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NATIONAL UNIVERSITY OF SCIENCES & TECHNOLOGY

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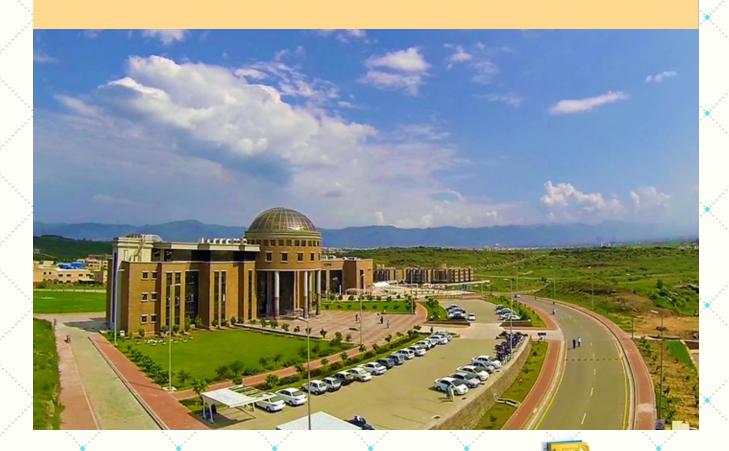
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NUSTNews is a bi-monthly publication, produced by Student Affairs Directorate, covering various events across the entire University. It will be appreciated if the focal persons send reports right after the events so as to give them timely coverage.



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EDITORIAL **TEAM**









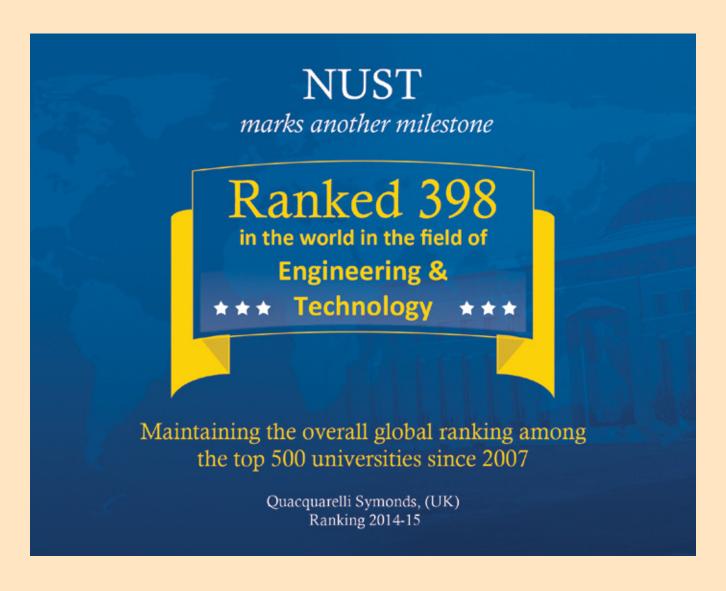
Student Reporters: Zainab Kainat, Amna Ahsan



IN THE SPOTLIGHT

NUST joins the ranks of world's top 400 engineering varsities

National University of Sciences and Technology (NUST) has retained its coveted position among the top 500 world universities according to the latest ranking list (2014-15) issued by M/S Quacqurelli Symonds (QS) of UK, the most prestigious ranking agency. NUST is the only Pakistani university, which is being consistently included in this elite ranking list since 2007. Moreover, NUST has won its place among the top 400 engineering universities of the world. This is the result of concerted efforts put in by the NUST management and faculty for providing quality education; conducting innovative research; establishing international linkages; engaging in collaborative research with leading international universities/ organizations; participating in international exchange programmes; improving infrastructure; and producing graduates who are welcomed by national / international industry, business, academia and market. Rector NUST Engr Muhammad Asghar has felicitated the management and faculty of all NUST constituent Institutions for playing their role effectively. He has also thanked HEC, MoST and services headquarters for providing continued support and guidance which enabled NUST to achieve this honour.





