was also inaugurated. The lab will provide support to students working on research topics of mutual interest and collaboration. Prof Hein donated equipment worth PKR 3 million for the lab.



Turkish Aerospace Industries delegation visits NUST

The Executive Vice President of Turkish Aerospace Industries (TAI) Mr Ugur Zengin & Mr Atilla Dogan along with a high-level delegation visited NUST on May 17, 2022. The delegation was apprised of the latest advancements in technology and research areas in which NUST excels. The delegation visited NSTP and School of Interdisciplinary Engineering & Science (SINES).



Hi-Tech Lab by TAI

NSTP tenant, Turkish Aerospace Industries, has established a high-tech lab at NUST School of Interdisciplinary Cluster for Higher Education (SINES). The aim of establishing this lab is to develop new technologies for the future of the aviation ecosystem between Pakistan and Turkiye Dr Rizwan Riaz, Pro Rector RIC, and Mr Sohail Sajjid, Country Head - TAI signed the agreement on behalf of the respective parties.



Team Tetra Tech Inc. USA

A delegation from Tetra Tech Inc USA visited SCEE & USPCASE, NUST. The Tetra Tech delegate was led by Vice President Mr Bill Meade while the NUST experts were represented under the leadership of Principal & Dean SCEE, Dr Muhammad Irfan, and Principal USPCASE, Dr Adeel Waqas.



PDC partners with various organisations

NUST Professional Development Centre (PDC) has partnered with various organisations to provide customised trainings to employees of multiple organisations including the Pakistan Armed forces, Army

Welfare Trust (AWT), German Embassy Islamabad, Natural Rural Support Program (NRSP), Authentix Inc., Interloop limited, Khushali Micro Finance Bank Limited, Kohinoor Textile Mills and Mobilink Microfinance Bank.



NUST, NDMA ink MoU

NUST Research Directorate inked an MoU with National Disaster Management Authority (NDMA) on January 28, 2022. The MoU is aimed at devising a framework for extended cooperation in Disaster Risk Management for Research collaborations, knowledge exchange, scientific and technical partnership for sustainable habitat plans.



NUST signs MoA with Paraplegic Centre Peshawar

A Memorandum of Agreement (MoA) between NUST and Paraplegic Centre Peshawar (PCP) was signed on March 10, 2022.



VC Connect Sessions

To help startups raise funding for scaling their business, NSTP arranged VC Connect Sessions with its tenants. Faisal Aftab, Managing Partner of leading VC firm, Zayn Capital, visited the park to listen to the unique business ideas of founders.



NUST & Cisco join hands

NUST signed a collaboration agreement with Cisco Networking Academy on August 3, 2022, to deliver a comprehensive learning experience for students to prepare them for future technologies.



PDC signs MoU with Askari Bank Limited

NUST Professional Development Centre (PDC) has signed a Memorandum of Understanding (MoU) with Askari Bank Limited (AKBL) with an aim to facilitate AKBL with customised executive development programmes, certifications, pathways, and skills development, including reskilling and upskilling for Askari Bank employees.



Signing of General Agreement of Cooperation

The signing of the General Agreement of Cooperation between NUST Centre for International Peace and Stability (CIPS), and Peace and Conflict Resolution Centre (PCRC), Fatima Jinnah University. On August 3, 2022, a 'General Agreement of Cooperation (GAC)' was signed between CIPS and PCRC.

Job Fair

Job Fair at NUST Military College of Engineering (MCE) was held on June 15, 2022. 44 Final Year Design Projects (FYDP) were presented. More than 10 senior representatives of renowned construction/consulting firms also displayed their stalls and interviewed students.

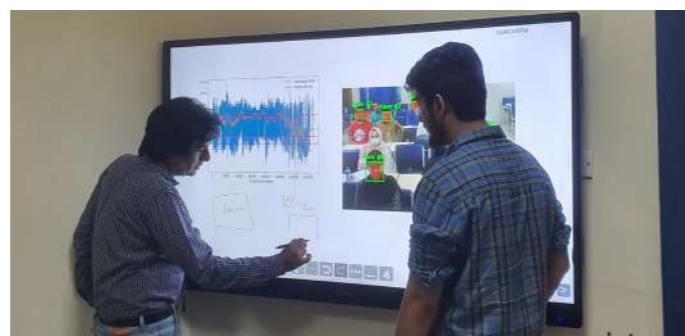


Faculty Placement in Industry

NUST Faculty Placement Programme 2022 was launched in July-Sept 2022 and Faculty Members were placed in relevant industries for 5 days. The prime objective of faculty placement programme is to provide faculty with an opportunity to be enlightened with industrial environment. The 1st Cohort of the FPP culminated in Sept 2022, where 26 faculty members were placed in relevant industries. As an outcome, many R&D projects, internships/placements opportunities, trainings, FYPs have been proposed to be jointly conducted between the host organisations and NUST.

