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NATIONAL UNIVERSITY OF SCIENCES & TECHNOLOGY

Biannual

NUST RANKED AMONGST TOP 400 WORLD UNIVERSITIES & WE OWE IT TO YOU-

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HIGHLIGHTS

<u>QS World University Rankings 2020</u> NUST ascends 17 positions to World #400

Continuing its upward trajectory in the world university rankings, National University of Sciences & Technology (NUST) has ascended 17 positions to #400 in the world, as per the prestigious UK based ranking agency, Quacquarelli Symonds (QS), in its 2020 rankings, released on June 19, 2019. NUST has been featured in several categories of the QS Ranking since 2007.

NUST has ascended 128 positions in the world ranking during the last 3 years, and 17 positions since last year, which is indeed a meritorious accomplishment. NUST is one of the only two Pakistani universities to achieve the honour of being in the world's top 400 elite universities.

QS ranks universities both at world and regional level, besides other ranking categories, such as subject rankings and young university rankings.

The QS university rankings are carried out on the basis of teaching & research quality, academic/employer reputation, citations per paper, papers per faculty and internationalisation measures taken by the university. NUST's improved scores in academic reputation, citations per faculty, faculty/ student ratio, and international students have helped further consolidate its position this year.

431-440

400-

 481-490
 481-490
 501-550
 501-550

 2014
 2015
 2016
 2017
 2018
 2019
 2020

 RANKING TRENDS OVER THE YEARS



#87 in Asia

> **#51** in young world universities under the age of 50

in Pakistan in overall discipline of Engineering & Technology

2 in Pakistan in Business & Management Studies, and Mathematics

> **940/0** Graduate Employment



National Science & Technology Park (NSTP) ready to flap its wings

NUST flagship project "National Science & Technology Park (NSTP)" is all set to take its first strides. As the country's 1st Science & Technology Park – which has been conceived, planned, built and funded solely by NUST – NSTP is about to be inaugurated this Fall in an auspicious ceremony.

The Park's tenancy campaign, kicked off by a powerful media blitz, is in full swing. The response has been overwhelming. The Park has been able to attract a substantial number of globally recognised firms and startups as its initial



tenants. However, due to the Park's policy, built around the purpose it has been forged to deliver, mandating an ornate process of selection of high-potential tenants focused on research and innovation, the applications continue to be evaluated through a well-set criterion to host premium tenants only. In order to create a microcosm for industry and academia, the Park's structure has been built on worldtested best practices, offering a number of distinctive opportunities for various categories of tenants, and bringing them together in a tightly coordinated synergetic role to each other.

Large and multinational enterprises get the opportunity to connect with NUST's knowledge and research base to enhance their products, to provide patronage to research & innovation projects on the campus, and license or acquire the resulting technologies for their own benefit. Startups and Spinoffs get to materialise their ideas filling the gaps in technology that they come in the know of due to exclusive proximity to high-tech companies, meet their funding needs by leveraging NAIN (NSTP Angel Investment Network), and receive technological support and resources from high-tech SMEs and the university. A true win-win for all. No wonder, applications are coming in like moths to flame.

With no intention to gloat or anything, with the addition of Cube8 incubator and Excelerate accelerator at NSTP, the existing incubation capacity at Technology Incubation Centre (TIC) that was established in 2005 as Pakistan's 1st incubator, NUST has become the country's biggest incubator / accelerator as well.

NSTP gets PPPA nod

In a landmark development, NUST has secured the approval of Public Private Partnership Authority's (PPPA) Board to initiate the process for its flagship "National Science & Technology Park" project. The approval was granted at the first PPPA Board of Directors meeting, on May 24 2019, chaired by the authority's Chairman, Mr Khusro Bakhtyar, Minister for Planning, Development & Reform.

NSTP is the first Science & Technology Park (STP) in the country. The project is being powered by strengths and competitive edge built by the university over the last 3 decades. The leading Engineering & Technology university of Pakistan is the most suitable host for NSTP, with its wellestablished ecosystem to support innovation, technology transfer and commercialisation.

Meanwhile, NUST was able to successfully submit an application for acquisition of Special Economic Zone (SEZ) status to the Board of Investment (BOI). The status will hugely benefit all zone enterprises in terms of tax and other economic privileges.

While NUST is doing all it can to jump-start a culture of research & innovation in the country, it is now up to the faculty and students, not only of NUST but of all colleges and universities to help make this initiative a success. If you have a startup, or an idea or even a dollop of curiosity, please visit nstp.pk or drop an email at info@nstp.pk

"University-affiliated think tanks critical for national policymaking," Foreign Minister

NUST Institute of Policy Studies (NIPS)

"Think tanks play a very important role in the contemporary world in raising voice and awareness on key national, regional, and global issues, and providing evidence-based inputs for the formulation of policies for national development and growth," Foreign Minister Shah Mahmood Qureshi said at the launch of the NUST Institute of Policy Studies (NIPS) on April 03, 2019. The launch included a seminar on "Pakistan-India Relations and the Resurgence of Freedom Struggle in the Indian-Occupied Jammu & Kashmir."

The Foreign Minister commended the NUST leadership for having taken a timely step by establishing a university-affiliated policy centre that would help harness the vast knowledge capital, R&D resources, multidisciplinary and expertise concentrated in NUST's network of schools, centres, institutes, and paraacademic initiatives. Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, highlighted the strategic vision and operational approach of the new think tank. He informed the gathering that the think tank would not only conduct high-quality research and analysis on key issues of comprehensive national development but also forge regional collaboration and connectivity with leading national and international think tanks in the world, especially in Asia Pacific, Europe, Middle East, and North Africa.

Dr Ashfaque Hasan Khan, Principal NUST School of Social Sciences & Humanities (S3H) and Director General NIPS, moderated the seminar. Dr Ashfaque is also the member of Prime Minister's Economic Advisory Council. In his talk, Mr Riaz Hussain Khokhar, former Foreign Secretary of Pakistan, appreciated the establishment of a new think tank by NUST. Ms Mushaal Mullick, a renowned peace & human rights activist and the wife of famous Hurriyet leader, Mr Yasin Malik, categorically condemned the incarceration of her husband by Indian authorities and highlighted the regime of terror and oppression that India was running against Kashmiri Muslims in Indian occupied Kashmir (IoK). She thanked the Government of Pakistan for raising the Kashmir issue at every important international forum.

The event was attended by diplomats, serving & erstwhile senior civil & military officials, students, scholars, researchers, professional experts, business personalities, think tank community, and civil society representatives.



Paving the way for inclusive growth NUST launches Balochistan Campus

Having already laid a firm foundation as a higher education institution (HEI) of global prestige and standing, NUST has been facilitating inclusive growth through a myriad of endeavours. Launch of **NUST Balochistan Campus** is a monumental stride forward to manifest that vision. The new campus is aimed at engaging gleaming young minds from the length and breadth



of Pakistan's largest province to seek quality higher education at the country's finest university and, hence, contribute to the national development, as top engineers and scientists.

To start with, NUST Balochistan Campus is set to offer undergraduate programmes in the disciplines of Civil Engineering and Computer Science. Classes of the opening batch will commence from September 2019. In the subsequent phases, NUST plans to launch MS in Computer Science, besides MS Water Resource Management and MS Tunnelling/Mining Engineering. With an estimated cost of PKR 2.63b, the campus, currently spanning over 80 acres, will initially house 550 students.

The new campus was inaugurated on May 8, 2018, in an impressive ceremony graced by the presence of Chief of the Army Staff and Chairman NUST Board of Governors -Gen Qamar Javed Bajwa NI (M), HI (M). Prominent among others included Chief Minister Balochistan Mr Abdul Quddus Bizenjo, Speaker Balochistan Assembly Ms Rahila Durrani, Balochistan Assembly's Leader of Opposition -Abdul Rahim Ziaratwal, Vice Chancellors and students of various universities, and other notables.

Delegation from Chinese tech giant visits NUST

Led by its Chairman Mr Xiong Qunli, a 23-member delegation from the Chinese tech giant China Electronics Technology Group Corporation (CETC) paid a visit to NUST on June 16, 2019. The purpose of visit was to formalise research collaboration in the cutting-edge areas of Artificial Intelligence, Cloud Computing, Big Data Analysis, Robotics, etc., and initiate a joint Academic Forum to co-produce research journals and academic publications.

Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, invited the



Chairman to establish CETC Innovation Centre at National Science & Technology Park (NSTP), NUST's flagship initiative being operationalised in Fall this year. The Park has the mandate to host leading technology companies to promote research and innovation aimed towards building the knowledge economy. Earlier, the delegation was conducted to National Centre of Artificial Intelligent (NCAI), one of the two National Centres of Excellence awarded to NUST by the Government of Pakistan, after a rigorous competition amongst the higher education institutions of the country.

NUST stuns world at UK "IMechE UAS Challenge 2019;" seizes Grand Champions title

Team NUST Air Works Beta has done the nation proud by seizing the Grand Champions title at the IMechE UAS Challenge 2019, held at Snowdonia Aerospace Centre at Llanbedr Airfield, Northwest Wales, UK from June 16 to 18, 2019. A total of 32 teams from the United Kingdom (UK), Sri Lanka, Brunei, Netherlands, Canada, Pakistan and other countries participated in this year's Challenge. Air Works Beta belongs to Pakistan Navy Engineering College (PNEC) Karachi, one of the 19 constituent institutions of NUST. The team has been rendering itself conspicuous following their one-after-the-other blistering performances at national and international competitions held under the auspices of IMechE since 2016.

Overall two teams from NUST PNEC participated in the



IMechE UAS Challenge this year – Team NUST Air Works Alpha in Fixed Wing category and Team NUST Air Works Beta in Rotary Wing category. In addition to Team NUST Air Works Beta bagging the Grand Champions title, a few other awards have been clinched by the two teams. "Safety & Airworthiness Award" (sponsored by Frazer-Nash Consultancy) – Team NUST Air Works Beta for developing the best combination of well-articulated safety case; "Business Proposition Award" (sponsored by Welsh Government) – Team NUST Air Works Alpha for the most prominent business and marketing case; "Scrutineers Award" – Team NUST Air Works Beta for the best presented UAS that is fully compliant with the competition rules; and "Media & Engagement" Award – jointly won by both the teams.

The UAS Challenge is a competition run by the Institute of Mechanical Engineers (IMechE) for university teams. Students undertake a full design-and-build cycle of an Unmanned Aerial System (UAS) with specific mission objectives.

NUST HONOURS ITS HIGH ACHIEVERS AT AWARD CEREMONY



In order to pay a felicitous tribute to the outstanding accomplishments by Nustians at various national and international competitions and events, NUST held a High Achievers Ceremony at its Islamabad campus on April 29, 2019. Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, was the chief guest, who conferred medals and merit certificates upon 219 excelling students in a multitude of top-tier academic, sports and co-curricular competitions and activities.

In his address, the Rector extolled the high-achievers; he said these meritorious triumphs bear witness both to the immense talent and the winning spirit of our youth. He urged them to continue treading the path to success with devotion and diligence, and explore new opportunities and avenues to glory.

Some of the most prominent international events and competitions Nustians proved their mettle in included:

- » CLAMATHON Y Accelerator Challenge 2019, organised by Pakistan and German Red Cross
- » Geo-prediction Competition by International Foundations Congress & Equipment Expo, USA
- » Formula Student /Silverstone (UK)
- » CERN Technical Student Programme (Switzerland)

Soon-to-be graduates meet employers at Islamabad, Lahore & Karachi

Having 94% employment rate within one year of graduation (QS World Rankings 2019), NUST strives to avail the best possible placement opportunities for its students and graduates. With this objective in site, this year NUST set a new precedent of holding a series of job fairs in the three major cities of Pakistan: Lahore, Islamabad and Karachi, during the months of March and April. These

job fairs were intended to enable students to come closer to industry and simultaneously afford employers access to qualified and well-groomed graduates. Over 200 companies – representing sectors as diverse as Automotive, Manufacturing, Oil & Gas, Banking, Telecom, Pharmaceutical, Biosciences to name a few – showed up at the Job fairs.



President UN General Assembly visits NUST; appreciates Pak's contributions to UN peacekeeping missions

Ms Maria Fernanda Espinosa. President of the United Nations General Assembly, accompanied by Ms Maleeha Lodhi, Permanent Representative of Pakistan to the UN, visited the Centre for International Peace & Stability (CIPS) at NUST Islamabad campus on January 21, 2019. While interacting with NUST faculty and students, Ms Fernanda acknowledged Pakistan's meritorious contributions to the UN peacekeeping missions. terming it one of the most prominent countries have contributed to bringing peace in areas marred by



insecurity and unrest. She also lauded NUST for providing peacekeeping training both to local & foreign troops. In his remarks, Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, extended his gratitude to Ms Fernanda for visiting CIPS. He highlighted Pakistan's contributions to the UN missions, besides apprising the dignitaries of NUST's accomplishments.

Minister MoST pays maiden visit to NUST

Federal Minister for Science & Technology, Chaudhry Fawad Hussain, paid a visit to National Centre of Artificial Intelligence (NCAI) at the main campus of NUST on May 29, 2019. Upon arrival, the Minister was greeted by Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST. NCAI, established at NUST School of Mechanical & Manufacturing Engineering (SMME) on March 16, 2018, and National Centre of Robotics & Automation (NCRA), established at NUST College of Electrical & Mechanical Engineering (CEME) on May 2, 2018, were won by NUST in an open and rigorous competition, conducted amongst all national universities by the Government of Pakistan. During a detailed briefing, the Minister was apprised of the research infrastructure, research areas and cutting-edge work being done at these Centres. He greatly appreciated the efforts being made by researchers, particularly in projects of national significance. He assured the university management of his Ministry's full support for further development of these centres.





IGT&E pays visit to NUST

Lt Gen Sher Afgun, HI (M), Inspector General Training & Evaluation (IGT&E), General Headquarters (GHQ), Rawalpindi, visited NUST Islamabad campus on April 16, 2019. He had a one-on-one meeting with Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, at the latter's office. Ensuing was a comprehensive briefing on NUST, particularly highlighting the establishment of and infrastructural development at NUST Balochistan Campus in Quetta, and soon-to-be-launched Pakistan's first-ever National Science & Technology Park (NSTP) at NUST Islamabad campus. IGT&E eulogised the university's management, faculty and staff for their committed and concerted efforts towards developing NUST as a centre of excellence in Pakistan with global standing. During the visit, the esteemed guest also planted a tree sapling and commended NUST's initiatives for going green, sprouting from its campuses and spreading across every nook and corner of the country.



Special Advisor to PM on Overseas Pakistanis & HRD visits NUST

Mr Sayed Zulfiqar Abbas Bukhari, Special Advisor to Prime Minister on Overseas Pakistanis & Human Resource Development, paid a visit to NUST on April 18, 2019. Upon arrival, the honourable guest was greeted by Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST.

The Advisor lauded the university's innovation profile as well its outreach efforts in engaging Pakistani diaspora through various initiatives. The Advisor hoped that NUST would further expand its efforts towards the development of entrepreneurship and provide consultancy services to his Ministry. He promised to support NUST initiatives, including developing an academic programme on Hospitality, establishing international campuses in UAE and KSA, and bringing on-board overseas Pakistanis in an angel investment network and setting up a Venture Capital fund for NUST start-ups and tenants of NSTP. Mr Bukhari also planted a tree sapling before a guided tour of the campus.



Delegation from NAMA, Sharjah, explores opportunities for women advancement through collaboration

A high profile delegation from Nama Women Advancement Establishment (NAMA), Sharjah, UAE, visited NUST on March 18, 2019. NAMA has been working on mobilising the means required to create enabling environments for advancing gender equity and inclusive economic and social growth.

