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National University of
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Bi-monthly Newsletter



NUST makes it to top
100 world varsities
aged under 50

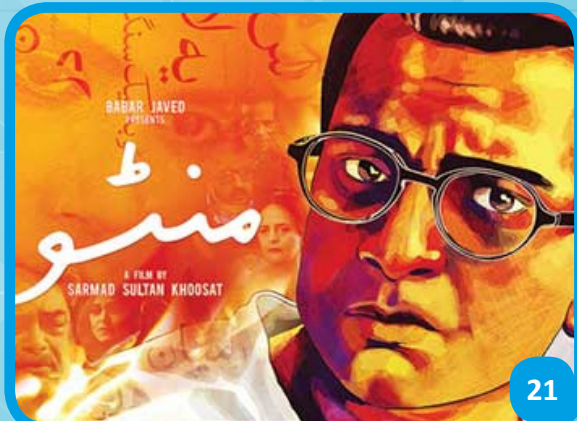


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NUSTNEWS is a bi-monthly publication of Publishing and Student Affairs Directorate, covering various activities from across the University.



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NUST makes it to top 100 world varsities aged under 50



National University of Sciences and Technology (NUST) has been ranked at 85 among world's top less-than-50-year-old universities by QS (UK). The ranking is aimed at recognizing the fast-emerging young universities, who have made their mark internationally.

It is pertinent to mention here that NUST has ac-

quired a strong academic reputation in just 24 years of its inception. Its core values of quality, merit, entrepreneurial character, community engagement and sustainable development promotion have earned it a good name globally. NUST is today the dream of every young aspiring man and woman.

College of E&ME inks MoU with EESINT

A Memorandum of Understanding (MoU) was signed between Electrical Engineering Solutions International (EESINT) and NUST College of Electrical and Mechanical Engineering, to establish a state-of-the-art Automation and Programmable Logic Controller (APLC) Lab in the Department of Mechatronics Engineering.

Under the MoU, EESINT will set up an automation lab in the Mechatronics Department by installing the latest Siemens equipment including S7 PLCs, Human Machine Interface (HMI) operator panels, along with all the simulating tools for the PLCs. EESINT will also install one SCADA system and run PROFI-



BUS Networking courses. The total estimated cost of equipment provided by EESINT is around Rs 7 million. The lab will be used for the conduct of short courses, final-year projects and labs for semester courses.

Installation of 16 water wells in Thar

NUST initiative featured in QS wow-story newsletter



With a view to recognizing NUST community service efforts, QS News2WOWU, a newsletter published by the renowned ranking agency Quacquarelli Symonds, has featured in its latest edition one of the University's initiatives, i.e., installation of 16 water wells in Thar. The newsletter is a quarterly publication and covers wow stories pertaining to universities' academic achievements, experiences, and developments that are extraordinary, outstanding, and unique.

NUST Community Service Club (NCSC), with the support of NUST Administration, had successfully completed installation of 16 water wells in Thar. The project was carried out in collaboration with Association for Water, Applied Education & Renewable Energy (AWARE), which worked hand in glove with NCSC for the installation of the wells in the Union Councils of Khejrari and Fageer Abdullah Taluqa and District Umerkot.

The Thar Desert creates a natural border between Pakistan and India, and remains susceptible to recurrent droughts and famines due to erratic rainfall patterns. Water scarcity is a major issue that has had adverse effects not just on the human population, but also on their main source of sustenance – the livestock.

Two students from NUST belonging to Thar visited a number of sites on May 22, 2015, and met community partners for a need analysis survey before initiating the project.

The major purpose of the project was to make it easier for the villagers to draw up underground water, so that they would get some relief from the difficult practice of dragging out water from a depth of 200 feet. Around 5,000 people residing in over 900 households have benefitted from the initiative of NUST. The project was successfully completed by the end of August 2015.

The main objectives achieved from the installation of the wells include: provision of safe drinking water for around 5,000 people from 11 villages; reduction of absenteeism and drop-out ratio of school-going children through easy access to water; promotion of a participatory development approach through community engagement; and improvement of health and hygiene by the provision of safe drinking water and raising of awareness among the locals.

A feasibility study for 10 more wells has been requested from AWARE by NCSC. The installation of these wells is expected to be completed in 2016.

Rector commends HEC in interview to USA TODAY

In an interview recently published in a supplement of the American newspaper, USA TODAY, Rector NUST Engr Muhammad Asghar has praised the role of Higher Education Commission of Pakistan in revolutionizing approach to higher education across the country.

"After its establishment, HEC promoted the research culture and valued creativity. The research and creativity which were never given importance in the past have now become so indispensable that one can't survive in the university without it," said Mr Asghar, adding Pakistan was among the top 10 countries in the world for its number of scientists and engineers, and much of the credit went to the HEC.

He further said that the HEC emphasized on the quality and relevance of education and believed in increasing the access to education for all. The rate of access to higher education was 2.6% in 2002, which had increased, in a matter of just over a decade, to about 10% of the university-aged population, he added.

NUST is an example of the success experienced by higher education institutions in Pakistan in recent years. When Mr Asghar became the Rector eight years ago, the student population was 5900. However, it is more than 15000 today. The university admits students only on the basis of merit, which gives the student population a mix of quality from all socioeconomic classes. "We select one out of every 35 candidates, and they are the best of the best," Mr Asghar shares.

Speaking on the US-Pakistani education partnership, Mr Asghar said, "Pakistan has been a long-time ally of the US and that gave us the opportunity to benefit from that educational system in the past. And we don't have any second opinion about USA's education being the best one. Therefore, we would like to benefit from this leading system. We have visited US many a time and our observation is that at the individual level, excluding politics, Americans are friendly and very good human beings. At the same time Pakistanis also possess the same traits. Hence, they study and work together in a very conducive environment. In engineering and technology we follow the US system."

ASAB faculty wins research grant



Dr Attiya Bhatti, HoD Healthcare Biotechnology at Atta-ur-Rahman School of Applied Biosciences (ASAB), has won an HEC research grant worth Rs 2.1 million on Type-II Diabetes. The main focus of the project will be the identification and characterization of susceptible genes involved in the disease progression, particularly in the Pakistani population. Ultimately, this research aims to discover potential targets for drug development.