NUST-One Screen Lab

NUST partnered with an international EdTech company called One Screen to establish NUST-One Screen Research Lab. The lab strives to exploit the latest AI technologies such as computer vision, natural language processing, deep learning etc. with the aim of improving student's learning and providing valuable feedback to the teachers.



GDSC EME & Fasset

Developer Student Club at CEME, powered by Google Developers, presented its first event on October 25, 2022. The club partnered with, Fasset Pakistan to organise the event. On the grand day, they hosted Noshad Minhas, Country Head Fasset. CEME welcomed the presence of JS Bank, Walee, and Reminisce Labs to unravel the potential of WEB 3.0. GDSC and NUST CEME also signed an MoA with Fasset Pakistan that day.



Construction Industry Exhibition

Construction Industry Exhibition on latest trend in Building Construction Material and Equipment at MCE, Risalpur was held from March 21-23, 2022. The focus of this exhibition was to foster academia-industry linkage and to abreast the students in Civil Engineering with smart solutions and use of modern construction material and equipment. 42 Construction industry firms participated in this flagship exhibition and the event hosted more than 2000 visitors.



Industry Visits

NUST Corporate Advisory Council (CAC) through its network of 200+ industry partners, plays a supplemental role to facilitate industry visits for the NUST Schools/Colleges. With the aim to facilitate students in relating their theoretical knowledge with the practices being followed in the industry, these industry visits are crucial to familiarise students with the industrial standards and processes.

Field visits of NBC students

Students of NUST Balochistan Campus went on several field visits during the year. Here are a few glimpses:



Askari Housing Scheme, Quetta



Sheikh al Zahid Institute of Cardiology



Under-construction road-site by NLC Quetta

CO-CURRICULARS

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National Literary Festival

NUST Literary Circle (NLC) stands unparalleled at the vanguard of literary activities at NUST. NLC organised a three-day event titled National Literary Festival from May 13 to 15, 2022, which included various competitions, sessions, workshops, and socials as well to rejuvenate the culture and national language of Pakistan. Renowned personalities including Justice Nasira Iqbal, Amjad Islam Amjad, Dr Sania Nishtar, Umair Jaliawala, Jamal Shah, Muneeza Hashmi, Ansar Burney, Amjad Saqib and many more graced the occasion with their presence.



National Science Bee

The 9th edition of the National Science Bee featured 10 spectacular modules spread across three days, March 4-6, 2022. Science Bee was as fun as it gets for the participants, but it truly was a manifestation of how learning can be exciting. From Sci-Run to Escape Room to Medical Mayhem, and from Crimeline to Speed Programming to Chemathon, students learnt and enjoyed modules including Speed Wiring, Robowards, and Mathletics. The three-day event came to an end with Buzz Night wherein renowned artist, Farhan Saeed, Soch the Band, and our very own the NUST Music Society performed.



Women in Engineering Day

Women in Engineering (WIE) NPSC arranged an interactive, knowledgeable, and entertaining event on Women in Engineering Day observed on June 20, 2022. Students and faculty of PNEC participated in the event themed around how women not only have the capabilities to become a good engineer and are extremely talented problem solvers, but also possess sound administrative and teamwork promoting qualities.



Young Innovators Programme

NSTP launched Pakistan's first-ever Young Innovators Programme, content of which is curated to engage young minds and instill in them the spirit of innovation. Children from various leading schools were introduced to innovative startups, augmented and virtual reality, the basics of programming language and coding. The young participants also carried out "DNA extraction procedure" using household items.



Unveiling of NAS '22 NUST Formula Student Team

NUST Formula Student Team (NFST) celebrated 10 years of innovation and passion in engineering and unveiled their current model NAS '22 on June 17, 2022. The event was graced by Commandant PNEC Kamran Ahmed, Dean Engineering Sciences Zulfiqar Ahmed, representatives of Team sponsors; Pakistan State Oil, Descon Midas Safety, National Science & Technology Park, Meinhardt Group, and industrial giants.



Meet our Sports Stars

Zainab Shujaat

Championship which was declared the winner of the National Inter-provincial Netball Championship 2022. She also won the Best Wing Defense award.