Relief Campaign for IDPs

NUST extending all-out support for North Waziristan IDPs



Phase-I

Operation Zarb-e-Azb was launched by Pakistan Army to completely wipe out the enemy in North Waziristan. As the operation continues to eliminate the most dangerous threats to Pakistan, about 900,000 people of North Waziristan had to leave their homes to seek shelter at the safe places.

Being aware of the fact that the internally displaced people (IDPs) are in dire need of basic life necessities, NUST Community Service Club (NCSC) along with NUST Administration started a fund raising campaign for the affected masses. The massive donation drive received generous contributions from

both the NUST administration and the University's alumni i.e., NUST employees and faculty donated their one-day salary amounting to Rs 3.5 million; the University's alumni contributed Rs 150,000, while the NCSC team collected Rs 1,450,000 through its robust campaign.





With a view to appositely spending the donations, NUST administration decided to extend support for the IDPs through Pakistan Army. Therefore, the University officials approved the suggestion of Col. Mehmood, who is a Wazir himself and belongs to Bannu, taking the responsibility of as many as 20 families taking refuge in Government Degree College Landi Jhalandar, District Bannu. A student of NUST in Bannu along with the help of Dr. Arshad of University of Science and Technology, Bannu, had compiled the list of the families living there. One of the major problems identified was the unavailability of sufficient water. The power supply with a voltage of 70 volts was not sufficient to meet the power requirement of a tube well available there. After a meeting with NUST Alumni Association President Mr. Ammar and MCS alumnus Mr. Mansoor, it was decided that the association would provide the generator (now functional) and a regulator for the tube well.

Director Administration Mr. Arif Mahmud Siddiqui floated the idea of providing some sports equipment and Eid gifts for the families to bring a feeling of "life is returning" among those families. The sports equipment, consisting of 150 bats, tennis balls, volleyballs and footballs, was provided by Col. Qaiser (Army Sports Dte). Eid gifts were purchased and packed by a team of students from NUST. The gifts included unstitched clothes for ladies and gents; shawls for ladies; readymade clothes for children; toy cars for little boys and dolls for girls; coloring books and pencils; mehndi (henna) and bangles; colorful hairpins and ponies for girls; goody bags containing candies for children and washing powder for those families.

On Wednesday, July 23, 2014 a team of 13 students along with Director Administration Mr. Arif Mahmud Siddiqui, Col Mehmood and Assistant Manager (Community Service) Mr. Athar Mushtag went to the college in Bannu to meet the IDPs. A cheque worth Rs 3.5 million was presented to Brig. Aftab Commd 475 Engrs Bde Gp/45 Engrs Div. The male students distributed Eid gifts among men and children and female students distributed among women and young girls. A cash of Rs 5,000 was given to each family by the students. The students spent almost two hours with the IDPs, while the representatives from Pakisrtan Army briefed the team about the state of the IDPs and relief work done for their welfare. It was after the feedback received from the Army authorities and the IDPs that the other basic needs of the affected people were ascertained.





Phase-II

In continuation to its efforts for the relief of internally displaced persons of North Waziristan, the NUST Administration planned a second trip to further aid the IDPs. With the continued assistance of Colonel Mehmood, it was assessed that the 20 displaced families living in Government Degree College Landi Jhalandar, District Bannu, could no longer stay there due to commencement of studies in the college after summer break. Based on this survey, it

was essential that some sort of shelter is provided to those families. Additionally, a small hospital in the vicinity drew the administration's attention. Rural Community Hospital Dhomail, currently supporting 150,000 IDPs in addition to its own population of about 100,000 lacked necessary medicines and needed their immediate supply.

In this connection, the measures that were taken included: (a) With the personal involvement of Dr. Akram

Sheikh, Professor Emeritus, a donation of medicines worth approximately Rs.1.35 million was received from W. Wilson. Similarly, Dr Umar, Principal Rawalpindi Medical College also donated lots of medicines for the IDPs. (b) For the displaced families, three crucial items i.e., tents, mats and pedestal fans were identified. Deliberate efforts were made to procure 20 sets for the families, and Rs.350,000/- out of the donations collected in the process were

utilized.