Top journal highlights RCMS research

Current Opinion in Structural Biology is one of the leading journals in the field of biology. In its Editorial Overview (Curr. Opin. Struct. Biol. 2015, 31, v-vi), the journal has highlighted a review article written by RCMS faculty member, Dr Farooq Ahmad Kiani. According to the editorial, "The review by Kiani and Fischer offers a great example of the importance of monitoring the local dynamics precisely in order to decipher the appropriate global catalytic mechanism of ATP hydrolysis in myosin motors during contraction." The original focus of this review article was to demonstrate the mechanism by which adenosine triphosphate (ATP) is hydrolyzed in the molecular motor myosin during muscle contraction and the reports by Dr Kiani and Fischer are noteworthy.

College of E&ME holds 21st convocation

College of Electrical and Mechanical Engineering held its 21st convocation on October 8, 2015. Rector NUST Engr Muhammad Asghar graced the occasion as chief guest. As many as 300 graduates were awarded bachelor's degrees, while another 148 conferred postgraduate degrees in the disciplines of Electrical, Mechanical, Computer, Mechatronics Engineering and Engineering Management. For best performance in Master of Science in Engineering, President's Gold Medals were awarded to Engr Shifa-al-Ain Sheikh in Electrical Engineering, Engr Sidra Rashid and Engr Abdul Basit in Computer Engineering, Engr Saad Sheikh in Mechatronics Engineering, Engr Muhammad Latif in Computer Software Engineering, and Engr Hassan Raza, Engr Ikram-ul-Haq and Engr Tanveer Ahmed in Engineering Management. President's Gold Medals at undergraduate level were awarded to students securing 1st positions in academics. Engr Waleed Ilyas, Engr Qasim Nazir, Engr Mashal Fiaz and Engr Razeen Hussain were awarded gold medals in Electrical, Mechanical, Computer and Mechatronics Engineering, respectively.

Chief of the Army Staff Gold Medal for Best Technical Cadet of the year was conferred upon Engr Muhammad Ubaid-ur-Rehman. Rector's Gold Medals for outstanding contribution in the undergraduate projects were awarded to Engr Muhammad Farjad



Hassan of Electrical Engineering, Engr Qasim Nazir of Mechanical Engineering, Engr Ahmad Khaliq of Computer Engineering and Engr Razeen Hussain of Mechatronics Engineering.

Best researcher of the year award was given to Assistant Professor Dr Noreen Sher Akbar, while Engr Nasir Rashid was declared best teacher of the year.

Addressing the audience, the chief guest congratulated the graduating students and appreciated College of EME for providing exceptional engineering skills to the graduates. Brigadier Aftab Ahmad Khan Lughmani, Commandant NUST College of E&ME, also spoke at the occasion mentioning the achievements of the students in a variety of national and international competitions.

Convocation of 79th Engineering Course held at CAE

The convocation of 79th Engineering Course of College of Aeronautical Engineering (CAE) was held at PAF Academy, Risalpur on October 12, 2015. Rector NUST Engineer Muhammad Asghar, was chief guest at the occasion. In his welcome address, Commandant CAE gave an overview of the curricular and co-curricular activities held at the college.

The chief guest conferred degrees in Aerospace and Avionics Engineering upon 65 students among whom were also officers of Royal Saudi Air Force. He also awarded Merit Certificates, Gold and Silver Medals to the distinction holders. Merit Certificate for best Aerospace Vehicle Design was awarded to Senior Gentleman Cadet Muhammad Hamza, while Merit Certificate for Best Avionics System Design was awarded to Senior Gentleman Cadet Zain-ul-Abideen. Rector's Gold Medal for Best Project in Aerospace Engineering was awarded to Pilot Officer M Naveed Tahir, Rector's Gold Medal for Best Project in Avionics



Engineering was awarded to Pilot Officer M Waleed Shams, Chancellor's Silver Medal for standing second in Aerospace and Avionics Engineering were awarded to Pilot Officer Shahan Qamar and Pilot Officer M Anis Jameel, respectively. President's Gold Medal for standing first in Aerospace and Avionics Engineering were awarded to Nust Cadet Faseeh Ahmed Khan and Nust Cadet Muzammil Bashir, respectively.

The chief guest advised the graduates to pursue new horizons of opportunities and undertake new enterprises to find multi-dimensional solutions to the problems facing the country."

College of E&ME excels at NERC 2015

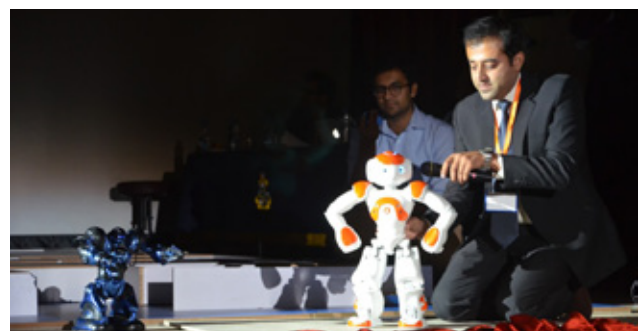


The month of September saw the commencement of the 13th National Engineering Robotics Contest (NERC) at NUST College of Electrical and Mechanical Engineering. The mega event is the oldest and biggest robotics contest in Pakistan, which attracts participants from all over the country. This year around 100 teams from various universities took part in the contest.

NERC 2015 consisted of two categories: the indigenous and the modular. In the first category, the robots are designed and built from scratch, while in the latter, the robots are made from off-the-shelf robot construction kits. The four-day event started on September 10, with the registration and measurement of the participating teams. The second and third day comprised the qualifying rounds in which all the teams were given a chance to compete. The best 32 teams out of these were chosen on the basis of the points they earned in the qualifying rounds. These teams participated in a head-to-head manner against each other on the final day of the competition. The closing ceremony of NERC 2015 was held on September 13. The chief guest, Lt. Gen (R) Tanveer Tahir HI (M), gave away the prizes to the winning teams.