Zainab Shujaat, an undergraduate student of Electrical Engineering at NUST Pakistan Navy Engineering College (PNEC) is a Netball player playing for Sindh at national level and representing Pakistan on international platforms since 2018.

She has bagged multiple awards for herself and for her team since 2018. Zainab was the captain of Pakistan's U-16 Netball team which was declared 'South-Asia U-16 Netball Champion' held in Kathmandu, Nepal in 2019.

In 2021, representing Sindh in the National Inter-provincial Netball Championship and National Netball Championship the team won 1st and 2nd position respectively. She was declared the tournament's Best Goal Defense.

She was part of the Sindh team for the National Inter-provincial Netball Championship and National Netball



Imaad Khan

26-year-old, Imaad Khan has become the first Pakistani to enroll for a master's degree at the prestigious Real Madrid Graduate School in Spain this year. Real Madrid Graduate School is ranked the world's second-best for sports education by Forbes.

Khan, a skilled football player since ten years of age, was in the national team in 2016 during Pakistan's tour of Sri Lanka. Today, he runs a sports club and football academy called 'Baseline' in Islamabad.



Nizalia Siddiqui

Nizalia Siddiqui, a student of NUST School of Natural Sciences (SNS) has been representing Pakistan on platforms of Cricket and Football since 2016. She represented Islamabad in PCB U-17 National Cricket Championship in 2016. She was a part of Punjab Football Team in National Games in 2019 and in National Women's Football Championship from 2019-2020. She holds the honour of representing Pakistan as a member of national women's football team in SAFF Women's Championship 2022 held in Kathmandu, Nepal and in the Four-Nation Cup held in Kingdom of Saudi Arabia.



All Pakistan Declamation Contest

NUST Military College of Engineering (MCE) secured 1st position out of 56 teams at All Pakistan Declamation Contest held at Khyber Medical College that went on from September 30 to October 1, 2022. GC Muhammad Omer Munsif was declared as best speaker in English Category.



Pakistan Cybersecurity

National Centre for Cyber Security (NCCS) at Air University organised a mega event of Pakistan Cybersecurity Challenge (PCC), a Hackathon and Capture-the-Flag (CTF) event, crypto challenge, and Ideas Cup, a startup challenge.

Saba Shehzad and Sidra Rehman of NUST Pakistan Navy Engineering College (PNEC) Cyber Security Dept participated in the event. They qualified for Round 1 as individuals and then qualified as a team in Round 2. Round 2 commenced on July 27, 2022, at Air University, Islamabad. They received the prize of Rs 2 Lacs and brought laurels to NUST.



Graduates of NUST College of Electrical & Mechanical Engineering (CEME) won the Battle of Minds, business case-solving competition of the flagship recruitment platform of Pakistan Tobacco Company. Mr Balaj Abdul Wahab, Mr Syed Ali Ibrahim, and Mr Muhammad Munim Shafi presented their winning idea of a "Smart Helmet" at the finale of the competition on September 30, 2022, where five teams battled for the top position.

Battle of Minds

COMMUNITY SERVICE

Breast Cancer Awareness with Pink Ribbon and Shaukat Khanum

NCSC celebrated Pinktober by organising awareness campaigns, emphasising the tagline #RemoveTheShameSayTheName. At a seminar on October 11, Dr Safoora Shahid, Senior Oncologist at Shaukat Khanum, debunked countless myths surrounding the disease, shed light on breast cancer risks and symptoms, and shared a plan of action based on taking precautions and self-examination. On October 13, food and art stalls were organised on campus for raising awareness in collaboration with Pink Ribbon.



Baat Cheet on Transgender Awareness

To enhance social and communal impact, NUST Community Service Club (NCSC) organised the event *Baat Cheet*, on February 24 themed "Trans Awareness: Inclusion of the Third Gender."

The purpose of this event was to increase awareness of the marginalisation faced by the transgender community among NUST's student body. The event included a discussion with notable members of the trans community including Nayyab Ali, Sherkan and Bijli Baji, who highlighted numerous problems and discrimination they faced within society.



NCSC Blood Camp

In collaboration with Jamila Sultana Foundation and AFIT, NUST Community Services Club (NCSC) organised their flagship event, blood donation camp from October 24-27, 2022. A total of 515 blood pints were collected over the course of four days. Over 734 potential donors registered for the noble cause of saving lives. The batch of '21 won with the maximum number of donors.



Reuse Event: Carve A Smile

NUST Environment Club (NEC) and NUST Character Building Society and Chadar, conducted this event from April 19-21, 2022. The main objective of event was to reuse items for making DIY material; that can be used by students, and perform activities with students related to environmental conservation, climate change and global problems.