The relief items were loaded on two separate trucks and were sent off on 6th September 2014. A team, consisting of NUST officials and students set off on 7th September, 2014 to personally see the handing over of the donated items. The medicines, in the first place, were dropped off at Rural Community Hospital Dhomail. Medicines were handed over to the administration of the hospital. The second stop was Government Degree College Landi Jhalandar, District Bannu. The NUST team unloaded the donations, which were handed over to heads of 20 families in an orderly manner. The trip organized by NUST Administration and Colonel Mehmood proved to be very fruitful.

However, NCSC's efforts for collection of donations will continue till the time the situation persists. The University is looking forward to receiving generous contributions by all the well-wishers and citizens towards this noble cause. The contribution could be in the form of cash or kind, especially the above mentioned items. Any of the following may be contacted for further information:-







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Islamabad Pakistan

PCTN steering committee discusses way forward



With a view to discussing the way forward, the first meeting of Pakistan Chapter of The Talloires Network (PCTN) Steering Committee was held on August 7, 2014 at National University of Sciences and Technology (NUST), Islamabad. Chair PCTN Engr Muhammad Asghar (Rector NUST) presided over the meeting. Shoaib Sultan, Chairman Rural Support Program Network (RSPN) was invited as a guest to share his views. Four steering committee members including Vice Admiral Shahid Iqbal (Rector Bahria University), Dr. Talat Naseer Pasha (VC University of Vetrenary and Animal Sciences), Dr. M. Asif Khan (VC Karakoram International University), and Nisar Ahmed Siddiqui (Director IBA Sukkur) attended the meeting.

Chair PCTN Engr. Muhammad Asghar, in his opening remarks, dilated upon the role of a university in a knowledge-based economy. He highlighted five key roles as development of

human resource, research-based technology development, knowledge application to develop economy, development of mechanisms for a positive social impact, and finally to provide guidance in policymaking. The main actors who generate such a socio-economic movement are the university leaders, students, community, government/non-government institutions and funding agencies and volunteers.

The opening address was followed by a presentation by Chief Coordinator PCTN Mahmud Bashir Bajwa, covering PCTN's progress so far. After this a presentation was made by Chairman Rural Support Programs Network (RSPN),

Shoaib Sultan Khan providing an insight into the role and functioning of RSPN. He highlighted areas where RSPN could offer useful collaboration to PCTN.

During the course of meeting, PCTN's Vision and Mission were finalized keeping in view the input of PCTN member institutions. It was also proposed that the status of PCTN steering committee members should be ex-officio and not by name, which was approved. The meeting decided that a PCTN seminar on Civic Engagement and Community Service would be held in March 2015 along with the annual VCs/Rectors' conference.

Towards the end, Chair PCTN, Engr. Muhammad Asghar directed PCTN Secretariat to pursue follow-up actions with the member institutions and chairman RSPN. Before the session was adjourned he appreciated the useful inputs of all participants and their strong resolve to pursue goals of PCTN.





20th UG Convocation of NUST College of E&ME

266 graduate with a promising future

NUST College of Electrical and Mechanical Engineering held its 20th convocation of its 32nd undergraduate programme on August 28, 2014. Rector NUST Engr Muhammad Asghar graced the occasion as chief guest. Others attending the event included faculty members, students, parents and some distinguished guests.

Addressing the occasion, the chief guest congratulated the graduating students and lauded the College of EME for providing exceptional engineering skills to the graduating engineers in the disciplines of electrical, mechanical, computer and mechatronics engineering that would enable them to lead a professionally satisfying life. He also appreciated the college for its focus on key areas of engineering in terms of imparting technical knowledge with emphasis on research and development both at undergraduate and postgraduate level.