College of E&ME emerged victorious in this year's contest. Team "Badar" from the college was the winner of NERC 2015, bagging a prize of Rs. 100,000. First runner-up team "Eagle Claw" from College of Aeronautical Engineering (CAE) was given a prize of Rs.75,000. Team "SPOC" from College of E&ME was the 2nd runner-up receiving a prize of Rs.50,000. In the Modular category, the winner was team "Band

of Brothers" from NUST College of E&ME bagging a prize of Rs 20,000 and team "Kitashi" from Cadet College Hasanabdal was the first runner-up receiving a prize of Rs 10,000. Various prizes amounting to Rs. 1,50,000 were also given in other categories, which included Best Engineering Design Award, Participation and Performance Awards and EME Award. These prizes were secured by teams from NUST College of E&ME, Air University, UET Lahore, UET Faisalabad, SSUET Karachi and LUMS. A large number of guests attended the event from all over Pakistan, including senior military officers, representatives of renowned industries, deans and various senior faculty members and members from the print and electronic media.



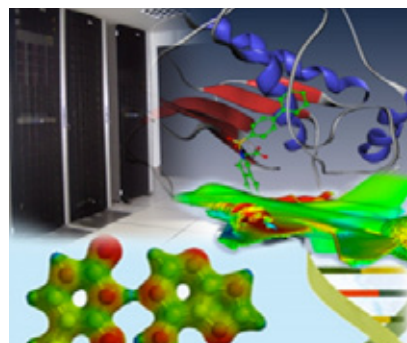
ASAB faculty to proceed abroad for postdoctoral fellowship

Dr Nasar-um-Minullah from Atta-ur-Rahman School of Applied Biosciences (ASAB) is proceeding to Cluster of Excellence in Plant Sciences at University of Cologne, Germany for postdoctoral fellowship. He will work with a Max-Planck Professor on Plant Immunity Evasion by Mycorrhizal Species. The Cholistan Desert of Pakistan is home to huge resources of Mycorrhiza including *Piriformospora indica*, which serves as a biocontrol agent against plant pathogens.



Six licensed software added to RCMS inventory

Scientific software are very powerful tools in modern day education and research. Research Centre for Modeling and Simulation (RCMS) has recently added six licensed software to its inventory. In addition to improving the classroom teaching, these software will also bolster the postgraduate research. All these software are installed on RCMS super-computer and hence accessible from all schools, colleges and centers of NUST. The software include MOE, GOLD, TURBOMOLE, CHARMM, GAUSSIAN 09 and ANSYS-CFD.



NUST Alumni Talk Series 2015 at SMME

University Advancement Office (UAO) in collaboration with Industry Liaison Office (ILO) organized the Alumni Talk Series 2015 – Episode 1 at School of Mechanical and Manufacturing Engineering (SMME) on September 29, 2015. The event was graced by NUST alumni, who shared their professional experiences and guided the students about career management. The guest speakers included CEO & Co-founder Xecofy Mr Ali Hसनain Shah, Business Development Executive CCBL Bilal Iftikhar and Maintenance Engineer Attock Gen Limited Awad Awan.



RCMS inducts two new faculty members

Dr Shumaila Sayyab and Dr Zartasha Mustansar have joined RCMS as Assistant Professors in September 2015, in the specialization streams of Bioinformatics and Biomedical Engineering, respectively.

Dr Shumaila has done her PhD in Bioinformatics from Swedish University of Agricultural Sciences, SLU, Sweden, while Dr Zartasha Mustansar holds a PhD from the University of Manchester, UK.

TIC entrepreneurs flourish at Pakathon Global finals, Canada



Pakathon is a global Hackathon event during which students from Pakistani universities and across the world participate to propose self-sustainable solutions of some of Pakistan's most pressing issues.

Technology Incubation Centre (TIC) has been hosting the NUST Pakathon for the last three years and its teams have consistently received international recognition. This year Pakathon included universities from Australia, Middle East and the UK in addition to North America and Pakistan. Held from October 16 to 18, 2015, the event was attended by esteemed entrepreneurs including Farrukh Malik, CEO DiscreteLogix, Mr Saleem Rafik, NADRA, Waqas Jabbar, CEO Softrove and Tahir Chaudhry, CEO Pakistan Institute of Entrepreneurs.

The top three teams that won the NUST Pakathon were Team Doctor Phoenix, GAPS and Team Green Thumbs and were given awards of Rs. 50,000, Rs. 30,000 and Rs. 20,000 for 1st, 2nd and 3rd positions, respectively. Team Green Thumbs was selected to pitch their plan at the Pakathon Global finals held at the Aga Khan Museum in Toronto, Canada on November 8, 2015. Keeping up with the entrepreneurial excellence at NUST, Team Green Thumbs went on to win the Global Finals in the Pakistani Teams category. Team members Awais Saeed, Umair Zubair and Salman Ahmed were not only able to secure cash awards as seed money to start their businesses and make prototypes but also get an opportunity to join global incubators.

World Mental Health Day observed at DBS

Department of Behavioral Sciences, School of Social Sciences and Humanities (S³H), celebrated World Mental Health Day on October 13, 2015. This year's theme was "Dignity in mental health."

A poster competition was organized and students from different schools of NUST and other institutions in Islamabad like National Institute of Psychology and Fatima Jinnah Women University submitted digital and hard-form entries. Later, segments such as "showcase of these entries, interactive session with youth, open



air theatre and walk around S³H" were arranged to show solidarity with people having mental health problems. At the occasion, Dr Salma Siddiqui, Head of De-

partment of Behavioral Sciences, talked about the negative impacts of stigma on personality development and stressed not to stigmatize people with mental illness.

NUST *Bazm-e-Pakistan* holds *Uth Jawana 2.0*



NUST *Bazm-e-Pakistan* has always come up with something cultural and patriotic yet entertaining. This time around, *Uth Jawana 2.0*, a motivational talk on *Tahreek-e-Pakistan, Nau-Jawan aur Quaid* was ar-

ranged on Sep 17, 2015. A renowned scholar, Orya Maqbool Jan, was the guest speaker at the occasion.