Basera Trust Visit

NCSC TABA team along with volunteers paid a visit to Basera Trust on October 8, 2022. The volunteers spent time with children and made cards for them, personalised according to their interests. A story telling session was conducted afterwards. Volunteers also played board games including ludo and carrom board with the children and distributed coloring books among the children.



Orphans kNOW More

Groups of students from NUST Community Service Club (NCSC) met groups of children at Noreen Zindagi Welfare Trust and Gehwara-e-Aman orphanage on March 13 and April 2 respectively. The visits consisted of game-playing, animated story-telling, and compassionate gift-giving under the NCSC flagship project, "Orphans kNOW More."



Pakistan Sweet Homes

NUST Character Building Society (NCBS) arranged an orphanage visit to Pakistan Sweet Homes on March 15. A counseling session was held for the students of orphanage where students from NUST guided them in their prospects according to their varying aptitudes.



NCSC TABA team visits old home

NCSC TABA team volunteers visited NAJJAT TRUST, an old age home. Volunteers interacted with the aged people and spent time playing board games and interacting with them.



NCSC Cloth Donation Drive

In the spirit of contributing to welfare of those in need, NUST Community Service Club (NCSC) conducted one of its signature events - Cloth Donation Drive from February 9-15, 2022.

The sole aim of this event was to organise a drive to gather clothes from the people within the university and donate those clothes to the people who need them.



Ration Drive

NUST Community Services Club (NCSC) organised a Ramadan Ration Drive from April 18-23, 2022. The aim of this event was to raise monetary donations for preparation of ration packs which were then distributed amongst the underprivileged families in Islamabad/Rawalpindi.



New Building of Department of Engineering Management at CEME

A new building has been constructed for Department of Engineering Management at CEME. The building has been designed keeping in view the concept of sustainability to reduce energy consumption. Along with other facilities, a Decision Support System laboratory has been made available for students.



NUST AirWorks

NUST AirWorks, Pakistan's foremost internationally competing drone team, consists of undergrad students and is based in NUST-PNEC. The team has been competing on national and international stage since its inception in 2016. Since 2018, the team has been successfully managing to raise Pakistan's flag high at the UK's IMechE UAS Challenge.



Prototypes for Humanity

Final Year Project titled 'Squatlet' of Zain Rehan Khan, a student of NUST School of Art, Design & Architecture (SADA), has been selected to feature in the 2022 edition of Prototypes for Humanity. Graduates from 100 countries applied for the show, out of which NUST project was amongst the selected few. Dr Raja Mubashar Karim from SADA supervised the project.



Unveiling Ceremony of EV-4

Team Formula Electric Racing NUST (FERN), unveiled their fourth Electric Vehicle, which participated in Formula Student UK 22, at an event held on May 15, 2022. The team held the unveiling in collaboration with Hashoo Group. Pro-Rector RIC Dr Rizwan Riaz graced the occasion with his presence and wished the team luck in their participation in the upcoming competitions at the international stage. Representatives from team sponsors: Maersk Pakistan, Faizan Steel, Hashoo Group Hospitality and Hydrogen Vehicle Systems were also present.



Team Envision

Envision is NUST's the oldest and most decorated student team having a stellar record in the Shell Eco-Marathon Asia.

The team secured 2nd position in the 'Communications Award' in October 2022, after competing against 50+ teams and winning the prize money of 750\$. Team Envision is the only Asian team to win 3 Communication and 3 Technical Innovation awards. The team unveiled the most efficient vehicle of Pakistan, 6th iteration in their prototype category, "Evo-X" on October 22, 2022. This is a battery electric vehicle that will participate in Shell Eco-Marathon Asia 2023 Prototype Category.



Fighting the Recent Flood Trauma in Pakistan

Centre for Counselling and Career Advisory (C3A) celebrated World Mental Health Day on October 11, 2022. The theme of this year was "Make Mental Health a Global Priority—Fighting the Recent Flood Trauma in Pakistan". Chief Guest of the occasion, Pro-Rector Academics, Dr Osman Hasan, Director C3A, Mr Ali Hasnain Sayed along with National & International speakers stressed on destigmatisation of mental health issues.



Mehfil-e-Zouq on Iqbal's Day

NUST Bazm-e-Pakistan (NBPK) organised Mehfil-e-Zouq for Iqbal Day on November 24, 2022. Various NUST teams competed in the Inter-school bait baazi competition. Kalam-e-Iqbal was recited in the three musical performances. The chief guest, Amjad Islam Amjad also recited his beautiful and thought-provoking poetry to the audience.