Upon arrival, the delegation was greeted by Maj Gen Muhammad Shahid, (Retd), DG Projects NUST, and was given a tour of the NUST School of Art, Design & Architecture (SADA) and NUST Centre for Innovation & Entrepreneurship (CIE). The delegates took keen interest in student-patented projects at SADA and entrepreneurial ventures housed at CIE, particularly Orbit – a startup founded and managed by two females. Ms Navera Waheed, one of the two co-founders of Orbit, gave a demonstration of their project, which could not but inspire the appreciation of visitors, so much so that the delegates expressed interest in showcasing Orbit under the banner of Sharjah Business Women Council at Gulf Information Technology Exhibition (GITEX), Dubai.

Later the delegation was given a detailed presentation on NUST, followed by a meeting with Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, at his office. During the meeting, consensus was made on developing bilateral cooperation between NUST and NAMA, particularly joint



efforts for the promotion of female entrepreneurship. The NAMA delegates included Ms Erum Mazher Alvie, Senior Advisor, The Executive Office of Her Highness Sheikha Jawaher Bint Mohammed Al Qasimi; Ms Reem Bin Karam, Director, NAMA Women Advancement Establishment; Sheikha Hind Bint Majid Al Qassimi, Chairperson, Sharjah Business Women Council (SBWC); and Ms Lina Hamdan, Senior Manager, Programme Management Operations, NAMA.

NUST signs MoU with RIC for clinical support of indigenous development of cardiac stents at NUST MDDC

NUST Medical Devices Development Centre (MDDC) has taken on board the Rawalpindi Institute of Cardiology (RIC) for clinical support & guidance for its current products, i.e., Bare-metal Stents, Drug Eluting Stents, Angioplasty Balloon Catheters and other upcoming medical devices, such as Diagnostic Angiographic Catheters, Heart Valves, etc. In this connection, a delegation led by Maj Gen Azhar Mahmood Kayani (Retd), Executive Director RIC, visited NUST on May 28, 2019, to ink the agreement.

As per the agreement, the clinical team of MDDC, headed by Maj Gen Kayani, would be conducting and supervising local clinical trials of the cardiac stents, including Bare Metal Stents (BMS) and Drug-Eluting Stents (DES); these trials will be conducted at various institutions in the country, including National Institute of Cardiovascular Diseases (NICVD) Karachi, and Armed Forces Institute of Cardiology (AFIC) Rawalpindi, among others. RIC has already provided NUST its pre-market clinical feedback reports of the angioplasty balloon catheters produced by MDDC after using it in more than 15 patients and the same report was received from NICVD Karachi with very promising results, which will be shared with Drug Regulatory Authority of Pakistan (DRAP) for product registration purpose. At the occasion, Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, greeted the delegation and thanked the RIC team and Gen Kayani for joining this noble initiative of NUST, which will bring currently expensive medical devices within the reach of common man. MDDC is Pakistan's first and only facility for indigenous production of cardiac stents and angioplasty balloon catheters. It aims to start

commercial production of its current products very soon.



NUST partners with Balochistan Education Endowment Fund



Balochistan Education Endowment Fund (BEEF) has selected NUST as a Centre of Excellence and entered into an agreement to sponsor tentatively 15 undergraduate students, hailing from Balochistan, every year for their entire degree from Fall 2018 onwards. Dr Rasheed Masoud, Chief Executive Officer BEEF, signed the MoU on behalf of BEEF, and Mr Salim Daud, Registrar NUST, signed on behalf of the university.

Chinese Lunar New Year celebrations at NUST

As part of the Chinese Lunar New Year celebrations, a China Photo Exhibition was held at NUST on February 11, 2019. The photographs depicted China's great progress over the past four decades: its reforms and Open Door Policy to the outside world. The event was organised by the Chinese Studies Centre (CSC) at NUST S³H, in collaboration with the Chinese Embassy in Islamabad. His Excellency Mr Yao Jing, Ambassador of the People's Republic of China to Islamabad, graced the occasion as chief guest. He expressed his desire to promote closer linkages with NUST. Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, said that NUST, over the past few years, has worked out plans and initiatives in partnership with Chinese HEIs to harness the opportunities from the Belt & Road Initiative and CPEC.



Minister of State for Interior inaugurates Spring Plantation



Sticking to the age-old adage "charity begins at home," NUST, over the years, has been effervescently conducting on-campus plantation drives and has planted over 75,000 trees as of 2018 at the Islamabad campus alone. Keeping up with the tradition, NUST kick-started the Spring Tree Plantation drive 2019 on March 13, 2019. Minister of State for Interior, Mr Shehryar Khan Afridi, inaugurated the environment-friendly campaign by planting an Olive tree. Rector NUST, Pro-Rectors, Directors, Principals, faculty, staff and students planted trees at the occasion.

In his address the minister eulogised NUST both for its on- and off-campus contributions towards reinstating and enhancing forestry across Islamabad and other parts of Pakistan. Maj Gen Jahangir Khan, HI(M), (Retd), NUST Pro-Rector Planning & Resources (P&R), apprised the audience that over 35,000 plants, including 12,000 seed balls, would be planted during the 2019. Earlier, an overwhelming number of students, faculty and their families enthusiastically took part in the marathon at the campus that culminated at the plantation site. The minister awarded prizes to the winners of various categories.



HIGHLIGHTS

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CEME team wins Microsoft Imagine Cup Regional Finals

Team EKKO from NUST-CEME won the prestigious Imagine Cup Regional Finals (Pakistan) by standing tall among 350 teams from 80 universities. Imagine Cup is termed the "Olympics of Technology." Led by Dr Muhammad Usman Akram, the team comprising Mr Muhammad Usman Khalid, Mr Yaqoob Jamal and Ms Zainab Ahmad presented their project EKKO, which is a therapeutic device, based on transmission neurocognitive theory that can be used in the treatment of speech disabilities



and treatment and rehabilitation of children suffering from cerebral palsy and some autism spectrum disorders.

Meanwhile, Ms Wajeeha Yasin (BESE-6), Mr Wajahat Hussain Khan (BESE-6) and Mr Burhan-ul-Tayyab (BESE-6) has won 1st position in North Regional Finals of Microsoft Imagine Cup 2019 at HEC Islamabad on March 7, 2019. Their project name is "Menerva". Federal Minister for Education and Professional Training Shafqat Mahmood was the chief guest at the awards ceremony, which was also attended by HEC Chairman Dr Tarig Banuri, HEC Executive Director Lt Gen (R) Muhammad Asghar, Microsoft Country Manager Abid Zaidi, several vice chancellors and a large number of students from various universities.



HIGHLIGHTS

ANNUAL FACULTY AWARDS

In order to acknowledge the services of our esteemed faculty, NUST confers annual awards upon them in various categories. This year, the awards were presented to distinguished faculty at the occasion of Rector's address to faculty and officers on June 13, 2019.

University Best Teacher Award

Dr Adnan Maqsood Associate Professor RCMS

A good teacher can inspire hope, ignite the imagination, and instill a love of learning. For the year 2017-2018, Dr Adnan Maqsood, was

conferred the University Best Teacher Award.

Dr Ahmad Salman

Assistant Professor School of Electrical Engineering and Computer Science (SEECS)

was awarded University Best Teacher Award 2018. This award is a depiction of his outstanding performance in his career

at SEECS, NUST. In 2018/19, he secured project funding of PKR 7.89 million, published 07 impact factor journals and 04 international conference papers. He successfully supervised 01 PhD student, 04 MS students and 17 UG final year projects.



Dr M Usman Akram

NUST College of Electrical & Mechanical Engineering (CEME)

The Best Researcher Award for the year 2017 was awarded to Dr M Usman Akram from NUST College



of Electrical & Mechanical Engineering (CEME). His distinguished achievements during 2017 were 2 research projects worth PKR 1.77 Million, 12 impact factor papers, 11 papers in international conferences, 02 patents, supervision of 5 PhD and 9 MS scholars.

Dr Haider Abbas

Military College of Signals (MCS)

Best Researcher The Award for the year 2018 was awarded to Dr Haider Abbas from Military College (MCS). of Signals His distinguished achievements



during the year were 02 research projects worth PKR 75.2 Million, including Cyber Security Lab under National Center for Cyber Security, 20 impact factor papers, 2 papers in international conferences, supervision of 8 PhD students and 2 MS students.

University Best Innovator Award

University Best Innovator Award for 2018 was presented to Captain Dr Syed Sajjad Hadier Zaidi of PNEC. Some of the major contributions of Dr Zaidi include patenting and licensing of NUST IPR titled "Three Phase Load Balancer" to the industry and multiple consultancies to clients like Dawlance, Procter & Gamble and Federal Board of Revenue (FBR).



Special Award for Technology Licensing

Asst Prof Saheeb Ahmed Kayani has received the Special Award for Technology Licensing for indigenous development of fleshing and shaving blades used in the leather goods manufacturing industry of Pakistan. The intellectual and commercial rights of these blades have been licensed to a national industry in 2018 and production of blades has commenced. At the moment these blades are being used in different tanneries engaged in leather production for local and international markets.





A eulogy to Capt Ali Arshad (Shaheed)-DE-35!

Capt Ali Arshad Shaheed S/o M Arshad Naeem was born in Rawalpindi. After his FSc, he joined Pakistan Army in 25th Technical Cadet Course, and did his BE in Mechatronics Engineering from CEME. During his stay at the College, he showed exceptional performance for which he was appointed as Battalion Junior under Officer (of his course). After getting his commission from Pakistan Military Academy, Kakul, he served in 55 EME Battalion in Pano Aqil Cantt. It is moment of grieve, yet pride that during his basic Infantry Course, he lost his life in an accident in Quetta. May Allah grant the shaheed highest rank in Jannah, aamin!



Fast Cables Excellence Award at SEECS

As part of its initiative to recognise the meritorious academic accomplishments of students from Pakistan's leading universities, Fast Cables organised an Excellence Award Ceremony, in collaboration with NUST School of Electrical Engineering & Computer Science (SEECS), at the university's Jinnah Auditorium on March 20, 2019. Mr Muhammad Umar, a final year student of Bachelors of Electrical Engineering at NUST SEECS, was the proud winner of the award, for having maintained a CGPA of 4.00 throughout his degree programme. General Manager Fast Cables, Mr Muhammad Usman Sheikh, presented a cash award of PKR 100,000 to the excelling student as a token of appreciation. Since its inception in 1985, Fast Cables Ltd has emerged as Pakistan's leading electrical cable manufacturer.

NUST launches You Tube Channel Join us as we take you through life at NUST

Knowing full well people today, and millennials in particular, are more inclined to seek information from digital sources than print, and the efficacy of video content in the digital age, NUST launched its own YouTube channel in January 2019, and ever since, we have been attracting the youth through our dynamic content on NUST achievements, events and special days, R&D breakthroughs, community service initiatives, thematic videos, and other student-related content that reflect a vibrant and happening campus life. Being one of the most sought after brands in the Pakistani higher education sector, NUST effectively strengthens its brand image with every new initiative. To date, the NUST YouTube channel has over 1,500 subscribers, a number that is progressively growing.

Like and subscribe

www.youtube.com/NUSTOfficial

Student clubs and societies are invited to share their video content via NUST Official YouTube channel – email us at marcoms@nust.edu.pk



SCAN THE CODE

52nd Academic Council Meeting

The 52nd Academic Council Meeting (ACM) was held on January 24, 2019. As many as 50 Working Papers were presented during the ACM in which 3 new programmes were approved, besides the revision of 10 existing programmes. The newly approved programmes include MS Data Science at SEECS, MS Statistics at SNS and MS Cyber Security at SNS. All these programmes will be offered from Fall 2019.

US Embassy, NIPO celebrate World IP Day

As part of the International Intellectual Property Day celebrations, NUST Intellectual Property Office (NIPO), in collaboration with the US Embassy, Islamabad, organised an awareness seminar on Intellectual Property Rights (IPRs) at USPCAS-E, NUST Islamabad, on April 25, 2019. The theme selected by World Intellectual Property Organisation (WIPO), Switzerland, for IP Day 2019, was "Reach for Gold: IP and Sports." The seminar focused on the importance of IPR, innovation promotion and role of IP in society in general and sports industry in particular. Mr



Khawaja Masood, President Sialkot Chamber of Commerce, who is also CEO of Forward Sport was invited as a guest speaker along with IP experts and economic adviser from the US Embassy.

NUST wins National IP Slogan Competition

NUST clinched National IP Slogan Competition organised by Intellectual Property Office (IPO) Pakistan on April 25, 2019. NUST managed to win 6 out of a total of 10 slogan awards. The slogans were designed by NUST Marketing & Communications Office.



Global Acceleration Program (GAP) 2nd Cohort – 2019

The NUST Global Acceleration Program (GAP) is a pioneering acceleration program sponsored by the U.S. Department of State that aims to help post-revenue Pakistani startups scale up globally. The second cohort of the Global Acceleration Program (GAP) started in May 2019 and will continue for three months until August 2019. A total of 9 startups from NUST were selected for this cohort. Over the course of three months in Silicon Valley, the startups will take part in the Draper University's Hero mentor programme and other numerous other networking sessions.



Erasmus+ International Credit Mobility Project worth 7.5 Million Euros

International Credit Mobility (ICM) under Erasmus+ is the European Union programme, which aims to provide individuals opportunities to improve their skills and performance, enhance their employability and



intercultural awareness. It is a matter of great pride that SEECS-NUST in collaboration with University of Malaga, Spain and Frederick University, Cyprus won an Erasmus+ International Credit Mobility Project worth 7.5 Million Euros. As part of the project, various students have conducted joint research with Dr Hassaan Khaliq Qureshi at NUST-SEECS and professors in partner universities and have published three impact factor journal publications and five conference publications of international repute.

Excellent Instructor in Huawei ICT Academy Program

Assistant Network Administrator Mr Ali Hassnain from SEECS got "Excellent Instructor in Huawei ICT Academy Program" on May 25, 2019 at Shenzhen, China, in Huawei ICT Talent Ecosystem. More than 100 people participated in the event from across the world.

L'Oréal Brandstorm Challenge 2019

Momin Abbas (BEE-8) from SEECS got 3rd position among national finalists of the L'Oréal Brandstorm Challenge 2019, held at Karachi on February 22, 2019. The other teammates included Aimen Alam (NBS) and Zain Shuja (NICE). The challenge was to invent a disruptive innovation for skincare experience for health conscious consumers by leveraging new online and offline services, digital solutions and connected technologies.



2 RCMS scholars secure PhD scholarship at TU, Germany

Two MS scholars, Mr Ahtisham Fazeel and Ms Darrak Moin Quddusi, currently enrolled in MS Computational Sciences & Engineering (CS&E) programme, were able to secure scholarship for PhD studies at Technische Universität (TU) Kaiserslautern, Germany. The outcomes of their research work could pave the way for identification of potential drug targets for systemlevel neurological disorders. During PhD studies, the students will be supervised by Professor Dr Naim Bajincha who was invited for a talk at RCMS in 2019.



Dr Nosherwan Shoaib wins 2019 IEEE Faculty Course Development Award



Dr. Nosherwan Shoaib, a faculty member at RIMMS, has been awarded the 2019 IEEE Faculty Course Development Award from IEEE Instrumentation & Measurement (I&M) Society during the award ceremony on May 23, 2019 at "International Instrumentation & Measurement Technology Conference," Auckland, New Zealand. The said award is known to be very competitive and prestigious and includes an IEEE certificate and 10,000 USD cash prize. The aim of this award is to support and encourage faculty members to develop a new course or significantly revise an existing course with specific focus on Instrumentation and/or Measurement, taught in an accredited engineering curriculum.