In his speech, Mr Orya shed light on the importance of education and morality. He urged the audience to make prudent choices both in terms of acquiring and imparting education for it held the key to national development. He cajoled the youth into investing all their energies in seeking education, and preparing themselves for the challenges of the ever-changing world.

Towards the end, Rector NUST Engr Muhammad Asghar also expressed his views on the topic. He thanked the esteemed guest for the words of wisdom he shared with the students.

Quality messing at hostels praised

NUST is a symbol of merit and quality. The University has instituted such a system whereby only the best students manage to get enrolled in different programs of studies. But once entered, the effort is worth their while. The rewards come in the form of high-standard facilities and services. The University administration pays special attention towards ensuring hygienic environment in hostels. The messing facility, for instance, functions with zero compromise on quality food. It enables the students to enjoy the home-like feeling on campus and fully concentrate on studies. When students were randomly asked about the quality of messing in their respective hostels, they expressed their views in the following words:

"I am very happy with our mess quality and services. The mess staff is very cooperative." (Falak Sher, PhD)

"During my academic career, I have been to many places (hostels, messes) but the quality that NUST mess provides is top of the chart. The management is very cooperative; cleanliness in the mess



halls and the kitchen is unprecedented." (Waleed Hassan, MS)

"I feel happy to write that food of (hostel) mess is highly standardized, comparable to any of the best messes or restaurants in the town. The conduct of staff is very amicable. Mess cleanliness is also excellent. I must say that there is no match to this mess food and whenever I get a chance (in future), I will visit it again." (Faizan, 102 EB)

"The food quality in Rumi-1 merits mention, as it has won the

confidence and praise of all living here. The messing and kitchen staff is very courteous and deserves appreciation." (M. Kamran Mahmood)



VISITS

Engineering Faculty Dean of Paktia University, Afghanistan

Mr Hazratullah Paktin, Dean of Engineering Faculty, Paktia University, Afghanistan visited NUST on October 29, 2015. Upon arrival, the guest had a preliminary session with Registrar NUST, Engr Salim Daud before a meeting which was also attended by other senior officials of the University. The guest was briefed about establishment, institutions, programs and future plans of NUST. Mr Hazratullah appreciated NUST's infrastructure and facilities provided for its faculty and students to ensure quality teaching, learning and research. He expressed his strong desire to establish formal collaboration between NUST and Paktia University in the areas of joint research and exchange of faculty and students.



Delegation from Civilizations Public School, Karachi

A 50-member delegation comprising students and faculty of Civilizations Public School, Karachi, visited NUST on October 19, 2015. Upon arrival, the delegates were given a detailed briefing on the establishment, constituent institutions and academic programs of NUST. The students were particularly apprised of the admission process and programs offered in various disciplines. The briefing was followed by a question and answer session and a guided tour

of NUST Business School (NBS) and School of Art, Design and Architecture (SADA), where the visitors got themselves familiarized with the University atmosphere and showed keen interest in different student projects on display.

The delegation appreciated NUST's infrastructure and facilities provided for its faculty and students, and also thanked NUST for hosting such an informative visit.



MCE students at SCEE

As many as 200 students of Military College of Engineering (MCE) visited different institutes of SCEE as part of their study on October 13. They were given a briefing on NUST at the NIT seminar hall. Later, they were conducted to SCEE institutes, i.e., NIT, NICE, IESE and IGIS, in four groups.



UN Military Observer Course & UN Staff Officer Course held at CIPS

UN Military Observer Course-10 and UN Staff Officer Course (UNSOC-8) were organized by Centre for International Peace & Stability (CIPS) at NUST main Campus from Oct 05 to 16 and 19 to 30, 2015, respectively. Diplomats, defence attachés and representatives of UN agencies attended the opening and closing ceremonies of the courses. Collectively, 40 officers from Pakistan Army and 7 foreign officers from Bangladesh, China, Myanmar, Nigeria and Sri Lanka attended the courses.



ASAB faculty attends 2nd ACSE Annual Meeting

The Asian Council of Science Editors conducted its 2nd annual meeting on Aug 13, 2015 at the Metropolitan Palace in Dubai, UAE. The theme of this year's Annual Meeting was "Trends in Academic and Scholarly Publishing in Asia". The participants included a number of well-known editors, editors-in-chief of various prestigious scientific publications, vice chancellors and academics from universities in Malaysia, Qatar, Pakistan, Venezuela, India, Sri Lanka, Egypt, Iran, Turkey, United Arab Emirates and United Kingdom. Dr Muhammad Qasim Hayat of ASAB represented NUST in this meeting.



Seminar on “Passive Cooling Techniques”

A lecture on “Passive Cooling Techniques” was arranged on October 7, 2015, in NIT Auditorium for the UG 2012 and 2014 Civil Engineering Batch of NUST Institute of Civil Engineering. The guest speaker for the occasion was Engr Syed Jibran Hashmi who is the CEO of ENCON (Pvt) Ltd Pakistan.

Mr Jibran spoke about passive cooling techniques being used all over the world. He explained that passive cooling uses materials to control heat and maximizes use of free solar energy for heating and lighting. It also maximizes use of free ventilation for cooling and uses shade (natural or architectural) to control heat gain. It attempts to use natural principles in order

to substantially reduce dependence on fuel based technologies for heating, cooling and lighting the building.

Guest speaker mentioned that passive solar heating and passive ventilation for cooling assist in creating sustainable building by reducing dependency on fossil fuels for heating and cooling buildings, as well as reducing the need for electricity to support lighting by using practices of day lighting in buildings. He also mentioned that in LEED or other rating systems, Passive Design assists in gaining points in the Energy and Atmosphere category, as well as in Indoor Air Quality as Passive Design promotes natural ventilation and

day lighting strategies.

After introducing the concept, he briefly differentiated between active and passive cooling techniques. The speaker also presented different strategies used currently in Pakistan for passive cooling among which Earth Air tunnel, Evaporative cooling and vegetations in buildings are important.