Commandant NUST College of E&ME, Brigadier Jamil Sarwar Malik, Sitara Imtiaz-Military, also addressed the occasion and mentioned the achievements of the students in a variety of national and international events and competitions. The international events included positions at IIT Bombay Techfest, Shell Eco-Marathon, Asia Pacific ICT Alliance (APICTA), ROBOCUP and International Competition on Future Flight Design. The national events included Lipton Talent Hunt, National ElectroniX Olympiad, IET Present Around the World, NERC, COMPPEC and Robo-Nav. The students of the college were also given opportunities to acquire leadership, managerial and entrepreneurship skills through events like NERC, COMPPEC, EME Olympiad, EME inertia and Young Entrepreneurs Symposium (YES). He also highlighted the successful pioneering implementation of outcome-based education by EME College that has paved the way for Pakistan to become a member of Washington Accord.

The main feature of the occasion was the award of 266 degrees to the undergraduate students completing their course in the disciplines of Electrical, Mechanical, Computer and Mechatronics Engineering. Graduated engineers were also awarded medals for their outstanding performances. Salman Ahmed of Electrical Engineering, Zulkeefaal Dar of Mechanical Engineering, Muhammad Usama Azhar of Computer Engineering and Hira Afzal of Mechatronics Engineering were awarded Prime Minister's Gold Medal for their best performance in academics. Zulkeefaal Dar was also given the President's Gold Medal for being the overall best student. Muhammad Abrar of Mechatronics Engineering was conferred the Chief of Army Staff Gold Medal for Best Technical Cadet of the year.

Students were also awarded gold medals for their projects. Muhammad Usama-bin-Sajid of Electrical Engineering, Muhammad Saqib Anwar of Mechanical Engineering, Khawaja Waleed Iqbal of Computer Engineering and Amir Ghafoor of Mechatronics Engineering Clinched Rector's Gold medal for best projects in their respective disciplines.









Conference on Information Assurance and Cyber Security 2014 - MCS

The Conference on Information Assurance and Cyber Security 2014 (CIACS- 2014) was held on June 12-13 at Military College of Signals (MCS), National University of Sciences and Technology. The conference was organized by the Department of Information Security and NUST ISACA Student Group (NISG). Dr. Aftab Maroof, Chair IEEE Islamabad Section and Director FAST-NU, Faisalabad-Chiniot Campus, graced the occasion as chief guest.

The main objective of the conference was to create awareness and provide a forum for exchange of information among researchers, academicians and users of information technology, regarding the globally critical domains of information security and information assurance.

The conference proceedings formally started with a welcome address by Dr Ashraf Masood, CIACS-2014 General Chair, on first day of the conference. He provided the participants with an overview of the conference theme, objectives, key activities, statistics related to research papers selection, invited

speakers and training workshops. He also appreciated the efforts of students and faculty members of MCS-NUST, who remained involved in the organization of CIACS-2014.

The conference especially focused on recent developments in information security technologies and best management practices along with their applications to achieve optimally secure IT infrastructure and organizational governance. On this platform, academicians and researchers mutually shared their knowledge and experiences with each other and explored the latest trends and technologies of the field. Comprising 8 intriguing invited talks, 10 high quality research paper presentations and captivating training workshops covering interesting topics of CEH, CHFI and Windows Forensics, the CIACS-2014 served as a worthwhile forum for participants from all walks of life. The presence of more than 150 participants including high profile speakers, motivated participants and young innovators, together, marked the success of CIACS-2014.











NUST, US State Department conduct Workshop on Entrepreneurship for Scientists and Engineers





NUST hosted a week-long Workshop on Entrepreneurship for Scientists and Engineers from June 02 to June 07, 2014 at its Centre for Innovation and Entrepreneurship (CIE). The workshop was conducted in collaboration with the U.S. Department of State, USAID, Higher Education Commission Pakistan, National Academy of Sciences, ASME Pakistan, and the Abdus Salam International Centre for Theoretical Physics. The opening ceremony, held at NUST on June 02, 2014 was chaired by Rector NUST, Engr. Muhammad Asghar. Dr. William Colglazier, Adviser to U.S. Secretary of State on Science and Technology, graced the opening ceremony as chief

guest. As many as 50 scientists, engineers and aspiring entrepreneurs from all over Pakistan attended the workshop, which was conducted by a line-up of prominent international speakers including Dr Bernard Amadei (US Science Envoy), Dr Surya Raghu (President, Advanced Fluids Inc.), Dr Franklin Carrero-Martinez (Technology and Health Policy Adviser US) and Dr Faysal Sohail (General Partner CMEA Capital). The closing ceremony of the workshop, in which the participating teams presented their business ideas, was graced by Chairman Higher Education Commission Prof. Dr Mukhtar Ahmed and Rector NUST, Engr. Muhammad Asghar.