NUST extends invites to foreign interns

In 2018, NUST launched its 4-week NUST Internship Programme for International Students (NIPIS), to offer internships to foreign students. NIPIS 2018 hosted 9 interns from Thailand, USA, Yemen, Jordan, Malaysia, Croatia, Nigeria and Indonesia. For the year 2019, NUST has received over 144 registrations and given acceptance to 87 applicants, based on the applicants' field of study and interest. The programme is to commence from July 1 and last till July 26. A good number of students have already confirmed to join the internship at NUST.

In addition, NUST also hosts foreign interns under two other international internship programmes: International Association of Exchange of Students for Technical Experience (IAESTE) and International Association of Students in Economic & Commercial Sciences (AIESEC). Around 20 foreign interns are likely to attend the programme.

Meanwhile, Ms Samira Kristina Saak, a Masters student in Psychology at the University of Oldenburg, Germany, visited NUST SEECS for an internship at the EEG lab from March 3 to June 13, 2019. Samira was supervised by Dr Hassan Aqeel Khan, Assistant Professor at SEECS. During her internship, Samira worked on the applications of Data Science & Machine Learning in the domain of EEG (Electroencephalogram) and Brain Computer Interfaces.



42nd All Pakistan Intervarsity Squash (Men) Championship 2018-19 concludes at NUST

The final of the 42nd All Pakistan Intervarsity Squash (Men) Championship 2018-19 was won 2-0 by University of the Punjab after outplaying the defending champions, University of Peshawar. The third and fourth positions were clinched by University of Karachi and Abdul Wali Khan University respectively. The event was jointly organised by National University of Sciences & Technology (NUST) and Higher Education Commission (HEC) at NUST H-12 campus from April 23 to 25, 2019.

As many as 18 universities from all over Pakistan participated in the championship. Mr Faisal Butt, DG Sports HEC, graced the occasion as chief guest and distributed trophies and cash prizes among the top 3 teams.



Infrastructural expansion in full swing at NUST!

NUST new campus has transformed from wilderness into a tailor-made state-of-the-art campus in a matter of few years. Ever since its launch, the campus has gone through a lot of infrastructural expansion commensurate with the increasing requirement of establishing new institutions, hostels, sports facilities, faculty & staff accommodation and so on. During the period between January to June 2019, completion of different projects has added new infrastructure to the conglomerate of buildings across the campus. Some of the newly completed projects include extension of NUST School of Chemical & Materials Engineering (SCME), 2 blocks for the residence of faculty & officers, climbing wall and Rector's residence.

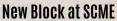


National Science & Technology Park (NSTP)



2 Residential Blocks for faculty /officers







New Hostel Block

RESEARCH & INNOVATION



Research Projects Funding Secured

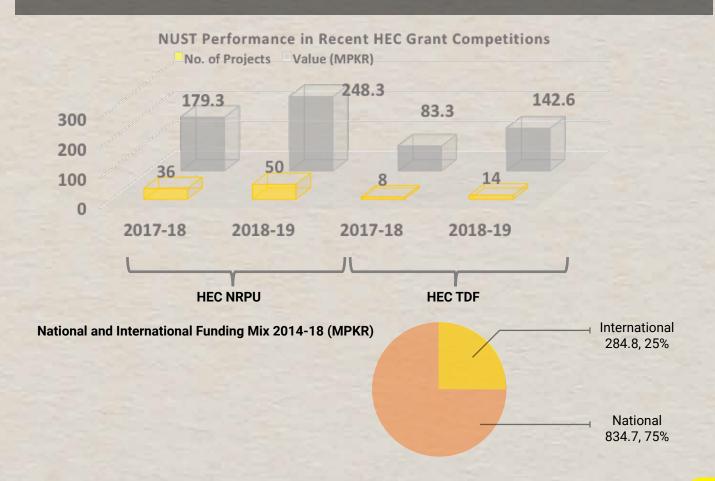


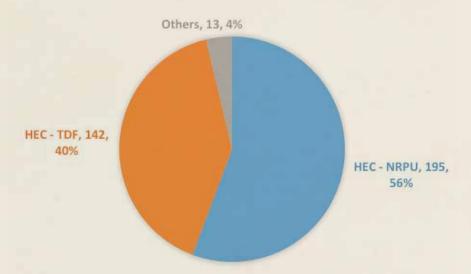
HEC-NRPU grant worth PKR 195 Million during first half of the year



HEC-TDF grant worth PKR 142 Million during first half of the year

NUST has also secured various international fundings for projects, including an international project worth PKR 23 Million sponsored by European Union, Horizon 2020 scheme.





NATIONAL FUNDING MIX JAN - JUN 2019 (MPKR)

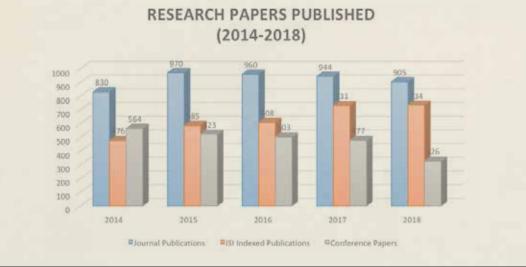
The projects approved are addressing the societal and global needs in the following research areas:



Milestones Achieved - Research Publications

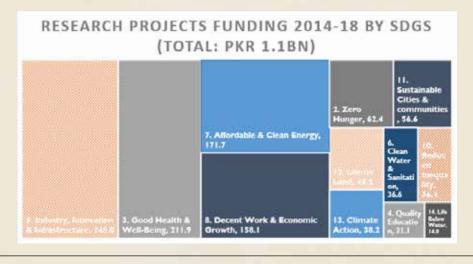
For the first time, NUST has successfully published a research paper with Impact factor of 22.973. The paper has been published by Dr Haider Abbas of MCS.

The average impact factor of NUST has been elevated from 2.5 to 2.8.



NUST SDGs Alignment Plan

NUST has embarked upon a process to be an SDG-aligned university, and is the pioneering university in Pakistan to initiate such a process. All aspects of the university, namely academia, research & innovation, and operations & governance will be in line with the vision of SDGs. NUST also participated in the global THE Impact Rankings, which is a ranking for measurement of the social impact a university is creating, and was ranked in 300s in the global list.



CEME earns position in Shell Eco Marathon Asia (SEMA) 2019

Team Toyota NUSTAG from College of EME participated in Urban Category of Shell Eco Marathon Asia 2019 held at Malaysia from April 28 to May 2, 2019 with their fuel efficient car and secured 11th position out of 100+ teams. NUSTAG were the only team from South Asia to clear the Technical Inspection and have valid mileage run, making it the best team of Subcontinent, beating India, Bangladesh,



Turkey, Singapore, Malaysia, Egypt, Saudi Arab, Nepal, Philippines and many other countries in its category. Pakistan was ranked ^{3rd} among the leading countries of the event.

PNEC partakes in SEMA 2019 at Malaysia

A PNEC team participated in SEMA-2019 for the10th time since its inception. The PNEC team's urban vehicle called "Mile X" was also one of the two cars from Pakistan to clear the technical inspection in the first attempt. The name Mile X was coined in the light of the team's successful participation for the 10th time, which itself is a great milestone achieved.



Medical Devices Development Centre (MDDC)

Transfer of technology from NUST to Pharmatec Group of Industries, Karachi

Dr Murtaza Najabat Ali, Associate Professor at Prosthetics & Implantology Research Labs, Research Wing at Medical Devices Development Centre (MDDC-NUST) was approached by Pharma Tec Group of Industries, Karachi, for transfer of technology involved in the development of the Smart Wound Management System for diabetic foot infections, which includes Quantitative pH Monitoring as well as an Electronically Controlled Drug Delivery System for treatment of highly exuding wounds.

The technology has now been transferred to PharmaTec group of Industries Karachi with the help of RIC NUST.



Development of Production Machinery at newly established Research Wing

Medical Devices Development Center (MDDC) – being pioneer and internationally accredited centre of excellence for the production of cardiovascular devices/implants, such as Stents, Angioplasty Balloon Catheters & Angiographic Diagnostic Catheters, etc. – has recently established its new research wing, where five different production machines (previously purchased from Germany at millions of rupees) were indigenously developed very cost effectively in order to support MDDC production for future purpose, i.e., either for production capacity enhancement or as a backup in the current production line acquired from Germany.

ISO Certification

Medical Devices Development Center (MDDC) is the first & only academia based medical devices manufacturing facility that has acquired ISO 13485:2016 certification from European Commission licensed notfied body after a week long audit from European inspectors.

RIMMS awarded PKR 60 m research grants by HEC

In the first six months of 2019, RIMMS faculty members have been successful in securing research grants for six R&D projects by HEC worth PKR 60 Mil in total. This has been possible through concerted efforts over the last year on high-end research and developing industrial collaborations, which have culminated into successful proposals. Two of these projects are approved in the Technology Development Fund (TDF) programme, while the other four projects are approved under National Research Program for Universities (NRPU) programme.



CAE team participates in International General Aviation Design Competition

A CAE team recently participated in International General Aviation Design competition 2017-18. Held under the auspices of Royal Aeronautical Society(RAeS), the team comprised of Dr Irtiza Ali Shah, Dr Ali Javed and Mr Muhammad Irsalan Arif. The task of the CAE team was to carry out a Computational Fluid Dynamics (CFD) analysis of a proposed design of an aircraft and evaluate the performance parameters. During the competition, the judges highly appreciated the number of aspects considered during the design process and the level of detail included in the report. A brief description of CAE design is also available at RAeS website (www. aerosociety.com) mentioning the winners of International General Aviation Design competition.



HILTI IT Competition - 2019 at Malaysia

HILTI, one of the world's leading construction companies, organises the esteemed global "HILTI IT Competition" every year. This year, the competition was held at Kuala Lumpur, Malaysia from April 8 to 11, April, 2019. Among 600+ teams, the PNEC team – comprising Ms Hafsa Mobeen, Ms Hajrah Saif, Ms Rida Arshad and Ms Tehreem Ashfaq Qureshi – participated with their final year project (FYP)"Intelligent Battery Health Monitoring System." The team was among one of the 8 teams selected to present their ideas and received excellent response from the panel of judges. The team was awarded certificates of appreciation and shield for participation.



CODE PLAY 3.0 COMPETITION

Code Play 3.0 competition was held from February 7 to 9, 2019 at Habib University. PNEC team – consisting of Mr Aftab Ahmad, Mr Tanveer-ud-Din, Mr Anas Inam and Mr Saad Mughal – was declared winner of the competition and received certificates and victory cash prize among 10 teams from different universities.

PNEC students take part in GEEKS 2019



GEEKS 2019, an exhibition of final year projects, was held at Bahria University, Karachi, on April 24, 2019. The PNEC team consisting of Mr Murad Abdullah, Mr Tariq Azeem, Mr Majid Alam and Mr Shabbir Ahmed presented their final year project (FYP) "IOT based Structural Health Monitoring & Traffic Intelligence System for Concrete Bridges using Wireless Sensor Network." The team won 1stprize along with cash award.



Fostering social entrepreneurship Finding Innovative & Creative Solutions for Society (FICS '19) concludes at NUST



Grand Finale & Prize Distribution Ceremony of Finding Innovative & Creative Solutions for Society (FICS 2019), a platform to foster social entrepreneurship, was held at NUST Islamabad on April 30, 2019. A total of 35 finalist teams of FICS '19 demonstrated their prototypes of technology-based innovative solutions to a panel of 16 judges. The overall winner of FICS '19 was Team COMET, who emerged victorious from amongst 298 project ideas pitched during the 3-stage competition. COMET is a communication device that provides off grid communication medium, in case there are no cellular services available. It will enable one to use one's mobile phone as user interface. The winning team was awarded a cash prize of PKR 100,000/-, sponsored by Khushhali Microfinance Bank Ltd. In addition, the winners of 8 SDG categories were awarded a cash prize of PKR 25,000, each. Apart from the Prototype Development Fund sponsored by the National Radio Telecommunication Corporation (NRTC), FICS is fortunate to have patronage for 8 SDG categories from a diverse set of industries. FICS '19 sponsors and partners included National Radio and Telecommunication Corporation (NRTC), Khushhali Microfinance Bank, Rastgaar Engineering Pvt Ltd, Arkhitech, Keystone Consulting Pvt. Ltd. Alachisoft, Alfoze Technologies Pvt. Ltd. Sustainable Development Policy Institute (SDPI), NUST Alumni Association, Epiphany Consultants and Mind Works International.

Addressing the audience, the chief guest, Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, said FICS is a perfect example of the entrepreneurial ecosystem, consisting of many critical components and working quite efficiently in unison to create the desired output. He added that the initiative has now come a long way as a viable platform



for deployment and commercialisation of students' technology-based ideas.

IP Boot Camp for FICS 2019

NUST IP Office organised IP boot camp for FICS 2019 teams in March at PDC. The purpose of this boot camp was to identify and prepare IP applications in a timely manner for FICS 2019 team projects, which had IP potential.

CAE teams win laurels at various competitions

During the past one year, various students teams of College of Aeronautical Engineering participated in different national competitions all over Pakistan including Airex (2018), DBFC (2019), Aerothon (2019) and UCP TAAKRA (2019). The teams performed exceptionally well in these competitions and brought laurels to the College as well as NUST.

1. The 14th National Design, Build & Fly Contest (DBFC-14)

was held at Ghulam Ishaq Institute of Engineering Sciences & Technology (GIKI), Topi from April 26 to 28, 2019. It is a nationwide contest, organised by GIKI Student Chapter of American Institute of Aeronautics and Astronautics (AIAA). Design teams from leading engineering universities participated in this competition along with CAE team who designed and flew a Radio Controlled (RC) airplane as per given mission requirements. Based on the stand-out performance, the team was awarded overall first position in DBFC-14.



2. "Airex Innovation Challenge" is one of the most prestigious university level competition, which was recently organised by GIKI Chapter of American Institute of Aeronautics & Astronautics at Ghulam Ishaq Khan Institute, Topi. These events provide, a competitive environment to students to design, build and present innovative solutions. More than 500 students from different universities all over Pakistan participated in the challenge. CAE team won four out of six modules of Airex Competition and was awarded certificates of participation, prizes and winning certificates.



3. "Acrothon 2019" is organised by NUST Chapter of American Society of Mechanical Engineers (ASME). The event was held at NUST School of Mechanical & Manufacturing Engineering (SMME), from March 15 to 16, 2019. CAE Aeromodelling team won both (Fixed Wing and Quad-copter) modules of Aerothon 2019 Competition and were awarded winning certificates and the trophy.



4. "UCP TAAKRA 2019" is organised by University of Central Punjab, Lahore from February 20 to 24, 2019. CAE Aeromodelling team won UCP TAAKRA 2019 competition and was awarded winning trophy.



CEME wins 3rd prize in DICE Competition at COMSATS, Lahore

A student team from NUST CEME Department of Engineering Management secured 3rd position among more than 60 participating teams at "All Pakistan DICE-IET, Control & Automation" event held from March 8 to 9, 2019. Two teams, comprising two MS students each, from Department of Engineering Management, NUST EME, participated in the event under the supervision of Lt Col Dr Faheem Qaisar Jamal. One of the teams comprising Ms Amna Khnazada and Ms Ifra Saleem secured 3rd position and cash award of PKR 40,000. Their project "Smart Panda: Indoor Environmental Monitoring & Controlling Device using IoT Applications," gives real-time air quality data on the "Things peak Cloud" and wirelessly controls the fan and window in accordance with the values detected by the sensors in the device and changes the colour of its eyes as per the quality of the air. The project also detects environmental parameters, such as temperature and humidity to play a key role towards maintaining a comfortable and healthy environment.