Unilever Hackathon 2022

Unilever arranged a Unilever Safety Helmet Hackathon to build a cost-efficient smart helmet. Numerous people from across the country including startups, businessmen and university students competed in it. Syed Ali Ibrahim, Balaj Abdul Wahab from NUST College of Electrical & Mechanical Engineering (CEME) with faculty advisor Dr Hassan Elahi and were declared the winners of Hackathon.



Industrial Visit

Final year students of NUST School of Mechanical & Manufacturing Engineering (SMME) visited Tarbela Dam on September 28, 2022. The students were shown the complete process of power generation for enhancement of their knowledge.



Winner of Pak Crypto Challenge

NCCS Air University Pakistan organised Cyber Security Challenge in July 2022. Team Lexicans from NUST Military College of Signals (MCS) won 1st position and cash prize of PKR 300,000 at the competition. As many as 20 teams made it to the final round from amongst 300 registered teams. Apart from that, Team Lexicans also stood first in the round "Capture the Flag" in

the final on July 28, 2022. Ahsan Rasheed Abbasi (Team NUST Green) from MCS won 1st Pakistan Cyber Security Challenge titled "Pak Crypto Challenge (PCC)" organised by National Cyber Security Center (NCSC).



Rabia Arshad wins Gold Medal for Pakistan at AYIMUN

Ms Syeda Rabia Arshad has made NUST proud by winning a Gold Medal for Pakistan at Asia Youth International Model United Nations (AYIMUN) in the category of 'Cooperation and Collaboration in pursuing World Peace.' Ms Rabia is an MS student at NUST School of Electrical Engineering and Computer Science (SEECs). She competed amongst 270 delegates at UNESCO counsel in AYIMUN that was being held in Malaysia. She elaborated on Pakistan's peace initiatives particularly the opening of Kartarpur Corridor. Ms Rabia was the only Pakistani to earn a Gold Medal in the said category.



Model United Nations at UET

University of Engineering and Technology Lahore organised MUN-22 from March 18-20, 2022, delegations from more than 16 universities and colleges participated. NUST Military College of Signals (MCS) delegation comprised of 24 students under supervision of Asst Prof Dr Farkhanda Afzal. They won the overall best delegation and 14 individual awards.



Session with Nouman Ali Khan

NUST Character Building Society (NCBS) in collaboration with NUST Literary Circle (NLC) organised a session with Islamic Scholar "Ustaad Nouman Ali Khan" on October 10, 2022. Nouman Ali Khan is a Pakistani-American Islamic speaker and Arabic instructor who founded the "Bayyinah Institute for Arabic and Qur'anic Studies" after serving as an instructor of Arabic at Nassau Community College.



NUST PNEC Job Fair 2022

To introduce graduating engineers to the industry for job opportunities NUST Pakistan Navy Engineering College arranged Job Fair on April 1, 2022.



Shahid Khan Afridi's Visit to NBC

Famous cricketer of Pakistan Shahid Khan Afridi visited NUST Balochistan Campus (NBC) in 2022. The celebrity had an interactive session with the students on the importance of inculcating healthy activities in their daily lives.



Welcome party

NUST Balochistan Campus organised a welcome party for batches of 2021 and 2022. A series of cultural dance performances, poetry, songs, a burlesque of famous Anarkali drama were all part of the magnificent eve. Dean NBC Brig Dr Waseem Khaliq addressed the gathering and welcomed the new batches to NBC family.



Book Exhibition

SMME library arranged a book exhibition on November 16, 2022, to procure the latest publications for SMME library.



Intra-PNEC Quiz Competition

To provide positive opportunity for academic and professional excellence Intra-PNEC Quiz Competition was arranged on April 8, 2022. The topic was "Pakistan Movement" (From establishment of All India Muslim League in 1906 till Independence 1947).



C3A holds Career Assessment session at NUST Summer School

NUST Centre for Counselling & Career Advisory (C3A) in collaboration with Student Affairs Dte conducted Career Assessment and Interpretation session in NUST Summer School. The purpose of these sessions was to assist them to identify their areas of interest and abilities and help them select suitable majors.



Pantomime-22

MCS has a tradition of treating the departing courses with an action-packed stage adventure. Pantomime was organised by students on June 4 & 1, 2022 where the Auditorium was decorated with the theme of Birmingham's infamous gangster family 'Peaky Blinders'. Juniors delighted the audience with no less than a professional show full of talent and joy. NUST Military College of Engineering (MCE) organised its Pantomime on October 16, 2022.