After that, he explained two main methods of preventing overheating which are Prevent the sun from hitting the glass (done using roof overhangs, special shading devices or vegetation) and Use special glazing (that filters the harmful rays out of the sunlight striking the glass).



Seminar on “Chemicals in Construction Use”

A lecture on “Chemicals in Construction Use” was arranged on October 21, 2015 at NIT Auditorium for Civil Engineering Batch 2012 & 2014 of NUST Institute of Civil Engineering (NICE), SCEE. The guest speaker for the occasion was Haider Ali Malhi, who is currently serving in SIKA Pakistan as a manager. SIKA is a Global Specialty Chemicals company with its headquarters is in Baar, Switzerland.

Haider Ali introduced SIKA to the students of NICE and elaborated

the application of chemicals in construction, which includes the use of chemicals in concrete flooring, waterproofing, refurbishment, industry, roofing & sealing and bonding.

The guest speaker introduced different products of SIKA which are being used in these applications in construction use. He showed different videos to remove the doubts of audience. He also mentioned the projects being run by SIKA in construction industry and briefly mentioned the list



of clients of SIKA. In the end, a question-answer session was held to clear the doubts of the attendees.

Lecture on “Image Building of Pakistan”

Pakistan like many Afro-Asian countries, such as Iran, Afghanistan and Somalia, has an image problem for one reason or the other. The present government seems to be extremely enthusiastic of the idea of marketing a soft image of Pakistan at the global level and, therefore, is using all kinds of cultural and commercial activities punctuated with some completely new (for Pakistan) international sporting activities.

In this connection, a lecture on “Image Building of Pakistan” was arranged on October 28, 2015 at NIT Auditorium for the UG 2012 & 2015 Civil Engineering Batch of NUST Institute of Civil Engineering. The guest speaker for the occasion was Prof Muhammad Akram, who motivated the audience by saying that one must feel proud of being a Pakistani. He said that



there was a need to take small yet targeted steps to bring about a positive change in the country's state of affairs. He maintained that it was high time to move away from useless drawing room discussions and mere lip service, and do something in practical for the greater good of the country.

Seminar on “Rehabilitation of Motorway”

A seminar on “Rehabilitation of Motorway (M-2 Project)” was arranged on October 28, 2015 in NIT Auditorium for the UG 2012 and 2013 Civil Engineering Batch of NUST Institute of Civil Engineering. The guest speaker for the occasion was Col (R) Abid Naeem who is currently serving in FWO.

The guest speaker on the occasion mentioned that under this project the Lahore-Islamabad Motorway will undergo major renovation work including a complete overlay (carpeting) for the 337km length, modernization of motorway facilities & equipment, and repair and rehabilitation to enhance motorway life.

The Road Safety Features, Rescue and Recovery Distress Management System will undergo major improvements, while services at Toll Plazas and Rest Areas will be upgraded. In the end a question answer session was also held

to clear the doubts of the audience.

National Highway Authority (NHA) and Frontier Works Organization had signed an agreement for the renovation of Lahore-Islamabad Motorway (M2) on Build Operate Transfer (BOT) basis.

Road engineering has become a complex discipline, where road safety, environmental and socio-economic issues are as important as technical design and construction supervision.

The project will be completed in a period of three years on Build Operate Transfer basis under which the Lahore-Islamabad Motorway will be renovated by FWO in accordance with international standards. It was told that M2 renovation is the biggest infrastructure project so far that is being initiated on BOT basis and it will give further impetus to development through public private partnership.



Talk on “Career Prospects for Economics Students”

The student affairs section of School of Social Sciences and Humanities (S³H) hosted a talk on “Career Prospects for Economics Students” on September 21, 2015. The event was organized for the freshmen who were told about the potential career paths that can be taken while doing a degree in economics. The event was conducted by Mr Ali Kemal who is a senior economist and has trained many government bureaucrats. The students participated actively in this interactive session.

Dr Shumaila Sayyab of RCMS holds seminar on “Next Generation Sequencing”

Dr Shumaila Sayyab, Assistant Professor at RCMS, delivered a talk on the significance of Next Generation Sequencing (NGS) technology at the center on October 1, 2015.

She spoke at length on NGS technology, which has significantly decreased the cost of whole genome sequencing and has traditionally been generated by large genome centers. With the introduction of smaller and lesser expensive “desktop” sys-

tems, NGS are now moving into the general laboratory. These technologies have allowed the researchers to efficiently map the disease to a gene and associate the phenotype to the genotype. Today, NGS technologies produce increasing amount of data that allows scientists to sequence the whole genome of mammals and many other species at a very low cost. This has become an attractive alternative to SNP chips where the disease



is rare and only a few individuals are available.

Paper Presentation by French scholar at S³H

David Waterman, Professeur des universités at the Université de La Rochelle, France, visited S³H on the invitation of Department of Behavioral Sciences and presented his paper titled “Traumatic Experience, Crisis of Survival and Healing: The Exchange of Interconnected Histories in Soniah Kamal’s An Isolated Incident” and held discussion with the faculty and students of the school. Prof. Waterman is a member of the research team of Center for Research in International and Atlantic History (CRHIA). He is currently working on Pakistani history, culture and literature in English, and has served on the editorial team of *Pakistaniaat*. His most recent publication is “Where Worlds Collide: Pakistani Fiction in the New Millennium”.

Seminar on “How to be a successful scientist?”

An inspirational seminar on “How to be a successful scientist?” was organized at Atta-ur-Rahman School of Applied Biosciences (ASAB) on September 9, 2015. The keynote speaker was Professor Dr Khalid Iqbal who is the chairman of Neurochemistry department, New York State Institute for Basic Research, USA. Dr Khalid drew on his personal experiences to highlight some important characteristics of an accomplished scientist. He inspired students by sharing his revolutionary discoveries related to the Alzheimer’s disease. A considerable number of students and faculty members benefited from the talk. Dr Tauqeer Ahmed of ASAB was the key coordinator of this event.