EME Hackathon

NUST CEME, in collaboration with National Incubation Centre (NIC), EME Centre of Innovation & Entrepreneurship (ICE) and IEEE Young Professional Islamabad organised the first Hackathon of its kind at CEME from January 10 to 13, 2019. The event featured over 60 teams consisting of over 200 best engineering minds from all around the twin cities. Five themes of this Hackathon included Internet of Things (IoT), Cloud-based Solutions, Renewable Energy Solutions, Solid Waste Management Solutions and Biomedical Solutions. Participants were given 4 days to work on their ideas and were divided into 2 groups, the first consisting of teams with ideas relating to IoT, Renewable energy Solutions and Solid Waste Management Solutions. The second group consisted of teams with ideas relating



to Cloud-based Solutions and Bio Medical Solutions. The top 3 teams were awarded cash prizes and shields. Cash prizes and shields were also conferred for the Best Product Design and the Best Idea Pitch. Top 13 startup ideas were selected by the National Incubation Centre for the final round (Business Plan) of their incubation process.

"Don't judge each day by the harvest you reap, but by the seeds you plant."

-Robert Louis Stevenson-

NUST participates in South & Southeast Asia Technology Transfer Matchmaking Conference 2019, China



China-South Asia Technology Transfer Centre, China organised "South & Southeast Asia Technology Transfer Matchmaking Conference" from June 13 to 14, 2019 at Kunming, China. Ms Saba Khan, GM Technology Transfer, represented NUST at the forum and delivered a talk on how NUST is establishing university-industry linkages at domestic level. She further highlighted how NUST could establish linkages with international academia and industry.

INNOVATION PROMOTION & MARKETING

1. NUST participates in 5th Pakistan International Mega Leather Show

NUST participated in 5th Pakistan International Mega Leather Show organised by Pakistan Tanners Association (PTA) at Expo Centre Lahore from January 27 to 29, 2019. A total of 110 industries exhibited their products. NUST also displayed and promoted projects / technologies developed by NUST researchers.



NUST participates in S&T Conference cum Expo at PCSIR Laboratories, Lahore

Pakistan Council of Scientific & Industrial Research (PCSIR) organised S&T Conference cum Expo at PCSIR Laboratories, Lahore from February 11 to 12, 2019. Dr Nassar Ikram, Pro Rector RIC, represented NUST at the conference. During his talk, he emphasised that Pakistani universities need to embark upon transformation to Generation 3 to become cradle of innovation and focus on knowledge transfer, entrepreneurship and collaboration with private sector.



NUST also exhibited projects at the expo Chairman Standing Committee Senate on S&T, along with other

honourable members of the Senate, visited the event and appreciated efforts made by NUST.

2. R&D projects for 2019 from (Civil & Defence) industries

Innovation & Commercialisation Directorate promotes university innovations and seeks industry problems for applied research at the University. The office has secured 278 applied R&D projects from different industries (Civil & Defence) and forwarded to schools out of which, the schools have undertaken 81 projects by engaging final year students. The projects were selected after thorough discussion with industries for better understanding of their requirements.

3. Industry Engagement Programme Batch-2



I&C Dte successfully conducted the Industry Engagement Programme for NUST faculty in 2018. This is the firstever programme launched by any Pakistani University. A total of 13 faculty members were placed in 4 different industries. As an outcome of the programme, 26 projects were identified for joint execution along with trainings of employees in different areas. In the second phase of this programme, industry representatives were invited to NUST for a period of 2 days to further enhance the university – industry linkages.

In continuation of the programme, this year 25 faculty members, nominated by respective Schools/Colleges, are to be placed in 18 industries for a period of 5 days between July and August 2019.

Our start-ups

TIC startups make it to 'Founders PUSH'

Two of EdTech startups from TIC, namely Ausomatic and LearnOBots, made it to Founders PUSH programme in the UK in January 2019. Only the top EdTech startups from all over Pakistan were selected to represent their startups in UK, and network with UK's top investors and entrepreneurial community.



TIC Startup "RAPIDEV" receives int'l award at Ajman University Innovation Centre



TIC's rapidly emerging startup "RAPIDEV" won an international award in March 2019, for its product RAPICS – a push to talk IP communication system. RAPIDEV also received the cash award of AED 10,000. The organising committee being a government agency will also be promoting the award-winning startups in UAE.

Silicon Valley's Billionaire VC invests in InventHub, a startup of NUST Global Acceleration Program (GAP)

InventHub, a graduate of Global Acceleration Program being managed by TIC, raised seed investment from venture capitalist and billionaire Mr Tim Draper. Draper's portfolio of



investments consists of big tech giants, such as Hotmail, Skype, Tesla, SpaceX, Baidu, and Robinhood. InventHub is a GitHub-like collaborative platform that uses artificial intelligence to automate circuit design and Draper strongly believes that it has the ability to revolutionise the hardware design process.

CTO of 'LearnOBots' attends MIT Boot Camp on Technology & Innovation

Mr Shamyl-bin-Mansoor, CTO of LearnOBots at TIC, was shortlisted for the MIT Boot Camp on Technology and Innovation executed in April 2019. The camp is an Accelerated-Learning programme for students to learn and practice leadership and innovation principles taught at MIT. The participants also attended lectures from MIT professors and scientists on Robotics, AI, and IoT during the boot camp.



Student Startup Business Center (SSBC) NUST (2018-2019)

Student Startup Business Center (SSBC) is a joint programme of "Promotion of Education In Pakistan" (PEP) Foundation Inc., USA, in collaboration with Higher Education Commission (HEC) and nine other public sector universities of Pakistan. Under this programme, two startups namely 'UPROOT' and 'SPECK' were incubated in May/June 2018 at TIC.

UPROOT | Mr Talha Yousuf, Ms Alina Rehman

Uproot is an agritech startup that is developing modular indoor vertical farming systems that employ hydroponics and automation to grow plants while requiring minimal human intervention. So far, three different versions of the vertical farming system have been developed and tested, with the latest one designed and fabricated in June 2019. Since its inception, uproot has successfully passed through the product development stage and is now entering the beta testing stage.

SPECK | Mr Hussnain Qasim

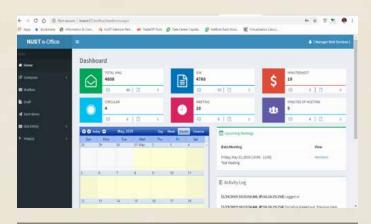
Currently incubated at TIC, Speck is a biotech firm, which produces Nano-biomaterials. It uses state-of-the-art Nano-Biotechnology to develop functional and tangible products at nanoscale for disease prevention, diagnosis and treatment. During the past one year under the SSBC Program, Speck was able to manufacture silver, carbon and titanium oxide nanoparticles. Through the workshops provided by TIC, SPECK revised its business model in order to make it work in Pakistan's entrepreneurial ecosystem.

Digitalisation of NUST Islamabad campus

As part of NUST ongoing endeavours towards the digitalisation of the university's main campus, a good number of applications have been successfully developed and made operational. Brief account of each application is as under: -

E-Office 4.0

Though E-Office is operational at NUST since 2005 with three versions released over the past 14 years, ICT is allset to release V 4.0 shortly. The new version is feature-rich promoting full automation of routine official processes, which include minute sheets, minutes of meeting, meeting invitation, circulars, task scheduling and integration of existing eION etc. Since users are already familiar with eION application in use, hence, e-Office 4.0 has been built on the same lines with improved features and user-friendly interface.



Sustainable Development Goals Tracking App (SDGTA)

NUST has aligned itself to become an SDG-engaged university. All of its functions related to 3 distinct aspects of Governance & Operations, Academics, Research and Innovation, are being aligned with SDGs. To be able to track the University's SDGs related activities in these 3 aspects, an application 'SDGTA' has been developed, which is currently being tested by Research Directorate. The app will be launched on July 15, 2019.

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NUST Internship & Placement App (NIPA)

Every year, NUST Placement Office arranges internships for thousands of students from all the schools / colleges, requiring extensive man hours in complete management of the entire process. To automate this time-intensive process, the ICT Dte has developed the application named "NUST Internship & Placement App (NIPA)," launched in March 2019. Following are the features of the application:

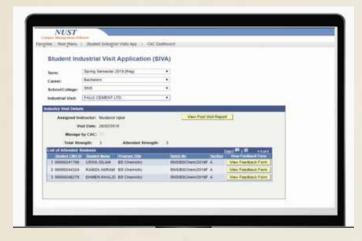
- a. Students can apply for internship as per their choice of sector, city
- b. Internship companies database management
- c. Facility to define internships slots offered by companies in different disciplines
- d. Allocation of internships to students and confirmation through email
- e. Feedback from employer regarding the internee assigned
- f. Dashboards for NPO office and ILOs for analysis



Student Industrial Visits App

To strengthen industry and academia linkages, NUST is promoting the culture of student and faculty visits to industry. An application has been developed by ICT Dte to facilitate Corporate Advisory Council (CAC) office and institutions to track and manage all students and faculty industrial visits. Following are the salient features of the application:

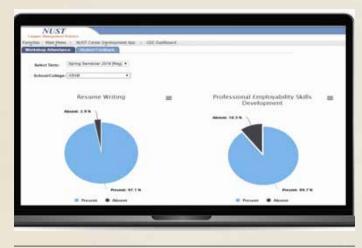
- a. Scheduling of Industry Visits
- Allocation of Industry Visits to Students/Faculty during the semester
- c. Mandatory Attendance of the Students during the visit
- d. Student Post Visit Questionnaire/Feedback Form
- e. Faculty Post Visit Report
- f. Dashboard for Reporting (Analysis of Feedback Reports)



NUST Career Development App (NCDA)

NUST enhances students' soft & interpersonal skills and grooms them for the industry. NUST Career Development Centre (CDC) arranges skills development workshops for students in each semester. To facilitate CDC in managing these workshops, ICT Dte has developed an application named NCDA. The salient features are as under:

- a. Scheduling of career development workshops
- b. Enrollment of students and faculty in career
- development workshops
- c. Mandatory Attendance of students
- d. Student/faculty Post workshop Questionnaire/ Feedback Form
- e. Dashboard for Reporting (Analysis of Feedback Reports)



Alumni Portal V2.0

Alumni Portal V1.0 was developed by ICT and launched in 2018 to provide a platform for 33,000+ alumni scattered in more than 58 countries, to connect and build NUST Alumni network. In version 2.0, launched in March 2019, new modules have been added such as event management, School/College level logins and reporting, election campaign management along with user-friendly interface which is compatible with multiple devices like laptops/ tabs/mobiles. Hostel Management System.

NUST Email Migration on Microsoft Office 365 NUST email server, earlier hosted in

the USA, has now been shifted to NUST ICT. With this shift, existing email services are now being migrated to Microsoft Office 365 for all faculty, students and staff. Each user shall be provided with 50GB email storage, 1TB of One Drive Cloud Storage and free access to Office 365. The project has been completed on June 30, 2019.

Office 365



NUST CIOUD. Owing to the advancement in technology, the need for efficient processing with on-demand computational resources is increasing day by day; hence, NUST has decided to launch on-premises cloud services. The project aims to transform traditional IT enabling environment to contemporary/ futuristic cloud computing environment, leveraging benefits of scalability and virtualised resources. The procurement process has been initiated and the project is set to be launched by December 2019.



NUST Smart University Phase (SUP) - II.

SUP-I was completed last year revamping obsolete Wi-Fi setup installed in all hostels by installing 388 latest Wi-Fi Access Points and increase of Internet bandwidth by 388 Mbps, hence, total bandwidth increased to 900Mbps. Coverage is highlighted in blue colour.



To further improve the internet coverage, SUP Phase-II project is currently underway to cover all schools and outdoor areas. With its completion, comprehensive Internet bandwidth coverage will be available on the campus as 697 x Wi-Fi Access Points are being installed along with increase in Internet bandwidth from 900 Megabits per sec (Mbps) to 1.5 Gigabit per sec (Gbps). Coverage area is shown green in the map.

CONFERENCES & WORKSHOPS



NUST holds seminar on "Conflicts, Genocides, Wars - Never Again. Peace & Stability through Credibility"

In commemoration of the Khojalay Genocide that took lives of hundreds of people, including women and children, besides rendering thousands of others homeless and hostage, NUST and the Embassy of Azerbaijan in Pakistan, organised a seminar on "Conflicts, Genocides, Wars Never Again. Peace and Stability through Credibility" here at the university's Islamabad campus on February 22, 2019. Dr Fehmida Mirza, Federal Minister for Inter Provincial Coordination, graced the occasion as chief quest. Prominent among others present at the occasion were H E Mr Ali Alizada, Ambassador of the Republic of Azerbaijan; H E Mr Mustafa Yurdakul, Ambassador of the Republic of Turkey; Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST; and Ambassador (Retd) Khalid Mahmood, Chairman Institute of Strategic Studies Islamabad and President of Pakistan-Azerbaijan Friendship Association. The Federal Minister commended NUST and the Embassy of Azerbaijan for holding the seminar on a topic of great significance. She said that Pakistan fully supports Azerbaijan on the brutal genocide of Khojalay, adding that it is amongst those countries that have not recognised Armenia as a State. She maintained that similar atrocities are being braved by the innocent people of Kashmir, terming it the most militarlised place. She said that Pakistan wants the solution of Kashmir according to the aspirations of Kashmiri people and United Nations

Resolution. She further said that there is a dire need for regional peace, which holds promise for the economic stability and progress.

H E Mr Ali Alizada thanked NUST for organising the seminar dedicated to the 27th anniversary of Khojaly Genocide. He said that we should remember such grave crimes against humanity, learn from them and take measures to prevent such incidents from occurring in future. In his remarks, Rector NUST said that the Khojaly genocide is one amongst many genocidal massacres in the modern history, adding all such outstanding conflicts, including the Khojaly and Kashmir conflict, exigently demand international response.



CONFERENCES & WORKSHOPS



U.S.-Pakistan Centers for Advanced Studies in Energy

International energy conference explores sustainable solutions for Pakistan

A two-day "International Conference on Sustainable Energy in Pakistan" commenced at the Islamabad campus of NUST on March 12, 2019. The conference was jointly organised by NUST and the University of Engineering & Technology (UET), Peshawar. Participants included Federal Minister for Power Division, Mr Omar Ayub Khan; the Mission Director USAID, Mr Jerry Bisson; officials from the Higher Education Commission (HEC) of Pakistan; NUST senior management and faculty, renowned national and international energy sector experts; and energy engineering students. The energy professionals reviewed latest developments, opportunities and challenges in renewable and non-renewable energy technologies and discussed future trends. The conference also highlighted key barriers, challenges and possible solutions for the promotion of market-based adoption of renewable energy technologies in Pakistan. The Federal Minister viewed the conference as a valuable platform for Pakistan's now-flourishing energy sector and Specialised Research Centers, like USPCAS-E, which sure are playing an instrumental part in providing sustainable and renewable energy solutions. The USPCAS-E programme is a partnership between Arizona State University (ASU), NUST and UET Peshawar, focusing on applied research projects relevant to Pakistan's energy needs, curriculum development, establishment of state-of-theart research laboratories and exchange programmes.