MCS faculty tops IEEE S&T quiz





Adeela Waqar, a faculty member at the Department of Information Security, won the first grand prize in the IEEE Science and Technology Quiz, Pakistan 2013-2014. The quiz is a new initiative by HEC's National Digital Library Program (NDLP), which has not only highlighted the work of Pakistani research fraternity published in IEEE Xplore but has also developed awareness of scientific and technical content available through NDLP. More than 15,000 participants took part

in this quiz competition. A prize distribution ceremony for winners of the IEEE Quiz was held at Higher Education Commission (HEC) Islamabad. Syed Imtiaz Hussain Gilani, Acting Chairperson HEC was the chief guest at the occasion.

Comdt MCS Maj Gen Ali Farhan congratulated Adeela Waqar on her achievement and presented her a certificate and a gift to acknowledge her commendable performance.

Nustians visit GMU under exchange research program - SCEE

Three of NUST's brilliant students were selected for Exchange Research Program at George Mason University this year in summers. During their research, they were introduced to real time research projects under direct supervision of faculty, which might lead to Doctorate Research funded by George Mason University at Fairfax, VA, USA.

Their selection for the programme is an achievement and inspiration for others. The students include Saadullah, a Masters in Geotechnical Engineering student; Hamza Masud, enrolled in Masters in Transportation Engineering programme; and Arslan Khalid, an undergraduate student at NUST Institute of Civil Engineering.





Launch of two new specialization streams at RCMS

Two new specialization streams in the Computational Science and Engineering degree programs namely Computational Chemistry and Computational Biomedical Engineering were presented and approved in the Academic Council Meeting (ACM), held on 25th August 2014. These streams will start from the Fall' 2014 Semester.

Dr. Ashfaque elected as member IIUI's BoTs

Dr. Ashfaque Hassan Khan, Dean/Principal NUST School of Social Sciences and Humanities (S3H) has been elected as a member of International Islamic University's Board of Trustees on July 1, 2014 in a meeting held at Riyadh under the chairmanship of Prof. Dr. Sulaiman Ibn Abdullah Aba Al-Khail, Pro-Chancellor, IIUI. Prof. Dr. Masoom Yasinzai, Rector IIUI, in a recent correspondence, has congratulated Dr. Ashfaque for this extraordinary achievement.

Senior clinical psychologist from Australia interacts with DBS students

Samina Whale, a senior clinical psychologist, working in the area of Child and Youth Mental Health Service in Australia, visited Department of Behavioral Sciences (DBS), School of Social Sciences (S3H) on 15th April, 2014. She is working in Australia for past 20 years and provides regular group interventions using a variety of intervention models including Cognitive Behaviour Therapy, Dialectical Behavior Therapy and Mindfulness.

Her visit to DBS was a wonderful opportunity as students enrolled in MS Clinical Psychology Program had three hours' interactive session with her and learnt from her rich experience. During this interactive session students discussed with her issues related to clients' problems and modern approaches in psychotherapy. She shared with them information on some of the recent advancement in the field of Child Youth Mental Health Service.

COMPPEC 2014 – CEME

The 13th Annual Computer Project Exhibition and Competition (COMPPEC) was held on 24th and 25th June, 2014. The closing ceremony was chaired by Lt. Gen (R) Talat Masood, with a huge participation of teams from various cities of Pakistan.

COMPPEC, a prestigious technological event is held every year at College of Electrical and Mechanical Engineering with the vision of creating harmony as well as a sense of competition among the participants. The event provides a platform to the undergraduate students of all Pakistani universities to showcase their brilliant and innovative ideas. Like the previous years, this year's COMPPEC also completed its two-day nationwide run, from June 24 to 25, with brilliant

success. A number of participants from various universities showcased their extraordinary projects.