Interactive session on scholarships and internships at ASAB

The ASAB Student Club (ASC) arranged an interactive session on scholarship and internship opportunities for students in coordination with MINZ advisors team on October 20, 2015. MINZ is a specialized organization, which provides guidance to students regarding the internship and scholarship opportunities available locally and overseas. The session comprised a presentation in which speakers from MINZ put forth all the information regarding foreign scholarships in a very enchanting manner, followed by a question-answer session. The students availed the opportunity to the fullest and asked questions regarding the future career related opportunities. ASC and MINZ also set up an information desk after the session to facilitate the students with more specific information. Overall the event was a huge success and proved to be of great source of information for the students.



RCMS faculty member teaches course at Heidelberg University, Germany

Heidelberg University is the best university in Germany according to Shanghai and QS rankings. Dr Stefan Fischer, the head of Computational Biochemistry at the Interdisciplinary Center for Scientific Computing (IWR) of the Heidelberg University, had requested Principal RCMS, NUST to arrange the visit of an RCMS faculty member, Dr Farooq Ahmad Kiani, to the Heidelberg University, for teaching a course at IWR. Dr Kiani stayed at the Heidelberg University for 16 weeks, during which alongside conducting the collaborative research work on myosin catalysis, he taught a course titled "Biomolecular Modeling and Simulation Methods" at IWR. The course was attended by the Masters students of the Center for Molecular Biology (ZMBH) of

the Heidelberg University. During his stay at Heidelberg University, Dr Kiani also arranged an additional training week for a team of the Salford University, UK at IWR.



Training workshop for school teachers

Centre for Career Counseling and Advisory (C³A) recently organized a training workshop for school teachers. The participants were from Lahore Grammar School, Head start School, Beacon house School System and POF Wah School. The participant teachers were quite motivated and eager to learn through such an interactive session. They were made aware of the key elements of communicating with a student: teacher's professional skills, communication techniques in the classroom as well as communicating within a hierarchy of organizations. Other modules were stress management for teachers, behavioral issues of children, relaxation techniques, children with special needs and effective communication with parents summed up by the session on positive teaching. The training was activity based. Case studies, activities and on ground examples were discussed at length in order to add relevance to their experiences. The trainees appreciated the training with their positive feedback.



Faculty Achievement

Mr Hammad Mushtaq, Assistant Professor at S³H, has successfully completed a six-month fellowship (Mar-Aug) at Brunel University, London and joined back S³H in Fall 2015. The fellowship was awarded by the Higher Education Commission of Pakistan. During his stay at Brunel, he received state of the art training for PhD research and completed a significant part of his PhD thesis.

Orientation session for new entrants at S³H

School of Social Sciences and Humanities (S³H) hosted an orientation session on September 5, 2015 for the new batch. Students were given a detailed introduction of the school in particular and NUST in general. New students were engaged in various activities to break the ice and make them feel more comfortable at NUST. The event was organized by a student body representing S³H Student Affairs. A number of faculty members were present at the occasion to answer queries of the parents and students. Principal/Dean S³H Dr Ashfaq H. Khan also addressed the new students and parents.





S³H holds “Urban October Challenge”

School of Social Sciences and Humanities (S³H) organized “Urban October Challenge” on October 26, 2015 to commemorate World Habitat Day. Urban October is an initiative by UN-Habitat that aims to create awareness and engage the international community to work towards a new urban agenda.

The event marked the inclusion of Pakistan’s name in the participation list with many other countries like India and Bangladesh. The competition encouraged students to show how they could improve Islamabad’s urban conditions by utilizing their talent. Activities to showcase their ideas included poetry, photography, prose writing and poster making sessions. Dr Malik Asghar Naeem, a post-doc in Urban Planning from MIT, USA, graced the occasion as chief guest. Winners were awarded prizes and certificates.



Farewell dinner for graduates hosted at CAE

Commandant and faculty members of College of Aeronautical Engineering (CAE) hosted a farewell dinner for graduated NUST students of 78th and 79th Engineering Courses at the college on October 11, 2015. The gathering provided an opportunity to graduates to discuss their future pursuits with the faculty members. The students reminisced about the years they spent in the college, expressing their gratitude to the teachers for everything from education to personality development and grooming to facing the challenges of life.

Commandant CAE was the chief guest on the occasion. While speaking to the graduates, he said, “Allah Almighty has blessed you with this opportunity. You should be grateful to Allah and spread the light of knowledge wherever you go.” He appreciated the academic performance of students, Mr Muzammil Bashir of Avionics Engineering and Mr Faseeh Ahmad Khan of Aerospace Engineering who obtained highest GPAs in their courses. All students were seen off with prayers and best wishes. Every one of them was presented with CAE crest.



ASCE-NUST holds orientation, general membership drive

American Society of Civil Engineers (ASCE), NUST International Student Group, had its orientation session for freshmen batch 2015 at NUST Institute of Civil Engineering (NICE). The session was specifically designed for the new civil engineering students at NUST.

The event helped spread awareness among NUST students to become part of ASCE-NUST International Student Group and accentuate the benefits of ASCE student membership. Dr Wasim Khaliq, the faculty advisor of ASCE-NUST ISG chaired the orientation.

At the opening of the session, promotional videos regarding Civil Engineering as a Profession and American Society of Civil Engineers (ASCE) were shown to the audience, which inspired and motivated the students. Next, President ASCE NUST International Student Group, Mr Ali Zameer gave a comprehensive presentation and introduced ASCE as a professional platform for civil engineers around the world. He described its functionality by providing an opportunity to develop careers and leadership required for undertaking the challenges of future.

After the president address, Dr Wasim Khaliq, faculty advisor ASCE NUST ISG deliberated on technical knowledge that ASCE integrates



within the civil engineering field. He also covered different aspects of ASCE NUST ISG and the benefits it would accrue to the students. He emphasized the importance of engineers around the globe to work as a closely net community, develop relations and achieve a common goal to improve the quality of life and living through professional civil engineering with interaction and mutual co-operation. He also highlighted the importance of professionalism and motivated the audience to work hard to achieve greatest skills and apply what they have learned in the lecture halls to apply in real life scenarios with confidence, motivation, and utmost professionalism. Dr Wasim Khaliq also highlighted the ad-

vents that would be available to students for their career development in Civil Engineering profession once associated with NUST ASCE ISG. He covered all the aspects and working of student body in ASCE ISG and its future endeavors. Afterwards, an interactive session was conducted for students in which they were asked questions regarding ASCE and some common civil engineering terms. They were given exciting prizes for the correct answers. After an amazing interactive session, the forum was open for students to ask questions from executive body of ASCE NUST ISG. Students clarified their doubts regarding ASCE and its functionalities. Registration begun after the orientation session and students participated overwhelmingly to become member of NUST ASCE ISG.