Int'l Water Technology Workshop at SCEE

NUST SCEE in collaboration with UNESCO organised a 2-day "International Water Technology Workshop (IWTW): Water-related Disaster Risk Reduction (DRR)" from February 21 to 22 at its Islamabad campus. IWTW attracted international experts as key speakers from UNESCO, Japan, Australia and China, besides leading national experts in the field, researchers, scientists, water professionals, end-users, managers, decision makers, and stakeholders from universities, research institutes, etc. The focus of workshop was also aligned to following UN Sustainable Development Goals (SDGs):

 By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels. By 2030, significantly reduce the number of deaths and number of people affected and substantially decrease the direct economic losses relative to global GDP caused by disasters, including water-related disasters, with a focus on protecting the poor and the vulnerable.



NUST Economics Society Conference 2019

NUST Economics Society Conference 2019 was organised as part of celebrating "Ten Years of Teaching Economics & Knowledge Sharing" at the Department of Economics, School of Social Sciences & Humanities (S³H), NUST, Islamabad on April 30, 2019. The theme of one-day conference was "Pakistan Economy-Key Challenges and Solution" and was attended by professional economists, academicians, development partners, policy makers, researchers, faculty members and students who deliberated on economic issues facing Pakistan. Mr. Sartaj Aziz, Former Finance Minister, was the chief guest of the conference, and deliberated on other critical issues like macroeconomic imbalances, balance of payment crisis, SDGs and poverty alleviation and also highlighted the macroeconomic issues such as environment, social development & China-Pakistan-Economic Corridor (CPEC) and its impact on Pakistan's economy.



MCS holds International Conference on Communication Technologies (ComTech-2019)



As part of its continuing pursuit for excellence in research, NUST Military College of Signals (MCS), Rawalpindi, organised the 2nd International Conference on Communication Technologies (ComTech-2019), in collaboration with the Institute of Electrical & Electronics Engineers (IEEE) and other related industrial partners. Commenced at the College on March 20, 2019, the two-day conference was aimed at providing a forum for researchers, developers and practitioners from academia and industry to meet and share knowledge in cutting-edge technological fields like Telecommunication, Software Engineering & Cyber/ Information Security. Chairman Pakistan Engineering Council (PEC) Engr Jawed Salim Qureshi graced the opening ceremony

as chief guest. He termed the conference a valuable opportunity to network with peers and get acquainted with the latest techniques and technological developments in the fields mentioned above. He congratulated MCS and the conference organisers on successful arrangement of this international conference on topics of national significance.

In the opening session, the keynote speech was delivered on Internet of Things (IoT) by Dr Kung-Kiu Lau from the University of Manchester, UK. On the second and final day of the conference, Dr Hafiz Malik from University of Michigan Dearborn, USA, delivered the keynote speech on Cyber Security as part of the closing session.

NUST SERVING THE INDUSTRY

Customised workshop on "Nuts & Bolts of Effective Communication Skills"

NUST Professional Development Centre (PDC) conducted a two-day customised workshop on "Nuts & Bolts of Effective Communication Skills" for the professionals of Attock Petroleum Limited (APL) from March 29 to 30, 2019. Held at APL, Rawalpindi, the workshop enlightened the participants with 6 areas of communication: Intrapersonal Communication, Interpersonal Communication, Non-Verbal Communication, Writing Skills, Presentation Skills and Listening Skills. They were also taught about the role and significance of empathy and dealing with difficult situations.

WORKSHOP ON "Go to Market Strategy - Turning Plans to Performance"

NUST Technology Incubation Centre (TIC) organised a training session on "Go to Market Strategy - Turning Plans to Performance" at NUST Islamabad campus on April 16, 2019. Mr Zulfiqar Qazilbash, CEO and Consultant at Islamabad Consultancy, conducted the training session, and divulged secrets of starting and sustaining a dream venture.





Workshop on Advanced Characterisation Techniques for Professionals



NUST School of Chemical & Materials Engineering (SCME) organised a three-day "Workshop on Advanced Characterisation Techniques for Professionals" from April 23 to 25, 2019. The workshop included lectures and handson training on state-of-the-art research equipment in the area of Characterisation Techniques. The purpose was to familiarise the participants with the working principles and applications of GC-MS, FT-IR, HPLC, TG/DTA, XRD, SEM, AFM, VOD metre, UV-Visible spectroscopy and Elemental Analyser.

Session on "Accounting for Start-ups"

As part of "Start-up Founders' Development Program," NUST TIC organised a session on "Accounting for Start-ups" with Mr Mustafa Najoom, Director Business Development, Madera Outsourcing, on April 29, 2019 at NUST. Madera, offers a distinctive and personalised solution for accounting and bookkeeping outsourcing needs and therefore facilitates the growth of the start-up businesses by focusing on their engagement with their



potential clients. The session facilitated the start-ups with their accounting challenges and provided them with the tools to fix them. TIC incubatees and student participants attended and took valuable insights from the session.

Training Session on Communication with Impact



NUST Professional Development Centre (PDC) organised a session on "Communication with Impact" for NUST's faculty and management on May 10, 2019 at NUST. The resourceperson was Mr Abdur Rehman Syed, who is an International Business Advisor and expert on communication. The session focused on effective communication skills and relationship management.

Youth urged to play role in curbing corruption

With a view to raising awareness among students regarding the menace of corruption and ways to curb it, a seminar was held at NUST on February 20, 2019. The chief guest, Mr Mohammad Altaf, DG Awareness & Prevention at National Accountability Bureau (NAB), said that the economy and social development of the country had suffered immensely due to the plague of corruption that had penetrated deep into our social fabric. He urged the youth to come forward in uprooting corruption through its identification and reporting as it exists in various forms and shades.



Seminar on "Developing Acceptance of Physically Challenged Individuals"

A seminar on "Developing Acceptance of Physically Challenged Individuals" was organised by NUST Centre for Counselling and Career Advisory (C3A) at NUST Islamabad campus, on February 26, 2019. The seminar aimed to raise awareness about the rights of the physically challenged and how these valuable individuals could be integrated into the society.



Pakistan Radio airs programme on USPCAS-E NUST

A radio show on USPCAS-E NUST was aired live on Radio Pakistan (FM 101) on April 18, 2019. USPCAS-E Deputy Project Director Dr Hina Kazmi, Faculty member Dr Rabia Liaquat, and MS student Mr Abdul Qayyum participated in the show and informed the public about the upcoming MS & PhD admissions, Applied Research Projects on Energy, Gender Equity, and USPCAS-E vision on green energy.



Lecture on "Pakistan - a Misunderstood State Reinvigorating Pakistan's PR Strategy"

A lecture on "Pakistan - A Misunderstood State: Reinvigorating Pakistan's PR Strategy" was organised by NUST Centre for International Peace & Stability (CIPS) at the Islamabad campus on March 25, 2019. Mr Toaha B Z Qureshi, Member of the Order of the British Empire (MBE), was the keynote speaker. He asserted that Pakistan is the world's most misconceived and misunderstood nation, and that every Pakistani should play their role in creating a positive image of our country.



Lecture on "Iqbal's Message to Youth"

An enlightening lecture on "Iqbal's Message to Youth" was organised by NUST on April 24, 2019 at NIT Seminar Hall. Mr Sultan Ahmad Ali, Chairman of a research think tank "Mission of Unity, Stability & Leadership in Muslims





(MUSLIM) Institute and Chairman Advisory Board of MUSLIM PERSPECTIVES Journal, delivered an insightful and thought-provoking lecture, which enlightened students about the teachings of Allama Iqbal, particularly his message to the youth.



Students, employees attend NUST Counselling Camp in large numbers

NUST Centre for Counselling & Career Advisory (C3A) organises counselling camps twice a year to promote the concept and strategies of psychological health among the university populace. In the same context, a counselling camp was organised at NUST main campus on March 26, 2019. Key objectives of the daylong camp were to raise awareness about mental and emotional health; and gain insights into individuals' strengths and weaknesses, and, in so doing, equip them with strategies to cope with challenges of life. The camp was inclusive of different activities, such as On-spot Counselling, Career Counselling, Testing & Assessment, Signature Analysis and Self-hypnosis. An overwhelming number of students, faculty and staff members showed keen interest in Testing & Assessment, Onspot Counselling and Signature Analysis.

NUST holds session on educational prospects in China

The Department of Mass Communication at NUST School of Social Science & Humanities (S3H) held a panel discussion and a lecture on the opportunities of pursuing higher studies in China. Held at the University's main auditorium on January 30, 2019, the session attracted an overwhelming number of undergraduate and graduate students from various institutions of NUST. Ms Joveria Hassan, a faculty member at S3H who is also pursuing her PhD from the Shanghai Jiao Tong University (STJU) China, was the



resource person for the session. The aim was to educate aspiring students on the opportunities and prospects of pursuing higher studies in China, myths of studying in China and post-degree opportunities. The 30-minute lecture was titled "Outside the Classroom: What else to Expect from Chinese Universities."

Launch of book "Kashmir Conflict: Changing Dynamics and the Prospects for Peace"

Launch of book titled "Kashmir Conflict: Changing Dynamics and the Prospects for Peace" was organised at NUST Centre for International Peace & Stability (CIPS) on March 26, 2019.

The edited book, based on the two-day international conference held in October 2018, was launched at NUST CIPS. Reviewing the book, Dr Asma Shakir Khawaja, Assistant Professor at Peace & Conflict Studies, National Defence University, Islamabad, said that there could not be a more appropriate time to discuss the Kashmir conflict.



The recent instances of deadly violence between India and Pakistan have proven that the world cannot afford to overlook Kashmir for much longer. Dr Mujeeb Afzal, Assistant Professor at the School of Politics & International Relations, Quaid-i-Azam University, Islamabad, emphasised that production of more and more literature on the Kashmir conflict is absolutely essential at a time when India is trying to change the contours of the conflict through its propaganda.

Think Tank Meeting on Energy & Energy Policy at USPCAS-E

USPCAS-E NUST organised its first "Think Tank Meeting on Energy & Energy Policy" on January 8, 2019. The 20 participants included representatives from Industry, Academia and Government. Principal/Dean, Dr Zuhair S. Khan enlightened the participants on the vision and objectives of the Think Tank at USPCAS-E NUST that will provide sound and valuable expert input on national policy documents, particularly relating to the Center's research domain of energy.



RIMMS holds "IEEE International Seminar on Nanoscale Healthcare Systems"

NUST-RIMMS organised "IEEE International Seminar on Nanoscale Healthcare Systems," on March 25, 2019. The event was held in collaboration with IEEE Islamabad Section Antennas & Propagation Society, Microwave Theory & Techniques Society and the Electromagnetic Compatibility Society (IEEE MTTS/APS/EMCS) joint chapter. The guest speaker was Dr Qammer H Abbasi from the University of Glasgow, UK, who is an Assistant Professor at University of Glasgow's School of Engineering and Visiting Lecturer at Queen Mary, University of London (QMUL).



PNEC students win gold, silver at IEEEP Student Seminar

Institute of Electrical & Electronic Engineering, Karachi Centre organised Student Seminar in collaboration with NED University of Engineering & Technology on January 15, 2019. Students from various universities all over country participated and presented their papers based on their final year design projects. 2 student teams from PNEC students participated in the competition and won Gold and Silver medal along with cash awards.

26th Pakistan HVACR Building Expo & Conference



ASHRAE Pakistan organised 26th HVACR Building Expo Conference at Expo Centre, Karachi from February 13-15, 2019. PNEC Shell Eco-marathon team exhibited their prototype vehicle "Gallant" to the attendees from the corporate, industrial, educational and public sector. The team also participated in the Expo's Technical Competition and was awarded 2nd position out of 20 participants from across the country.

Roundtable on "Evolving Situation in Afghanistan and Policy Options for Pakistan"



What are the prospects of early peace in Afghanistan and whether peace can exist in the prevailing state of affairs? This was the moot question raised by NIPS for the roundtable discussion on May 29, 2019, attended by a panel of experts on diplomatic and security matters. The discussion captured crosscutting issues such as hurdles in the way of a winwin resolution of Afghan conflict; basic flaws in the American approach towards establishing a new order of peace and stability in Afghanistan; and a pragmatic mechanism to find a way forward that can generate useful spill overs for the region and beyond. Full report of the event is available on NIPS website.

Multiple events held on good practices of Quality Assurance

NUST Quality Assurance Directorate organised various events for the capacity building and skill development of NUST faculty and staff. Some of the major events that helped participants share their knowledge and good practices of quality assurance included Awareness Seminar on Quality Assurance in Higher Education at SEECS on April 30, Seminar on Quacquarelli Symonds (QS) Asian University Ranking by QS Representative at NUST main auditorium April 1, Awareness Seminar on University Ranking & CQI for PNEC Faculty & Staff at PNEC on March 29, to name a few.



NUST organises "IP Awareness seminars"

One of the core actions of NUST IPO is to raise IP awareness amongst NUST students, researchers and faculty members through seminars, workshops and courses etc. In this regard, IP seminars were conducted in each school / college of NUST to enlighten PhD and MS qualified FMs by General Manager Intellectual Property & Legal Affairs and Director Innovation & Commercialisation.

Guest speakers deliver thought-provoking lectures at MCE

Military College of Engineering (MCE) has always strived for providing opportunities to its students to keep them abreast with developments in the industry. During the semester, numerous guest speakers were invited to deliver talks on their areas of expertise and enlighten the nurturing young civil engineers. Both undergraduate and postgraduate students took active part in these sessions. Guest speakers included renowned alumni of the college, including Brig Mansoor Akhtar from Housing Directorate who talked on project management during mega construction work; Mr Tariq Moeen, a senior expert

with extensive experience in the field of fire safety and its management, enlightened the students on the need to have in-depth view of fire management systems and its needs in our society; Dr Farrukh Bashir, a senior meteorologist, delivered his talk on climate change and its impacts on Pakistan; Dr Irfan Ahmed Rana from NUST delivered his lecture on Risk perception and its assessment in the context of emerging disasters in the country. Mr Shahibzada Sultan Ahmed Ali, a well-known religious scholar was also invited to deliver a talk. His session focused on "the Holy Quran: A guideline and inspiration for Iqbal."



Training organised for ILOs

I&C Dte organised a two-day training for the Industrial Liaison Officers (ILOs) of all Schools / Colleges of NUST from April 17-18, 2019 at CIE. Attended by 17 ILOs, the training focused on elaborating their job description, types of university-industry linkages and how they can facilitate RIC offices in order to enhance their respective outputs.



NDU invites Dr Zamir Hussain as keynote speaker

Dr Zamir Hussain, a faculty member at NUST Research Centre for Modelling & Simulation (RCMS), was invited to National Defence University (NDU), Islamabad as a keynote speaker at a workshop titled "Research, Governance and Public Policy" held from April 24-25, 2019. The workshop focused on the dissection of modern research methodologies & computational skills, role of elected officials in governance and contemporary policy needs.

"Reading maketh a full man; Conference a ready man; and Writing an exact man"

-Francis Bacon -

NUST Career Development Centre holds career workshops



NUST Career Development Centre (CDC) continues to provide Nustians with latest employability skills to enhance their marketable skills. Under a well-planned programme, centre implements custom-designed the career programmes for all students across NUST Schools and Colleges. CDC held 70 career workshops, which included Career Development Plan, Resume Writing, Professional Employability Skills) for 2nd, 4th and 6th semesters during Jan-July 2019 across 15 Schools and Colleges of NUST. In addition to DD CDC, these workshops were conducted by a specialised job market consultant who enlightened students with latest job market trends and knowledge.

PNEC faculty wins Best Oral Presentation Award at GCGW-2019

Dr Tahir Abdul Hussain Ratlamwala, a PNEC faculty member, participated in 8th Global Conference on Global Warming (GCGW) held in Ibn Khaldoon Hall, Qatar University, Doha, Qatar from April 22 to 25, 2019, and won the Best Oral Presentation Award.