Scavenger Hunt

Scavenger Hunt was held on March 10, 2022, at NUST Military College of Signals (MCS). Three teams out of 18 made it to the final round. The winner team "Clueminati" was awarded Rs 20,000 and runner-up team "The Dauntless" received Rs 10,000.



FAST Olympiad 2022

Students of NUST Pakistan Navy Engineering College (PNEC) participated in FAST Olympiad 2022 held from February 21-25, 2022. The students took part in Sports Olympiad "Sportics," which included Cricket, Futsal, Basketball, Volleyball, Table Tennis, and chess.



Sports Week

NUST Balochistan Campus (NBC) organised a sports week featuring inter-departmental matches of volleyball, cricket, futsal, badminton, board games and rally race.



Sports Gala

NUST Military College of Engineering (MCE) organised a Sports Gala from March 14-31, 2022. Badminton, Football, Volleyball, Table Tennis, Cricket, Basketball, and Tug of War were played.



Painting Exhibition

Literary Society of NUST-PNEC organised an art display for students on October 23-24, 2022. Artwork included everything from Quranic Calligraphy Paintings, Sketches, Sculpture art, to portraits etc.



Trip to Ziarat

Students of NBC visited Ziarat in 2022. The trip also included a stop at one of the most beautiful waterfalls of Balochistan, Sand-e-men tangi, located in-between the mountains.



Orientation

Orientation is one of the flagship annual events of NUST, which is spread on five days. Orientation '22 was organised from September 5-9, 2022, to greet the freshmen of Fall '22. Several activities were organised, including briefings, Q/A session, batch photo, life at NUST, sports, inter-school visits, CSR activities, play by NUST Dramatics Club, carnival and ending the week-long orientation with a musical night.



Human Logo

Human logos, a trendy attribute of NUST College of Electrical & Mechanical Engineering (CEME), was organised to celebrate the newcomers. The event is scheduled on yearly basis, to enhance the interaction and make the arrival of the new batch in college memorable.



Bake Sale

Bake Sale is the most reoccurring event of Team Education & Community Services Society (ECSS) of NUST PNEC, with the prime motive to raise funds for those in need. The event was arranged on March 30, 2022, and the charity was contributed for arranging gifts during Charity Visit to Bilquees Edhi Child Home.



Tree Plantation Drives

Tree Plantation drives were held at NUST Military College of Engineering (MCE) and NUST Military College of Signals (MCS) on March 12 & 15, 2022.



NUST Rocket Team

NUST Rocket Team (NRT) signed a liaison agreement with Pakistan's prestigious space agency, SUPARCO in April 2022. Project Raftaar was initiated in 2019 and was completed in October 2022. It is Pakistan's first ever student-built sounding rocket that, when launched, has the capability to reach an altitude of 10,000 ft. The Avionics department of NUST Rocket Team researched and developed a student-built flight altimeter called the SRAD (Student Research and Developed) flight altimeter for Project Raftaar.

The Truth International, The Dawood Foundation and

Orange Tree Foundation have signed an agreement with NRT to be the sponsors.



The Science Fun-2022

NUST School of Materials Engineering (SCME) organised "The Science Fun", a summer programme for kids of ages 9-13 years. The event involved 2 weeks of activities exclusively designed to highlight the importance of applied sciences for little minds through exciting scientific adventures and hands-on activities in four main scientific themes, including "Big in Small," "Bio Wonders," "Little Chemist" and "Energy Mania."



Visit of students to Darson Industries

To inculcate the knowledge of technology used in the industry, NUST School of Materials Engineering (SCME) organised an industrial visit on February 24, for graduating batch of BS Material Engineering to Darson Industries PVT Ltd, Wazirabad. The students observed the processing, tools being used, and the procedure followed.



SCME Students visit Mughal Steel

Final-year students from NUST School of Materials Engineering (SCME) visited Mughal Iron and Steel, Lahore on February 17. The students investigated the continuous casting plant with melting process in Furnace of 20 tons capacity.



Book Fair

NUST Pakistan Navy Engineering College (PNEC) provides quality education to achieve academic excellence. Besides academic activities various extracurricular activities are conducted on a regular basis. In this regard, a Literature Festival and Book Fair was arranged from October 23 to 24, 2022.



ALUMNI AFFAIRS

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Dr Raheel Nawaz, International thought leader in Digital Education
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Industry-Academia linkages in Industrial City
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Awais Shafique in Forbes 30 under 30

Awais Shafique (SEECs '16) has been listed in Forbes 30 under 30, Europe 2022 along with Leon Szeli, his partner and co-founder of Presize.ai. His company has been acquired by Meta (Facebook) and Awais will lead the company at Meta as the Project Manager.