The students who attended the session left the seminar with positive energy and everyone was very excited and looking forward to playing their part in the development of ASCE NUST ISG and having access to the technical, educational and professional progress through the society.



Noor-e-Chiraghan – a fundraiser for mini libraries

With a view to reinforcing the book-reading habit among the university students, NUST Book Club (NBC), in collaboration with Hashu Foundation, launched its project on October 8, 2015, to establish mini libraries across the campus. In this connection, the USAID-funded Hashu Foundation offered to donate a total of 1000 books for establishing mini libraries. The project is aimed at setting up small book booths for students for easy access to books on leave-one-pick-one basis. The booths are likely to be set up at cafeterias, student centers and hostels. Booths at hostels would also include course books.

Pro-Rector Dr Asif Raza graced the inaugural session as chief guest. The total book donation is worth around rupees 35 lacs. The aim is to revive the book reading trend and inculcate among students the love for book reading.

The inaugural session was followed by a fundraising event *Noor-e-Chiraghan*, an event filled with lights, beautiful melodies on rubab and different performances by the students at SCME ground. The



students had a memorable time and supported the event for the noble cause.

Hike To Miranjani 1.0

NUST Adventure Club (NAC) organized yet another successful event, "Hike to Miranjani 1.0" on October 17, 2015. As many as 60 participants were facilitated to enjoy the trip. NAC had reserved seats for participants from College of EME, MCS, MCE. With the October winds blowing everywhere, the hike was a perfect treat for NUSTians after the exams.



NBC holds trip to Sajjikot waterfalls

NUST Book Club arranged a trip to Sajjikot waterfalls on September 12, 2015. It was a nature-inspired trip for the writers to grab some food for thought. The group consisted of about 50 students accompanied by the faculty sponsor and members of the administration. It was a very well organized trip with food and refreshments provided to the students.

The Sajjikot waterfall lies in the Abbottabad district, 24 km from the town of Havelian, about a two-hour drive from Islamabad. The waterfall, though small, is no doubt one of the most beautiful ones in Pakistan. All the students enjoyed a swim and admired the magnificence of the nature around.



NMC brings Nescafe Basement to NUST

NUST Media Club started off its new year with a loud bang by bringing the famous Nescafe Basement to NUST. The mega event pulled more attention than anticipated as hundreds of music lovers turned up to quench their artistic

thirst. It was an opportunity for those who not only loved music but also made it.

School of Art Design and Architecture (SADA), was the event venue. After the screening the amateur singers and musicians

were sent off to the seminar hall to showcase their talent to the judges. The audience were surprised to see the extent of talent Nustians had. After a tough call, two musicians were selected.



Session with cast of *Manto*

NUST Dramatics Club, in collaboration with NUST Fine Arts Club, organized an interactive session with the cast of "Manto" at the Jinnah auditorium on September 16, 2015. Pro-Rector NUST Dr Asif Raza accompanied Mr Sarmad Sultan and Miss. Sania Saeed to the auditorium. The session started with a promotional video song of the movie along with the trailer. Mr Sarmad said that he always wanted to make a movie on Saadat Hassan Manto, whom he considered as a real genius.

Later, the project of a Mass Communication student was also shown to the audience which matched with the theme of the movie. Towards the end, Dr Asif Raza gave shields to Mr Sarmad and Miss. Sania Saeed.

SPORTS

Badminton (Men)

On-campus Badminton (Men) Championship 2015-16 was organized at NUST Gymnasium, H-12 Campus from October 2 to 7, 2015. Eleven teams (SCME, ASAB, SNS, SADA, NBS, SCEE, SEECS, S³H, CAS-En, RCMS and SMME) participated in the event. The final was played between the teams of SCEE and SMME,

which SCEE won by 3-2 after a very thrilling competition. Mr Imitaz Ahmed Gill, Secretary General of Pakistan Badminton Federation was the chief guest at the finals and handed over winner trophy to the SCEE team.



Badminton (Women)

As many as ten teams (SCME, ASAB, SNS, SADA, NBS, SCEE, SEECS, S³H, CAS-En and SMME) participated in On-campus Badminton (Women) Competition 2015-16, held at NUST Gymnasium, from October 2 to 7, 2015. The final was played between the teams of SEECS and S³H, which the latter won by 3 - 2 after a very thrilling competition. Dr S M H Zaidi, Principal SEECS NUST, was the chief guest at the finals and handed over winner trophy to S³H Team.



Table Tennis (Men)

On-campus Table Tennis (Men) Competition 2015-16 was organized at NUST Gymnasium, H-12 Campus from October 4 to 6, 2015. Eleven teams (SCME, ASAB, SNS, SADA, NBS, SCEE, SEECS, S³H, CAS-En, RCMS and SMME) participated in this event. The final was played between the teams of SCME and SMME, which SCME won by 3-0. Mr Arif Mehmud Siddiqui, Director Administration NUST was the chief guest at the finals and handed over winner trophy to SCME Team.



Table Tennis (Women)

SEECs outclassed ASAB by 3-0 win in On-Campus Table Tennis (Women) Competition 2015-16, organized at NUST Gymnasium, H-12 Campus from October 4 to 6, 2015. Ten teams (SCME, ASAB, SNS, SADA, NBS, SCEE, SEECS, S³H, CAS-En, and SMME) had participated in the contest. Mr Arif Mahmud Siddiqui, Director Administration NUST was the chief guest at the finals and handed over winner trophy to the SEECs Team.