The GCGW-2019 is a multi-disciplinary international conference on all aspects of energy, environment and materials. It aimed to provide a forum for the exchange of technical information, dissemination of high-quality research results, presentation of new policies and scientific developments and promoting future priorities for a more sustainable development.

Training on "Patent Database Searches & Development of TISCs in Pakistan"

A 2-day training workshop on "Patent Database Searches and Development of Technology Innovation Support Centres (TISCs) in Pakistan" was organised by NUST from February 10 to 11, 2019. It was held at PNEC Karachi in collaboration with World Intellectual Property Organization (WIPO), Intellectual Property Organization (IPO), and Pakistan and Higher Education Commission (HEC). Mr Alejandro Roca Campañá, Senior Director WIPO along with his team provided training to the participants from NUST, other Pakistani universities and R&D institutions.



Institutional Mendeley Conference at NICE-SCEE

A hands-on workshop was conducted by Dr Muhammad Usman Hanif, a faculty member at NICE-SCEE, to introduce students to the research management software 'Mendeley,' on April 16, 2019. Held at SCEE Seminar Hall, the purpose of workshop was to introduce one of the tools that assist the researchers in managing, organising and streamlining their research process. Mendeley is a free research management software produced by Elsevier and is getting popular throughout the world.

TIC Workshops



▲ Workshop on "Business Model Design & Disciplined Entrepreneurship" conducted by Mr Usman Asif Ali, a successful growth strategist & entrepreneur, in January, 2019.



A Workshop on "Team Building Strategy" conducted by Mr Owais Anjum, CEO eMumba



▲ Workshop on "Lean Startup Methodology" in February, 2019, with Ms Samar Hassan, CEO & co-founder of Epiphany.



▲ Workshop on "Effectively Leveraging the Start-up Ecosystem" for technology entrepreneurs in March 2019. The workshop was conducted by Ms Sidra Jalil, Dir Operations Code for Pakistan.



▲ Workshop on "Developing a Business Plan for New Ventures" in February, 2019. The workshop was conducted by Mr Sayyad Ahmed Masud, MD Channel-7 Communications (Pvt.) Ltd.



▲ Workshop on "Accounting for Start-ups" with Mr Mustafa Najoom, Director Business Development, Madera Outsourcing



▲ Workshop on "Product Commercialisation" was conducted by Dr Adeel Tariq, Assistant Professor at NUST



▲ Workshop on "Pricing Strategies for Startups" was conducted by Ms Nazia Hamid, a fervid professional with international experience spanning over 17 years.

TIC entrepreneurs appear in "Startup Insider" on DBTV

Two startups of TIC-NUST were featured in "Startup Insider" on DBTV. Haseeb Khizar and Talha Shahzad represented their startup UshAR on the show. They talked about how they devised an innovative new way of instruction manuals, through an AR-based smartphone application, with a comprehensive curriculum. Another startup "CheMystic" also featured in "Startup Insider' discussed the prospects of AR in the education sector. CheMystic is an application for simulating chemical reactions in 3D using Augmented Reality AR.



CONFERENCES & WORKSHOPS



▲ United Nations Staff Officers Course - 21 (UNSOC -21) was conducted at Centre for International Peace & Stability (CIPS), NUST Islamabad from April 8 to 19, 2019. The purpose was to educate the participants about the UN, roles & responsibilities of the Peacekeepers as Staff Officer. Lt Gen Maqsood Ahmed (Retd) ex MILAD UN DPKO was the Chief Guest at the closing ceremony

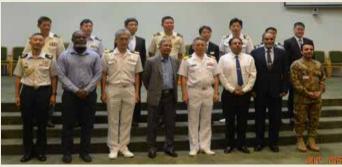


▲ UN Military Observer Course - 20 was conducted at CIPS from February 4 to 15, 2019. Pakistani and Foreign Participants attended the Course.



▲ United Nations Protection of Civilian Course - 4 was conducted at CIPS from January 14 to 25, 2019. Foreign Secretary Ms Tasleem Aslam was the chief guest at the Closing ceremony





▲ A 12-member delegation from Japanese's National Institute for Defense Studies (NDIS), led by "CAPT (MSDF)" Hoshina Toshiaki, Director of Education Department, NIDS), visited CIPS/ Peacekeeping Training Department on May 19, 2019.

A one-day Solar Photovoltaic (PV) Systems workshop was arranged for the students of United States Pakistan Center for Advanced Studies in Energy (USPCAS-E) by the Technology Centre on May 09, 2019 at USPCAS-E. The workshop specifically entailed a comprehensive insight on Solar PV systems and designs.



▲ A psychologist from C³A conducted a 2-hour activity-based lecture on Bio-Psych-Social Model for the undergraduate students of NUST Atta-ur-Rahman School of Applied Biosciences (ASAB)



▲ C³A conducted an interactive session with NG Staff on "Attitude, Behaviour & Ethics at Workplace" on February 20, 2019. The objective was to educate personnel to behave in a manner consistent with the organisation's mission and goals.



▲ C³A conducted a lecture on "How to Communicate Assertively" with students of NUST School of Natural Sciences (SNS) on April 24, 2019.

PARTNERSHIPS FOR IMPACT

GLOBAL

NUST joins hands with Beihang University China to establish Cyber Security Research Centre

NUST and Beihang University (BUAA), China, one of the top 16 Chinese universities, have partnered for the establishment of a state-of-the-art Cyber Security Research Centre (CSRC) at the NUST School of Electrical Engineering & Computer Science (SEECS). Dean of the School of Cyber Science & Technology, BUAA, Professor Liu Jian-wei, visited NUST on January 11, 2019, today to formalise the partnership that will go a long way in enhancing research in Cyber Security, which is a crucial domain not only for Pakistan but also for the world at large. The partnership between NUST and BUAA will also



encompass mutual exchange of faculty and students, conduct of joint symposia, conferences, workshops and summer schools.

NUST, Shenzhen University to boost cooperation in multiple fields



NUST and Shenzhen University (SZU), China, joined hands on February 21, 2019, to advance exchange and collaboration in higher education for mutual benefit. Led by Prof Li Qingquan, President SZU, a 7-member delegation visited NUST to solemnise the partnership. On behalf of their universities, Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, and President SZU expressed their willingness to cooperate in areas as diverse as Joint Degree, PhD and Post Doc Programmes, faculty & student exchange, joint research projects, joint conferences/seminars, etc.

NUST partners with Adam Mickiewicz University, Poland

In a ceremony held at NUST in the month of February, Adam Mickiewicz University, Poznan, Poland, formalised partnership with NUST vis-à-vis exchange of faculty and other staff for collaborative learning; development and application of joint national and international research projects; use of digital and web resources for joint educational programmes, including Distance Learning and e-Conference; development of short- and long-term training courses; and the promotion of joint academic publications. The Polish delegation was led by Professor Andrzej Stelmach, Dean of the Faculty of Political Science & Journalism at AMU.



Swedish Ambassador and Programme Director STINT



The honourable Ambassador of Sweden in Pakistan, Her Excellency Ingrid Johansson visited NUST on April 2, 2019. She was accompanied by Dr Hans Pohl, Programme Director, Swedish Foundation for International Cooperation in Research & Higher Education (STINT). STINT aims to form strategic cooperation in emerging countries in research and higher education, and focuses on collaboration between young researchers and teachers. The delegation met with Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST; and Rear Admiral Nassar Ikram, Pro-Rector Research, Innovation, Commercialisation (RIC) NUST.

University Teknologi Petronas (UTP)

Headed by Dr Nor Hisham Bin Hamid, Associate Professor and Deputy Vice Chancellor Student Affairs and Alumni, UTP, Malaysia, a delegation of senior academics from University Teknologi Petronas (UTP), visited NUST Islamabad campus on April 15, 2019. The main objective of visit was to explore possibilities of partnership with NUST, especially in the fields of Chemical, Mechanical and Manufacturing Engineering.



British Council Delegation



A 2-member delegation led by Mr David J Lock, Consultant for Strategic Plan for Pakistan-UK Education Gateway, visited NUST on March 21, 2019. The Gateway is a joint initiative of the Higher Education Commission of Pakistan and the British Council to enhance partnership between the higher education sectors of Pakistan and the UK. The delegates also showed their keenness in collaborating with NUST, vis-à-vis innovative & collaborative research, student exchange programmes, etc.

Faculty Registrar University of Wolverhampton

Ms Saiqa Andleeb, Faculty Registrar from University of Wolverhampton UK, visited NUST Islamabad campus on March 26, 2019. Dr Asif Raza, Pro-Rector Academics NUST, greeted the guest upon her arrival. Both sides concurred to extend collaboration in the domains of student-faculty exchange, split degree programmes and particularly collaborative applied research projects.



Tsinghua University, China delegation

With a view to furthering its multifaceted partnership with Tsinghua University (TU), NUST received a 4-member delegation of TU on March 22, 2019. The delegation was led by Professor Dr Zhang Wei, Associate Dean Graduate School & Director of Engineering Management Education Centre of TU. During a discussion, NUST & TU mutually agreed that both varsities would exchange students under their summer school programmes. The discussion also focused on joint research, information sharing and faculty exchange for short courses.





▲ A three-member Ulster University UK delegation, led by Ms Catriona McCarthy, Head of Global Engagements, visited NUST on January 14, 2019. The other members were Prof. Paul Hanna from Faculty of Computing, Engineering and Built Environment, and Mr Humair Ahmad, Country Manager for Pakistan and Bangladesh.



▲ A two-member delegation led by Mrs Sharne Procter, Director International Office, Durham University, UK, visited NUST on February 15, 2019. The other member was Ms Kate Brennan, International Officer.



▲ Prof Jérome Gensel, Vice-President for International & External Affairs at Université Grenoble Alpes, France visited NUST on February 6, 2019. The other members were Mr Sebestien Cartier, Higher Education Attaché, Cultural & Cooperation Department, Embassy of France in Pakistan and Mr Jamil Ahmed Qureshi, Project Manager, HEC.

PARTNERSHIPS FOR IMPACT



▲ A nine-member delegation from Hasselt University Belgium visited NUST on February 19, 2019. The delegation was led by Prof. Dr Jean-Michel Rigo, Vice Rector Research of Hasselt University.



▲ Led by Prof Li Qingquan, President SZU, a 7-member delegation visited NUST to formalise bilateral ties on February 21, 2019. Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, along with members of NUST management, welcomed the delegation.



▲ A 53-member NDU and NSWC delegation, headed by Rear Admiral Syed Zain Zulfiquar, SI (M), visited NUST on March 11, 2019.



▲ A four-member delegation led by Professor Amir M Sharif, Associate Dean (International) & Professor of Circular Economy, Bradford University, UK, visited NUST on February 26, 2019.

PARTNERSHIPS FOR IMPACT



A 15- member delegation headed by Mr Madhawa Dewasurendra, Additional Secretary (Development), Ministry of City Planning, Water Supply & Higher Education, Sri Lanka. visited NUST on May 03, 2019.



A five-member delegation headed by Dr Osman Tongusakov, Director Institute of Philosophy, Political & Legal Research of National Academy of Sciences, Kyrgyzstan, visited NUST on March 28, 2019.



▲ A 4-member delegation headed by Sh Ali Zahir, Dean Faculty of Law & Islamic Studies, Maldives National University visited NUST on April 23, 2019.

PARTNERSHIPS FOR IMPACT



A 2-member delegation headed by Dr M Arif ADLI, Vice President of TAI Academy, Turkish Aerospace Industries visited NUST on May 06, 2019.



▲ A five-member delegation headed by Dr Takao TODA, Vice President of JICA, visited NUST on March 20, 2019.



▲ A 4-member delegation headed by Junaid Khan, CEO Edu-Surferz, Sweden, visited NUST on May 16, 2019.



▲ Prof Elhadj Dogheche, In-charge of International Affairs at Université of Valenciennes, France, visited NUST on June 17, 2019. The other members were Mr Sebestien Cartier, Higher Education Attaché, Cultural & Cooperation Department, Embassy of France, in Pakistan and Mr Jamil Ahmed Qureshi, Project Manager, HEC.



▲ Syed Siraaj Ahmed, Director UK Pakistan Chamber of Commerce, visited NUST in April 2019 with an aim to engage academia with international industry. He highlighted the passion of Pakistani diaspora to give back to their country of origin, and expressed his commitment to take the cause of educational development forward.

INDIGENOUS Secy Health visits NUST

Capt (R) Zahid Saeed, Secretary, Ministry of National Health Services **Regulations & Coordination** (NHSR&C), along with team from Drug а Regulatory Authority of Pakistan (DRAP), visited Medical Devices NUST Centre Development (MDDC) on June 14, 2019. The delegation visited MDDC's current facility, research wing labs, as well as the under construction new building for the Centre. Secretary NHSR&C appreciated indigenous development of cost-



effective production machines (previously procured from Germany at a very high cost) by MDDC research wing, which would support production in the long run in terms of capacity enhancement and as a backup in case of downtime of imported machines.

MDDC is Pakistan's first facility for production of cardiac stents and angioplasty balloon catheters. It an ISO-

13485:2016 certified facility, licensed by European Commission body and approved by DRAP. It will soon be providing cardiac stents and other devices to the public at a fraction of the cost of imported devices, leading to significant foreign exchange savings and treatment for patients in lower middle and lower income strata, who are currently unable to afford expensive imported devices.

NUST partners with DWP Foundation

NUST welcomed Digital World Pakistan (DWP) Foundation as an esteemed partner of NUST Endowment for Educational Development (NEED) Initiative on Jan 22, 2019. Under the partnership, DWP would extend half support for 20 need-based students, with matching fund given by NUST Trust Fund (NTF). These students, from the intake of 2018, would be able to continue their education through the generosity of cause champions like DWP Foundation. Mr Sabah-ud-Din Rana, GM HR, **DWP** Technologies and General DWP Secretary Foundation, signed the agreement for support of these students at NUST. He was accompanied by Mr Malik



Tariq Mehmood, Country Manager HVAC, Mr Rana Maqsood-ur-Rehman - Regional Manager and 12 representatives of the DWP Foundation.

Pakistan *Bait-ul-Mal,* NUST to enhance R&D, support for deserving students

Pakistan *Bait-ul-Mal* (PBM) has pledged to support 50 deserving undergraduate students of NUST for their entire degree programmes at the university. A delegation led by Managing Director PBM Mr Aon Abbas Buppi visited NUST here on March 14, 2019, to ink the agreement with NUST. Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, greeted the delegation and appreciated the support of PBM for 50 UG



students of NUST, who would now be able to afford quality education at Pakistan's leading higher education institution.

PEP Foundation Delegation

Dr Khalid Iqbal, President Promotion of Education in Pakistan (PEP) Foundation, visited NUST Islamabad campus on April 9, 2019. He was accompanied by Ms Ramla Batool, Senior Program Manager, PEP Foundation. Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, apprised the delegation of the milestones recently achieved by the university, student support endeavours, etc. In addition, Director Finance, Mr Nasir Amin Khan, discussed the progress and growth of the Student Advancement Fund Endowment (SAFE) with the guests. SAFE is the initiative of PEP Foundation, to assist talented students from economically disadvantaged backgrounds to receive undergraduate and graduate degrees at universities.





NUST inks MoU with IBM Italia S.p.A. Pakistan

NUST inked an MoU with IBM Italia S.p.A. Pakistan on June 27, 2019. Under the MoU, IBM will initiate "Startup with IBM" programme at NUST for its startups. The programme entails start-ups to remain under IBM's mentorship and support for 12 months, and avail the opportunity to use free IBM Cloud Services. This will allow start-ups to receive go-to-market support, technical guidance and networking opportunities to quickly bring solutions to the market.