Waleed Sabir Khan conferred Tamgha-e-Shujaat

Mr Muhammed Waleed Sabir Khan (IGIS '14), in recognition of his meritorious and extraordinary services, has been conferred Tamgha-e-Shujaat by the President of Pakistan.



Dr Raheel Nawaz, International Thought leader in Digital Education

Professor Raheel Nawaz (MCS '01) was appointed to the post of Pro-Vice-Chancellor for Digital Transformation at Staffordshire University on July 1, 2022. Professor Raheel Nawaz is the most cited scholar worldwide in Applied AI and Educational Data Science.

Maria Abrar Revolutionising AI

Ms Maria Abrar (SEECs '14), Senior Data Scientist at Reality Labs of Meta (Facebook) in Toronto, Canada has been selected as one of the 25 women in AI in Canada by RE.WORK, an Artificial Intelligence (AI) and Deep Learning content-producing company.



Irfan Memon assumes charge of DC Islamabad

Irfan Memon (PNEC '03) has been appointed as Deputy Commissioner, Islamabad. NUST is elated to see its Alum taking responsibility for the administrative affairs of the Capital.



Increasing citations through international collaboration

NUST alumni in academia from 17 countries came together on June 26, 2022, to discuss multiple avenues to collaborate with NUST. Pro-Rector Research, Innovation & Commercialization Dr Rizwan Riaz & Pro-Rector Academics Dr Osman Hasan shared the recent developments in the research and academic ecosystem at NUST which needs support from alumni working at various higher education institutions across the globe.



CSS Club Reunion

NUST Alumni CSS Club reunion was held on March 18, 2022, at NUST Main Campus. More than 25 NUST Alumni serving in different sections of the Central Superior Services including Foreign Services of Pakistan, Pakistan Administrative Services, Police Services of Pakistan, Pakistan Customs Services, and others attended the session. Pro-Rector Research, Innovation, and Commercialization, Dr Rizwan Riaz, and Director Advancement Ms Maria Qadri welcomed the alumni.



First PhD Graduation Ceremony at CAE

College of Aeronautical Engineering is the premiere institute of the country in the field of aeronautical engineering since 1965. Their PhD Aerospace Engineering programme began in Fall 2018. Mr Taimur Ali Shams was enrolled in the 1st batch of PhD Aerospace Engineering Programme. The scholar completed doctorate degree requirements in four years and defended his thesis titled "Thrust Embedded 6DOF Modeling and Experimentation for Handling Fixed Wing Micro Aerial Vehicle Flight Instabilities" on November 7, 2022. A ceremony in this regard was held right after his thesis defense which was graced by Pro-Rector Academics Dr Osman Hasan. A memento was presented to Dr Taimur Ali Shams on successful defense of his PhD work.

During research, Dr Taimur published four journal articles with accumulative impact factor of 9.569 and five conferences papers. The scholar is a recipient of HEC Indigenous Scholarship and HEC IRSIP Scholarship for 7 months research at University of California, Irvine, USA. He also secured a funding amounting to PKR 1.8 million through Pakistan Science Foundation as Co-PI to achieve research objectives during PhD studies.



ALUMNI MEETUPS

In the heart of Silicon Valley

The USA, the annual meetup of NUST Alumni in Silicon Valley was held on November 13, 2022. NUST delegation led by Pro-Rector RIC Dr Rizwan Riaz and Director Advancement Ms Maria Qadri discussed the ongoing projects of NUST and the role NUSTIAN USA is playing on multiple grounds.



They also lauded the recent role of the chapter in fundraising for flood relief activities.

Industry-Academia Linkages in Industrial City

Alumni & Community Event was hosted on September 24, 2022, at British Muslim Heritage Centre, Manchester where thirteen well-established alumni attended the event and hoped that such events will be organised in other regions as well. Rector NUST Engr Javed Mahmood Bukhari, Pro-Rector RIC Dr Rizwan Riaz, and



Director UAO, Ms Maria Qadri graced the event.

Connecting the Dots

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



world-class higher education.

Road from NUST to UC Berkely

Dr Ihsan Ul Haq, (PNEC '15), Postdoc Fellow at Lawrence Berkeley National Laboratory USA, delivered a lecture to students of chemical and material engineering on "Energy Storage



Materials and Research Opportunities in the USA" on September 20, 2022.

Stepping up for an organised chapter

NUST alumni met on November 26, 2022, at Ibrahim Karma, Dubai, UAE for a reunion. Attended by 25 alumni, the discussion centered around formalising the UAE chapter and identifying multiple nodes of cooperation between alumni.