Project Smart-Steth won the overall best prize of Rs. 50,000. Alongside the project exhibition, the 3rd C&IT Symposium was also held. Some of the best minds of Pakistan IT sec-



tor were invited to the event as they shared their knowledge and insight with the attendees. This symposium was an outstanding success. The College received proposals for 48 research papers, from which 40 were presented. Distinguished speakers included Dr. Akram Sheikh, Dr. Sajjad Sarwar and Dr. Shafaat.

International Conference on Economic Development through Higher Education

International Conference on Economic Development through Higher Education was held at the HEC auditorium on April 24-25, 2014. Principal/Dean CES-CAS NUST, Dr. Mohammad Bilal Khan presented a key-note paper on the Centers for Advanced Studies (CAS) project, designed by USAID and the Higher Education Commission of Pakistan (HEC) to support Pakistan's economic develop-



ment by strengthening the relevance and responsiveness of university products, including applied and policy research and skilled graduates, to the needs of the public and private sector. The project will create a cadre of effective graduates for employment in the private and public sectors in food security/agriculture, water and energy. Each CAS will form public-private partnerships and interest-specific networks by bringing together the best minds in academia, government and the business community to produce research solutions to some of Pakistan's greatest challenges in food security/agriculture, energy and water. The project will also equip universities to provide opportunities to promising but economically disadvantaged students to obtain higher education.

Solar energy projects - STV

Realizing that self-sufficiency in energy is the assurance to strengthen any country's economy, NUST is emphasizing on projects related to solar energy. One such project is installation of solar PV system to supplement the overall demand of electricity in several industries. In this regard, NUST-STV has recently signed a contract worth Rs 0.9 Million with Canadian Red Cross Society (CRCS) in partnership with Pakistan Red Crescent Society for the solar electrification in their Basic Health Units (BHU's) and Rural Health Centres (RHC's) in Battagram and Swat districts. Another contract is in process with M/S Coronet Foods (Pvt) Ltd for the installation of 65KW Solar PV System at their premises in Industrial Estate Hattar, against an amount of Rs. 9.95 Million.

CMS implementation running on all cylinders at NUST

After the successful completion of the design phase of Campus Management System, configuration and the most challenging data migration preparation activities were started in March 2014. Data migration activity preparation for all students at NUST was termed most critical and challenging as it involved the exhaustive efforts of functional support teams of institutions and directorates. After untiring efforts of SEECS and CMS teams, a solution was

developed and implemented by all concerned institutions. Furthermore, a subsequent session was held at SEECS one week later in which all the DBA/ System Administrators from every institution participated and necessary training was given to them.

Besides others, security is one of the focal areas of Campus Management System (CMS). In order to have a foolproof security, NUST has chosen the most widely used Microsoft Active

Directory Services (ADS) out of a few industry standard products, which is an integral part of Microsoft Windows Server Operating System. For this purpose, a session with all the System Administrators of Institutes was organized in RIMMS Seminar Hall to finalize the Hardware Requirements and Design Specifications. ADS ultimately will become an integral part of CMS which is being implemented at NUST.



Khatm-e-Quran ceremonies held at NUST mosques

The enlightening Khatm-e-Quran ceremonies were organised by the University's Administration Directorate with zeal and religious fervor at the three mosques of NUST main campus i.e, Masjid-e-Taqwa (July 22), Masjid-e-Noor (July 24) and Masjid-e-Rehmat (July 24). All these mosques were beautifully decorated, and the congregations were attended by overwhelmingly huge strength of NUST employees, both residents of campus as well as those living outside in the proximity. Congregation entailed recitation of Holy Quran, Naat and a sermon that focused on enlightening the audience with the significance of 'Shabbe-Qadr' and finally culminated with prayer (dua) for all Muslim Ummah in general and prosperity of NUST in particular.