It is important to mention that the IBM programme will benefit start-ups at NUST, which is at the cusp of becoming the largest incubation space in Pakistan with the launching of the country's first National Science & Technology Park (NSTP) in September. In addition to Technology Incubation Centre (TIC) established at NUST in 2005, NUST will have another dedicated incubator namely Cube8 at NSTP.

The MoU was signed in a ceremony held at NUST

Islamabad campus, wherein Mr Asif Ahmed (County Sales Manager) and Mr Muhammad Faisal (Director, Innovation & Commercialisation) signed the MoU on behalf of IBM Italia S.p.A. Pakistan and NUST respectively.



NUST & UBL - Commitment to Educational Equity

United Bank Limited has generously partnered with NUST to establish 05 scholarship endowment seats at the university. With this PKR 12.5 million collaboration, five deserving students at NUST will be able to pursue their educational aspirations at all times. The efforts of Engr Ghulam Akbar Bukhari have played a vital role in streamlining the collaboration between NUST and UBL. where you come first

Bank Islami & NUST to explore academia-industry linkage for Islamic financing

A new chapter of collaborative avenues for NUST's industry-academia linkages has recently been opened with a partnership with Bank Islami Pakistan Ltd. With an aim to positively impact the Islamic Banking and Finance paradigm in the country, the two organisations will collaborate to enhance the awareness and create research opportunities in the field of Islamic Finance



MOL Group and NUST - Enabling Education

NUST welcomed MOL Group as a partner to the programme in January 2019. The group has generously contributed PKR 4.05 million to establish an endowment seat, which will support a female student hailing from Karak, Hangu or Kohat.



NEED INITIATIVE IN LIMELIGHT



▲ Head of Advancement Ms Maria Qadri delivered a talk on the NEED Initiative at Corporate Social Responsibility Summit and Awards, held by National Forum for Environment and Health (NFEH) in Islamabad on January 4, 2019



▲ Rotary Club invited Head of Advancement Ms Maria Qadri for a panel discussion on Higher Education as an enabler at Rotary Corporate & Public Partnership Summit in Karachi on January 29, 2019



▲ Dr Nassar Ikram, Pro Rector RIC, during a collaboration meeting at Karachi Port Trust (KPT) on April 10, 2019, seeking their support for NEED initiative as well as other areas of collaboration.



▲ A University Advancement Office (UAO) team visited Peshawar in April 2019 for outreach and met with President Women Chamber Peshawar and President Small Industries Chamber.

The Annual Fundraiser -Zakat as an Enabler

UAO carried out an extensive and first-ofits-kind Zakat outreach campaign, to enable higher education for those who qualify on merit but are unable to afford academic expenses. With an overwhelming response from alumni, industry and NUST Family across the country, the campaign closed with 46 students supported.



NUST hosts event in honour of Karachi's business community

Pro Rector RIC Dr Nassar Ikram hosted a lunch reception at the Services Mess Club Karachi in the honour of the business and corporate community from around the City of Lights. The outreach event explored opportunities of collaboration with city's leading organisations, such as Tufail Chemicals, FPCCI, Pharmatec, Pakistan Oxygen Limited, Association of Builders & Developers of Pakistan, Fipro Enterprises, GSK etc; where notable executives appreciated NUST's efforts and pledged to support the cause.



NUST CORPORATE ADVISORY COUNCIL FORGING PARTNERSHIPS

Support Secured for FICS

Entities of strategic importance have graciously joined hands with Corporate Advisory Council (CAC) to support Finding Innovative & Creative Solutions for Society (FICS), an intra-NUST programme to promote social entrepreneurship. Some of these esteemed partners include **National Radio Telecommunication Corporation (NRTC), Khushhali Microfinance Bank Ltd and Sustainable Development Policy Institute (SDPI).**

<u>Groundbreaking Initiative with National Energy Efficiency &</u> <u>Conservation Authority (NEECA)</u>

NUST CAC and Project Management Office (PMO) partnered with National Energy Efficiency & Conservation Authority (NEECA) – previously known as ENERCON ¬– in 2018 to collaborate as a co-financing partner for the Global Environment Facility (GEF) Funded Project titled *"Delivering the transition to Energy Efficient Lighting in Residential, Commercial, Industrial and Outdoor Sectors in Pakistan."*

A delegation from NEECA recently visited NUST in May 2019 to discuss the co-financing aspects for supporting the GEF funded project.



<u>GE announces</u> scholarship award winner from NUST



GE Renewable Energy – Hydro Solutions, having one of the broadest portfolios in the renewable energy industry, recently announced the scholarship award winner from Pakistan. Mr Hissam Karim, a student of NUST School of Mechanical & Manufacturing Engineering (SMME), obtained a fully funded "Master in Hydraulic & Civil Engineering" at the prestigious Institut National Polytechnique de Grenoble (INP) in Grenoble, France.

<u>CAC welcomes Avanceon MEA</u> <u>aboard NCRA Scientific &</u> <u>Industrial Advisory Board</u>



NUST Corporate Advisory Council (CAC) has formally welcomed aboard Avanceon MEA on the Scientific & Industrial Advisory Board (SIAB) of the National Centre of Robotics & Automation (NCRA) at NUST College of Electrical & Mechanical Engineering (CEME). Mr Bakhtiar Wain, Founder & CEO at Avanceon MEA has given consent to join the advisory board. NUST CAC has already been working with Avanceon MEA on various academic fronts, primarily curriculum improvement.

<u>Curriculum Review - Feedback by</u> <u>CAC Industry Partners</u>



The Academics Directorate of NUST regularly holds curriculum review sessions for reviewing the Curriculum Framework of its constituent Schools & Colleges. These sessions are held to ensure the curriculum relevance and applicability to contemporary education systems and the contemporary market needs. CAC industry partners have played an active role in improving the academic programmes at NUST over the years. NBS, MCE, USPCAS-E, IGIS-SCEE, S3H, SEECS, CEME, PNEC and CAE conducted several curriculum review sessions in 2018 and 2019. CAC Industry partners, including Mr Ather Imran Nawaz, CEO Sybrid Pvt. Ltd/Former President OPEN Islamabad, Mr Asim Ghaffar, Vice President R&D, LMKR, Mr Liagat Ali Sultan, CEO Chinar Minerals Processing Mills Ltd, Mr Ahad Nazir, Project Coordinator Sustainable Development Policy Institute (SDPI), Mr Haroon Sharif, Vice President GIS, LMKT, Mr Muazzam Arsalan Bhatti, CEO Alfoze Technologies, Ms Samar Hasan, CEO Epiphany and Mr Khalid Khan, Chairman Central Asia Cellular Forum were part of various curriculum review sessions at NUST.

USPCAS-E signs MoU with FFCEL for "Wind Farm Repowering Project"

A Memorandum of Understanding (MoU) signing ceremony for a joint project titled "Wind Farm Repowering Project" between USPCAS-E and Fauji Fertilizer Company Energy Limited (FFCEL) was held on March 21, 2019. As part of the agreement, FFCEL will accommodate three to five USPCAS-E students in future for a six to eight week internship to assist their research projects.



NUST preparing students for industry through internships

During the first half of 2019, NUST has revised the model of NUST Internship Programme (NIP), making it mandatory for only third year students and optional for 1st and 2nd year students. First and second year students are placed in NGOs, trusts, community services and public sector organisations, whereas, third year students are placed in the relevant industries according to students' field of study. In order to make the programme more efficient and transparent, NUST has automated the entire process through an application developed by the ICT Directorate, named NUST Internship Program Application (NIPA). The application was launched on CMS in March.



Recruitment drives on the rise!

NUST Placement Office arranged 85 recruitment drives centrally for common disciplines and 104 such drives at NUST Schools & College between January to June 2019. Through these recruitment drives, NUST was able to offer 1900 job slots to its final year students. Consequent upon it, the recent graduates of NUST have already been offered jobs at the leading local and multinational companies, including Engro, Huawei, Unilever, Pepsi Co, Techlogix, LO'real, Bank Alfalah, Inbox Technologies, House of Habib, Telenor, Ufone, Fatima Group, to name a few. For off-campus recruitment, graduate profiles were also shared with the pool of over 850 industry partners.



Strengthening NUST FFC Cooperation

USPCAS-E Communication & Outreach Specialist & Industry Liaison Officer (ILO) visited FFC Energy Pvt Ltd on April 16, 2019 and held a meeting with the General Manager and Head Technical. During the meeting, detailed presentation was delivered highlighting the programmes being offered, testing and research facilities, new programmes, collaboration with private sector, etc.



CO-CURRICULARS

NIMUN '19

NUST International Model United Nations (NIMUN) had the successful run of its 8th edition from January 11 to 14, 2019. The event was set in motion with a felicitous opening ceremony. The chief guest, Deputy Head of Mission at the Australian High Commission, HE Mr Brek Bately, endowed the attendees with some words of wisdom.

NIMUN '19 made an impactful return for its 8th installment with one of the most important needs of the society as its tagline, "Embracing Differences," and the topics of discussion pivoted upon all 17 Sustainable Development Goals (SDGs) of the UN's 2030 Agenda for Sustainable Development. The aim was to highlight the causes, extent and consequences of different types of discrimination prevalent in the world, including racial, social, religious and sexual bigotry.

In comparison to the previous editions, the circle for discussions on world issues this year was upgraded by the incorporation of six new committees that, along with the rest, served as a stage for the delegates to attempt to resolve grave issues and develop their leadership skills. All 16 committees simulated served as catalysts to enlighten the youth and make them more socially as well as politically aware of the world around them.

The Diplomatic Meet was the highlight of the conference, allowing delegates to interact with reputed guests and diplomats. The guests for the occasion included Shakeel Ahmad, Chief of the Development Policy Unit at UNDP Pakistan; Ex-ambassadors Seema Ilahi Baloch, Zamir Akram and Fauzia Nasreen; Muhammad Kamran Akhtar, Director General of Arms Control and Disarmament in the Ministry of Foreign Affairs; Dr Talat Habib, owner of Nishan Foundation; and Ata-ul-Munim Shahid, Director General (EC and OIC).

The productivity of the committee sessions in the four days was revitalised regularly with social nights; nurturing friendliness and promoting an informal atmosphere of interaction between the participants from diversified backgrounds, in hopes of exposure and exchange of goodwill.



NUST INTERNATIONAL MODEL UNITED NATIONS 2019

The Global Theatre featured an amalgamation of countries under one roof, in all their glory. The Kaleidoscopic Journey, the themed formal dinner, symbolised the motto "Embracing Differences", perfectly encompassing the colorful reflections of humanity. The carnival, "Jashan-e-Khaas", witnessed an exceptional performance by artist Toshi with assorted food stalls set up for the audience.

The final day featured the closing ceremony, which concluded with the spellbinding talent of Attaullah Khan Esakhelvi at the Musical Night.

Meanwhile, Air University hosted AirMUN' 19 from April 5 to 7, 2019. An MCS team of 16 members participated with full zeal in the event. GC Attique-ur-Rehman was declared the winner of Best Delegate Award. GC Mashood Saleem won the Outstanding Diplomacy Award, while GC Muhannad Arshad, GC Hamza Abid, GC Abdul Qadeer Khan and NC Zahra Uzair received Honourary Mention Award.

Over 2000 participants from around Pakistan take part in Olympiad 2019

The 2019 edition of NUST Olympiad, one of the biggest and most popular co-curricular events of NUST, was held at the university's Islamabad campus from March 7 to 10, 2019. The four-day mega event was attended by over 2000 participants from various universities and educational institutions across Pakistan.

Olympiad is all about showcasing abilities, and providing a platform to participating students for unleashing their creative abilities and talents. The participants would also have the opportunity to demonstrate their potential in as many as 40 in- and out-door competitions in various sports, debate & declamation, mathelatics, e-gaming, etc. The special feature of this year's Olympiad was the amalgam of diverse social events, such as carnival, musical concert, etc., which were thoroughly enjoyed by the participants.



CEME Olympiad

Held on March 3, 2019, CEME Olympiad (2019) introduced some new events and had the hefty prize pool, which attracted participants from all over the country. The mega event took place under the collaborative supervision and efforts of Commandant's OIC and the Student body, which turned out to be quiet a successful journey in terms of statistics and bringing a colourful break to the otherwise monotonous routine. This year's sponsors included renowned names such as National Bank of Pakistan, Oil and Gas Development Company Limited, MPCL, Inglot and Eagle Security. Events were assorted in 5 categories namely Arts, Technical, Sports, Media Fest and Socials. The 4-day extravaganza witnessed incredible turnout in all categories. College of EME showed a hearty participation in every event and also managed to bag significant number of accolades. Over 5000 students from different colleges and universities showed up at the occasion.



MCS wins Annual RMU Debating Championship

A team from NUST Military College of Signals (MCS), comprising GC Abdul Qadeer Khan (BETE-52), GC Zaid (BESE-23), GC Abdullah (BETE-54) and GC Attiqueur-Rehman (BESE-21), participated in the "Annual Declamation & Debates Contest" held at Rawalpindi Medical University (RMU) on April 9 2019. After a thrilling contest of oratory skills, GC Abdul Qadeer Khan stood 1st in English Debates category and GC Attiqueur-Rehman secured 1st position in Urdu Category, and MCS was declared the champions of 2019.



All Pakistan Declamation Contest at DHACSS

All Pakistan Declamation Contest (APDC 2019) was held at DHA College & School System (DHACSS) on February 7, 2019. S/Lt Muhammad Ahsan PN got 1st position in Urdu serious category among 23 x teams from all over Pakistan.





Bidding farewell to UG Graduating Batches 2019

Continuing the new tradition set in 2018 of biding a befitting send-off to the graduating batches, NUST hosted a series of lunch and dinner receptions in the months of March and April, 2019, to say goodbye to the graduating batches of 2019.

"What we call the beginning is often the end. And to make an end is to make a beginning. The end is where we start from" – T S Eliot

Lt Hassan wins 2 gold medals at 26th National Shooting Championship

Lt Hassan Abbas PN, Staff Officer of PNEC, participated in the 26th National Shooting Championship held at Karachi from April 25 to May 3, 2019. He won 2 gold medals: 1 gold in "50 Mtr .22 Prone Rifle" event and the other one in "10 Mtr Air Rifle" event.







Riphah Tameer Entre Fest

Riphah University hosted a business plan contest "Riphah Tameer Entre Fest" on May 2, 2019. Team SHADR from MCS won the Overall Best Business Plan Award and was declared best overall presenter as well. SHADR is a cost-effective and smart helmet that uses various sensors to aid the rider and emergency services in times of accidents. The project is being supervised by Asst Prof Dr Mir Yasir Umair.

Oath-taking/Lapel Pins distribution

With a view to recognising the hard work put in by students for the smooth conduct of events under the auspices of Clubs & Societies, an Oath-taking & Lapel Pin award ceremony was held at USPCAS-E on February 22, 2019. Prior to the distribution of awards, all Office Bearers (OBs) were administered oath in a graceful ceremony. Pro-Rector Academics Dr Asif Raza graced the occasion as chief guest.





LUMUN 2019

A team of 7 students from CEME took part in Lahore University Model United Nations (LUMUN 2019) at Lahore University of Management Sciences (LUMS). Debates, discussions and diplomacy were all the game consisted of. The team performed real well and won various accords, including Honorary Mention, Special Mention, etc.