Borders Apart, Still at Home

To enhance international community linkages to work towards NUST's nation-building goal through transformative higher education and to relink with the alumni based in the United Kingdom (UK), the University Advancement Office (UAO) delegation organised an Alumni Convention at Pavilion Banquet Hall, London on September 25, 2022.

The event was attended by 50 well-established alumni and served as a platform for nurturing industrial partnerships, networking, exploring collaborating nodes and sharing valuable insights.

A founding team of the NUST Alumni Association (NAA) UK Chapter was also formulated during the event to engage local alumni. Rector NUST Engr Javed Mahmood Bukhari, in his welcome remarks, expressed the deepest pride in the achievements of 300+ alumni working in more than 16 sectors in the UK and making NUST, and Pakistan proud.



Unwinding memories in the windy city

As part of NUST's USA outreach visit, NUSTIAN USA organised an alumni meetup in Chicago, USA on November 6, 2022. Around 20 alumni gathered for a meetup with NUST delegation led by Pro-Rector RIC Dr Rizwan Riaz and Director Advancement Ms Maria Qadri.



Roaming in Rome

NUST alumni family in Naples, Italy had a get-together on October 2, 2022. Five Alumni from different institutions and organisations gathered to enjoy NUST memories.



NUST Alumni Convention

Alumni convention Riyadh was hosted by KSA Alumni Chapter on March 25, 2022, and attended by more than 100 alumni. Pro-Rector RIC Dr Rizwan Riaz and Director Advancement Ms Maria Qadri highlighted NUST's journey in recent years. Rector NUST Engr Javed Mahmood Bukhari commended the Alumni for their hard work and

commitment.



Rushing together in Jakarta

The first-ever alumni meetup in Jakarta, Indonesia was arranged on November 7, 2022, in which Rector NUST Engr Javed Mahmood Bukhari hosted a dinner for the alumni. Rector was accompanied

by the Director Academics, Dr Adnan Maqsood.



ALUMNI MEETUPS

Homecoming

Homecoming



Dr Maria Riaz (MCS '03), Staff Software Engineer at Google, and Dr Mukarram Tariq (MCS '01), Principal Engineer, delivered talks on "Create Impact through Innovation" on July 27, 2022.



Dr Sajid Siraj, (CEME 1999), Associate Professor at the University of Leeds, UK, visited NUST on August 25, 2022.



Muhammad Yasir (NBS '12), Senior Manager Insights and Strategy at GALE, Canada, visited NUST on October 26, 2022.



Atif Naseer (CEME '10), Senior Lecturer at Umm ul Qura University, visited NUST on August 17, 2022.



NAASA Talk (NUST Alumni Association Saudi Arabia) on Business vs. Entrepreneurship, with Dr Amjad Saqib, Chairman of Akhuwat Foundation, on March 3, 2022.



Adnan Raza, (CEME '14), Mechanical Engineer at Intel USA, delivered a talk on "Higher Education and Job Opportunities in the USA" on October 12, 2022.



NUST alumni from Civil Service delivered a lecture on 'CSS as a Career' on March 18, 2022.



Saad Akber (CEME '05), Senior Drilling Engineer at Halliburton KSA, visited NUST on July 19, 2022.



Shehzad Aslam Khan (CEME '06), Team Lead RF Optimization at Ericsson KSA, visited NUST on June 6, 2022.



Muhammad Hafeez Abbasi, Lead Strategic Partnerships at Saudi Electric Services Polytechnic, visited NUST on July 18, 2022.



Dr Razi Ahmad, (EME '03), Radar System Engineer at Jet Propulsion Lab NASA, delivered a lecture on "Spaceborne Radar Applications", on July 21, 2022.



Haroon Raees (MCS 1996), Consultant and Solutions Architect at Cisco UAE, visited NUST on July 20, 2022.



Mr Awais Ali Akbar (CEME '09), directing Simeio Solution's IAM Program, visited NUST on June 20, 2022.



Dr Muhammad Afzal (SECS '08), Assistant Professor at Sejong University South Korea, and Dr Maqbool Hussain (SECS '08), Senior Lecturer at the University of Derby, visited NUST on July 25, 2022. They had a symposium at SECS on "Digital Health Technological Trends and Connecting Healthcare Professionals".




Usman Aurakzai, working at Telefonica UK, visited NUST on August 31, 2022.



Sarah Tahir (S3H '16), currently in UK, visited NUST on May 9, 2022.



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