Volleyball (Men)

On-campus Volleyball (Men) Competition 2015-16 was organized at Concordia Complex - I, H-12 Campus during October 5-8, 2015. Nine teams (SCME, ASAB, SNS, NBS, SCEE, SEECS, S³H, SMME and RCMS) participated in the event. The final was played between the teams of SEECS and SCEE, which SCEE won by 3-0. Engr Muhammad Ashfaq Sheikh, Acting Director Coord was the chief guest at the finals and handed over winner trophy to the SCEE team. Mrs. Robian Anser (DD Sports), Mr Gul Azhar (DD Hostels) and Muhammad Zubair Shahid (DD Adm) were present during the award ceremony.



04 COMMUNITY SERVICE

NCSC, CSL participants set up free medical camp on diabetes at SSD

NUST Community Service Club (NCSC) Masaadah team along with seven community service learning course participants set up a free medical camp on diabetes at Social Security Dispensary in I-11/3, Islamabad on October 29, 2015. The Diabetes Centre and PharmEvo sponsored the camp.

The aim of the camp was to help the underprivileged people who could not afford to purchase the medicines. It was the third free medical camp of the team. The target community of the camp were the low wage workers and social security servants. The team collaborated with IESS dispensary administration, The Diabetes Centre and PharmEvo for setting up the camp.



Counseling camp at FAST

Centre for Career Counseling and Advisory (C³A) organized a counseling camp at FAST University. The purpose was to help students better deal with their issues related to either their career concerns or general anxieties affecting healthy living. The camp was inclusive of different activities such as Signature Analysis, On the Spot Counseling, Career Counseling and Psychological and Career Testing. Around 300 students were registered for the activities. FAST faculty members and officers also participated in these activities and appreciated the work of C³A.



C³A holds career counseling seminars at Froebel's International School

Career counseling seminars were conducted with A-level students at Froebel's International School, Islamabad, on September 29 and 30, 2015. Zainab Alam, the student of MS Career Counselling & Education Program (C³A), played active role in conducting these seminars. The topics of the two consecutive seminars were "Road to Universities" and "Applying to UK and US Universities".

In the first session, information about international universities' application procedures was disseminated to the students. During the second session, information was given on university application procedures and deadlines. Strategies to make informed career choices and preparing



a successful application for the potential universities in the UK and US were also discussed during the session.

Workshop on Disaster Management

A workshop on "Disaster Management" was held for Community Service Learning Course (CSL-401) on October 2, 2015. The workshop commenced at CIPS auditorium by an introductory speech from Dr Irtiza giving a brief overview of the workshop.

The students were explained about the importance and methodology of creation of plans by which

communities could reduce vulnerability to disasters. Dr Irtiza shed light on strategies to keep oneself mentally and physically prepared to safely deal with and survive all kinds of hazards posed by natural calamities. By doing so, he said, the risks could be minimized by 40%.



Workshop on Community Service Project Management & Social Entrepreneurship

Workshop on Community Service Project Management & Social Entrepreneurship was held on October 9, 2015. The earlier workshops were mainly centered around ways to help the society and means through which betterment could be achieved. This workshop, however, was a bit different in the sense that it was more technical. Instead of teaching students what

they could do to play their part in the community; it was more relevant in terms of how they could achieve their goals.

The workshop was divided into two parts: the first part focused on how to initiate a project and build a team to control and manage the resources. The second part of the workshop was solely devoted to the concept of social entrepre-



neurship and how students could actually start a for-profit business for the community.

CSL participants donate blood at AFIT

As part of the first phase of field project of Community Service Learning Course (CSL-401), students donated blood at Armed Forces Institute of Transfusion, Rawalpindi (AFIT) on October 25, 2015.

Doctors and surgeons rely on blood donations to carry out life-saving and life-enhancing treatments every day. Each donated blood pint can help up to three different people. For donors, it's just a few moments out of their day but for patients in need, it may save their lives.



NCSC, Pink Ribbon collaborate to raise awareness on breast cancer

NUST Community Service Club (NCSC) conducted a breast cancer awareness campaign at the university's main campus on October 28, 2015 in collaboration with Pink Ribbon Pakistan. The campaign, a part of PINKtober breast awareness month, was a step ahead to break all the societal barriers and taboos associated with breast cancer. It involved putting up various posters regarding breast cancer along with setting up information desks at the cafeterias.



Students spend time with ailing children

The participants of Community Service Learning Course visited Shifa International Hospital to enquire after children suffering from different diseases. Upon their arrival at the hospital, the students were given a presentation on the projects of Shifa Foundation. To make their time as enjoyable as possible, fun-filled activities were conducted with

the children.

The children were given coloring books, water colors, china clay, Ludo, colorful stamps, magic balls and many other things to play with. A couple of days later, the course participants also visited Falahee Clinic of Shifa Foundation, and spent time with the ailing children.



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05

IN A SNAPSHOT



▲ Ms Saeeda Khanum, a faculty member at C³A, receiving participation certificate from Rector NUST after completion of weeklong training on Research Methodology, organized by SMME.



▲ Dr Farooq Ahmad Kiani, Associate Professor at RCMS attended conference on "Recent Trends in Chemistry" arranged by the Allama Iqbal Open University, Islamabad in which he co-chaired 2nd session of the conference.



▲ PDC organized two-day workshop on "Presentation and Public Speaking Skills" from October 13 to 14.



▲ Qazi Ijaz, a student at College of Aeronautical Engineering, presented his research paper in IEEE's fourth international conference on "Aerospace Engineering" at Institute of Space Technology, Islamabad on September 3, 2015.



▲ Professional Development Centre (PDC) organized training on September 12-13 and September 19-20, 2015, for working professionals who intended appearing in PMP Certification Exam.



▲ PDC organized two-day customized training for Telenor professionals on “Essentials of Emerging Leaders” on October 19 & 20, 2015.



▲ Ms Ayesha Mujeeb & Ms Shaista Zafar, psychologists from C³A attended four-day training titled “Schema-focused CBT for Psychological Disorders” at Bahria University.



▲ C³A organized three-day recreational trip for MS CC&E students to Narran, from September 11 to 13, 2015.



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