JOB FAIRS





MCS

NICE (SCEE)



MCE

NBS

NUSTIAN 19 63

SPORTS GALA

NICE-SCEE

The Student Council (SC) of NUST Institute of Civil Engineering Student Council-SCEE organised "NICE Sports Gala 2019" from March 25 to 29, 2019.Sports Gala is the signature event of NICE Student Council. The event consisted of 4 Houses, which competed in more than 15 different games. Students really enjoyed, as the gala provided them with a much-needed break from the hectic academic routine.



CEME

CEME sports gala kicked off on April 22, 2019, with the march past of all five companies followed by Inter Company Relay Races. The 4-day event included cricket, football, hockey, badminton, archery, and the list goes on to a total of 34 events. The finals of all the categories on April 25, 2019, the fourth and final day of the event. The chief guest at the closing ceremony was Commandant CEME, Brig Tariq Javed, SI(M), who gave away awards to the winners of various categories. The special feature of the closing was a fabulous display of martial arts and judo karate.



All Pakistan GIKI Sports Festival

PC Usman Tahir DE-37 of Mechatronics Engineering Department at CEME participated in "All Pakistan GIKI Sports Festival" and secured 2nd Position in the Squash Competition. The festival was held at GIKI from February 1 to 3, 2019.



Annual Drill Competition 2019 at CEME

ER UP SQUASH

The annual Drill Competition was held at NUST CEME on February 27, 2019. Morale of each participant was sky-high, which was reflected in their spellbinding performances and appreciated by the audience with thunderous applause.

UNIVERSITY SOCIAL RESPONSIBILITY

NUST Outreach Programme for Bright Students

NUST Outreach Programme is aimed at synchronising the raw talent and refining the faculties of the promising students, hailing from underprivileged areas of the country. The programme is being regularly conducted at Quetta, Peshawar and Hyderabad with the patronage of Southern Command, Headquarters 11 Corps and 5 Corps, respectively, in collaboration with Pakistan Petroleum Limited (PPL). The selected intermediate students attend 4-week preparatory classes for NUST Entry Test.





NUST Awareness Sessions

Admissions Directorate conducted 47 UG awareness sessions throughout Pakistan in 2019. The cities included Rawalpindi, Islamabad, Peshawar, Mirpur, Gujranwala, Faisalabad to name a few. Over12,000 students and faculty members attended the sessions.

Balochistan students' Exposure Trip to NUST

As many as 180 students and faculty members from universities and colleges of Balochistan visited NUST on June 24, 2019, as part of their exposure trip to Islamabad. Students were given a comprehensive presentation on NUST, followed by visits to various labs and facilities of NUST School of Mechanical & Manufacturing Engineering (SMME). The faculty and students showed interest in Robotics & Automation related research being carried out at NUST.



Over 600 blood pints collected at NUST Blood Camp 2019

NUST Community Services Club (NCSC), in collaboration with Jamila Sultana Foundation, held "Blood Donation Camp 2019" at NUST Islamabad campus in the first week of April. A good number of volunteers – students, faculty and staff – donated blood during the 4-day camp. A record number of 600+ pints of blood were collected during the campaign, as compared to the previous donation drives held under the auspices of NCSC. All donations have gone to patients suffering from Thalassemia – an inherited blood disorder characterised by abnormal haemoglobin production. It may be noted that NCSC has also set up a blood bank at Jamila Sultana Foundation. Any one from NUST students, employees and alumni can collect blood from the bank in any emergency situation.



Blood donation drive at MCE

Students at NUST Military College of Engineering (MCE) have always proved to be forthcoming when it comes to community service. Hence, the College organises a blood donation drive each semester. Students from all semesters actively participated in the donation camp held recently at the College. Thirty-one students took part in the camp to help those suffering from Thalassemia and in dire need of blood donations.

Meanwhile, 550 pints were collected during a 3-days blood donation drive held at CEME.



NCSC Eye Camp 2019

Continuing with its tradition, NCSC organised yet another successful free Eye Camp this year in collaboration with Al-Shifa Eye Trust. The camp took place at NUST Medical Centre from March 14 to 18, 2019. The camp offered free eye checkups, medicines and spectacles. A total of 1100 faculty, staff, officers and students benefitted from the Camp.



MARCH FOR EARTH

In celebration of NCSC's theme of the month, "March for Earth", a plantation drive was held by NCSC in collaboration with the Administration Directorate on March 28, 2019 at NUST Hiking Trail. An astounding 1035 saplings were planted during the drive.



MCE students organise "Play for Change"

Students of MCE organised a charity event "Play for Change" at the College from April 22 to 25, 2019. The event is held in the Spring semester every year. It comprises sports events, which generate funds for charity. The sole purpose of event is to collect charity for supporting the needy and less privileged in the society.



Vocalise Your Talent

As part of the NUST Olympiad 2019, the event "Vocalise Your Talent" took place under the headship of NUST Community Service Club (NCSC) at ASAB Seminar hall. The event provided ground to the children from Aghosh Al-Khidmat Orphanage to showcase their talents.



NCSC introduces "Catch the Trash"

NUST Community Service Club (NCSC) introduced "Catch the Trash" initiative – a cleanup drive in collaboration with World Wide Fund for Nature (WWF), Pakistan from March 20 to 21, 2019. The volunteers visited two central locations, Rawal Lake and G-9 Markaz, in Islamabad, collecting litter and raising public awareness towards keeping the environment clean.



COMMUNITY SERVICE LEARNING COURSE PROJECTS



277 notebooks donated at Saya School F-11, Islamabad



Visit to MGQ Old Home Murree Road, Rawalpindi

UNIVERSITY SOCIAL RESPONSIBILITY

Community services projects

Students of MCE recently organised an institution-wide drive of collecting clothes, shoes and toys for children of the support staff. The essence of the entire drive was to bring smile on the faces of those who keep supporting the institution wholeheartedly and still remain away from the spotlight.



Water Conservation awareness campaign at FG Boy Shahood Alam Shaheed High Secondary School Islamabad:



Visit to OPF school







Installation of sustainable water filtration plant in Kalamabad village of new Murree





Book donation to Bradarie Foundation



Teaching at EHD School



Wall painted at Al Farabi Centre G-8/4

UNIVERSITY SOCIAL RESPONSIBILITY



Water conservation awareness visits to schools



A day with children at Bazeecha Trust, a local orphanage located in Bani Gala

Community Services - CEME Students

Keeping the spirit of community services alive, the impassioned college students made sure to take time out of their academic activities to lend a helping hand to those in need. Here is a brief review of projects conducted in the academic year 2018 -2019.

Visit to Faiz-ul-Islam

Here, we believe that happiness is only real when shared. To make the jubilant occasion of Eid more joyful, students paid a visit to Faizul-Islam orphanage and spent the day with the little

angles to make them feel loved and a little less lonely, and all of them were even given Eid gifts to make the day as special as it should be.

Iftar Drive

During the holy month of Ramadan, students of CEME arranged Iftar drives for the less privileged. One such drive was arranged in collaboration with Helping Hands, which catered to around 200 people.



Baghban Old Age Visit

Students visited old age home, Baghban, right after Eid-ul- Fitr, in order to compensate for the loneliness of people living there and to break the monotony of their lives. Gifts were arranged for the elderly along with dry ration sufficient for a month.





Taray Zameen Par

CEME students arranged a trip of students from Hassan Academy to the College. The purpose was to engage them in various fun activities and enhance their confidence. The event included horse-riding, sports and a brief trip to the college area.

ALUMNI AFFAIRS

Alumni swarm in at NUST Alumni Homecoming 2019; Abrar-ul-Haq, Bilal Khan perform live

NUST extended a very warm reception to an overwhelming number of its alumni from the pioneering batches to the ones most recently graduated at the "4th NUST Alumni Homecoming" here at the main campus from March 1 to 2, 2019.

The highlight of the event was the "2nd Annual Alumni Conference," which hosted alumni from far

and near, including some of the most excelling individuals



from NUST's ever-expanding family of 34,000 graduates. They conducted panel discussions on career management and forging unique professional paths. The conference concluded with the remarks by Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, who appreciated alumni for their participation, and keen commended their various

contributions towards the development of their alma mater. Alumni relived their old memories by staying in campus dorms. A lakeside bonfire and live PSL screening fostered reminiscent conversations and joyous laughter. Earlier on the morning of March 2, following a brunch hosted by Rector NUST, a host of various outdoor activities were also conducted. The Jashn-e-Baharan festival featured avenues for wholesome activities in the form of a family carnival, kite-flying and a food court, which were truly a sight to behold. The evening culminated with a spectacular musical performance by none other than the iconic Abrar ul Haq and the charismatic Bilal Khan. The audience moved to the groove of Abrar's upbeat performances and swooned over Bilal's soulful tunes as they took in the decorated landscape of NUST, a place they call home.











Rendezvous with Senior Alumni

Many of NUST senior graduates have risen to top managerial and technical positions in some of the leading organisations around the globe. These alumni act as a liaison for the industry-academia collaborations. Briefs of visits to NUST by some senior alumni are highlighted below:

Dr Sajid Siraj, Associate Professor at Leeds **Business School, UK**

Dr Sajid Siraj, a NUST CEME graduate and Associate Professor at Leeds Business School, UK, visited NUST on April 9, 2019. He held meaningful discussions with the university high-ups for enhancing cooperation between NUST & Leeds Business School. He also called on Lt Gen Naweed Zaman, HI (M), (Retd), Rector NUST, to share the details of possible collaboration avenues, including research, student and faculty exchange, etc.

Mr Kashif Hasnat from A T Kearney USA

Mr Kashif Hasnat Khan, an alum from CEME class of 2005, is currently acting as a senior Manager at A T Kearney, USA. He visited NUST on March 13, 2019, and delivered a very engaging talk to students of SMME. He also met with Pro-Rector RIC Dr Nassar Ikram in the latter's office.

Mr Saad Akber from Halliburton, KSA

Mr Saad Akber, another CEME alum from the class of 2005, is currently working as Drilling Engineer at Halliburton, KSA. He spent a day NUST Islamabad campus on March 13, 2019. The visit included an interactive session with SCME students on Career Management, and a meeting with Principal SCME, Principal S3H and Director Academics.

Alumni from Silicon Valley USA & UAE

Mr Raheel Bodla, a CAE graduate and a Success Coach at Silicon Valley, USA, visited NUST on March 29, 2019. Similarly, Mr Wagas Ali Tunio, an alum from PNEC Manager Projects at Abbott and Mr Kamran Haider, Regional Sales & Product Manager - EMEA at Globus Group UAE joined the alumni talk session.

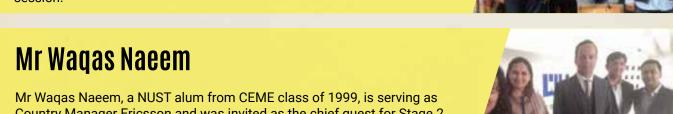
Mr Wagas Naeem

Mr Waqas Naeem, a NUST alum from CEME class of 1999, is serving as Country Manager Ericsson and was invited as the chief guest for Stage 2 FICS ceremony.













Alumni Meetups around the World

While the engagement of NUST alumni with their alma mater is of significant importance, it is also immensely important that the network members interact among themselves on regular basis. In the period from January to June 2019, alumni attended get-togethers on different occasions.

271 alumni in 16 cities from 4 continents got together along with their families to celebrate Ramzan blessings.



Nustians USA Southeast Chapter hosted its first meet-up at the start of Spring season 2019 in Atlanta.



NUSTIANS Annual Strategic Meeting was held in Bay Area, California in March 2019.



Nustian USA chapter held its first annual meeting to discuss the Vision2020 on March 11, 2019.

Nustians USA NYC/NJ Chapter met on April 27 2019. This turned out to be an excellent networking and socialising opportunity to meet and greet with fellow Nustians in New York, USA.



Nustians Chicago Chapter's 1st meet-up of 2019 on February 2, 2019.



MCE NUST alumni get together in Sydney, Australia on April 20, 2019.



NUST alumni KSA chapter celebrated Pakistan Day at Pakistan Embassy in Riyadh.



NUST Alumni Lahore Chapter organised Meet & Greet sessions at local hotels on February 11 and 23, 2019.

Alumni Talk Series Cracking the Code- How to land your first job

Alumni Talk Series session on "Cracking the Code- How to Land Your First Job" was held for the the graduating batch of 2019. The session aimed to equip the students with insights into the corporate world, and sought to share tips and tools to navigate the start of their professional journey, and more specifically with respect to landing their first jobs. Mr Taimur Aziz Bhatti, from NBS Class of 2005, currently working as VP HR Nayatel, and Mr Umais Rasheed, NBS Class of 2010, currently working as Senior HR Partner at Telenor, were the guest speakers for the session.



Beyond the National Borders

NUST alumni abroad can play a critical role in the brand building of the University, and in supporting NUST in its nation building endeavours. It was due to this reason that any alumni faculty or staff member going abroad is requested to meet the alumni present in that region.

Bay Area alumni & NUST Global Acceleration Program (GAP)

Another year and another shout-out to NUST alumni at Silicon Valley for all the support and networking opportunities they provided to NUST Technology Incubation Centre (TIC) cohort from Global Accelerator Program (GAP)! The GAP team and startup founders networked with NUST alumni based in the Bay Area.



School Level Reunions

SMME and RCMS joined hands with the NUST Alumni Office to host School level alumni reunions. The aim of such events is to build a long-term relationship of NUST alumni with their alma mater. Alumni attended the events in large numbers and met with the Principals and HoDs of their respective institutions.

NUST Alumni Portal is Live & Growing!!!

NUST graduates are its asset. In order to engage them at an enhanced level, NUST has recently launched its Alumni Portal. The portal is Live to connect with NUST community around the world. With this version, one could be able to do multiple things with only a few clicks. All one has to do is to create their profile by visiting www.alumni.nust.edu.pk. By signing up, an alum joins the loop of NUST alumni network.

List of Abbreviations NUST Institutions/Directorates

ACAD	Academics
ASAB	Atta-ur-Rahman School of Applied Biosciences
C ³ A	Centre for Counselling & Career Advisory
CAC	Corporate Advisory Council
CAE	College of Aeronautical Engineering
CDC	Career Development Centre
CEME	College of Electrical & Mechanical Engineering
CIE	Centre for Innovation & Entrepreneurship
CIPS	Centre for International Peace & Stability
HR	Human Resource
IESE	Institute of Environmental Sciences & Engineering
IGIS	Institute of Geographical Information Systems
ILO	Industry Liaison Office
MCE	Military College of Engineering
MCS	Military College of Signals
MRC	Manufacturing Resource Centre
NBS	NUST Business School
NICE	NUST Institute of Civil Engineering
NIPCONS	NUST Institute of Peace & Conflict Studies
NIPS	NUST Institute of Policy Studies
NIT	National Institute of Transportation
NPO	NUST Placement Office
ORIC	Offices of Research Innovation & Commercialisation
РМО	Project Management Office
P&PR	Publishing & Public Relations
PDC	Professional Development Centre
PNEC	Pakistan Navy Engineering College
SA	Student Affairs
QA	Quality Assurance
RCMS	Research Centre for Modelling & Simulation
RIMMS	Research Institute of Microwave & Millimetre-Wave Studies
S³H	School of Social Sciences & Humanities
SADA	School of Art, Design & Architecture
SCEE	School of Civil & Environmental Engineering
SCME	School of Chemical & Materials Engineering
SEECS	School of Electrical Engineering & Computer Science
SMME	School of Mechanical & Manufacturing Engineering
SNS	School of Natural Sciences
TIC	Technology Incubation Centre
USPCAS-E	US Pakistan Center for Advanced Studies in Energy



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