NEWS IN PICTURES





Eid Milan Party held at PNS Jauhar on July 29



▲ A lecture on 'Community Service' was delivered by Dr Adnan Majeed, Director Pakistan Baitul Mal Sindh, on Friday, August 29 at PNEC auditorium.



△ COMKAR farewell dinner cum musical program was held at PNS Jauhar on August 13. Vice Admiral Khawaja Ghazanfar Hussain HI (M) was chief guest.





▲ The 67th Independence Day of Pakistan was celebrated on August 14 at the parade ground. Commandant PNEC addressed the officers and Ships Company on significance of the day.





▲ In connection with Independence Day celebrations, Inter-divisional Declamation Contest was conducted on August 14 at PNEC.







△ Commandant PNEC gave away arm badges to new appointment holders (U/T officers and Civilian Students) for Fall Semester 2014 at the college parade ground on 29 August 2014.



▲ Dr Samar Yazdani delivered lecture on "Smartphone in the information and communication Technology Era" at PNEC on Sep 05.







△ Defence Day celebrations at PNEC – September 06



▲ Faculty and students from NUST attended Cyber Security Seminar at USA – August 4 to 22









△ Asst Prof Dr Rizwan Naseer attended a course at the US Institute on US Foreign Policy organized by the US State Department from June 21 – August 3. Dr Naseer gave a presentation on Anti-Americanism in Pakistan.





△ CIPS and Hanns Seidal Foundation ink MoU in Islamabad on August 15

CONFERENCES/ WORKSHOPS/LECTURES

Workshop on Methods of Instruction for NUST Faculty

A five-day faculty development program titled 'Methods of Instruction' was arranged by Professional Development Centre (PDC), NUST. The workshop commenced on 5th August 2014 and continued till 11th August 2014. The development program incorporated topics such as: Introduction to Effective teaching, Planning Effective Sessions, Education Technologies, Exploring Research Grants and Funding Options, Curriculum Development and Assessment and Evaluation. Last day was marked for 'Micro Teach' session wherein faculty members first gave

ten-minute presentation each and then resource person assured improvement in their teaching skills after previous four days training. The main resource person of the workshop was Dr Farzana Rizwan, an experienced, UK based, cer-



tified teacher trainer, who delivered sessions on methods of instruction and also supervised the 'Micro Teach' session. The other expert resource persons were Dr. Ashraf Iqbal from SEECS, Dr Ahmed Ejaz, (Principal RCMS), Dr Riaz Ahmed (Dir Research) and Engr Salman Absar (Dir I&C).

MCS faculty attends int'l conferences

During the month of July 2014, three faculty members of MCS participated in three different international conferences and presented their research papers with the financial support of NUST. Brig Dr Fahim Arif attended the '18th International Conference on Information Visualization' held from 15th to 18th July, 2014 in the University of Paris Descartes, Paris, France. Dr Fahim presented his research paper titled 'Super-resolution using edge modification through stationery wavelet transforms' in the oral session of the conference Col Dr Muhammad Hanif attended "32nd Euro Physics Conference on Atomic and Molecular Physics of Ionized Gases" (ESCAMPIG 2014), 15th to 19th Jul, 2014, Greifswald, Germany. He presented his research paper titled 'Spectroscopic studies of Zirconium plasma produced by the fundamental

(1064 nm) and second (532 nm) harmonics of an Nd: YAG laser.' Dr Muhammad Hanif presented NUST shield to Prof Dr Jurgen Michener, Chairman International Scientific Committee.

Assistant Professor Dr. Safia Akram attended 10th American Institute of Mathematical Sciences (AIMS) conference on Dynamical System, Differential Equations and Applications that held in Instituto De Ciencias Mathematicas (IC-MAT) Madrid, Spain from 7th to 11th July 2014. She has also participated in the special session on 'Qualitative and Quantitative Technique for differential equations arising in Economics, Finance, and Natural Sciences,' with an oral presentation titled 'Nanofluid effects on peristaltic transport of a fourth grade in the occurrence of inclined magnetic field.'



Three-day workshop for Pakistan Army officers at PDC

Professional Development Centre (PDC) in collaboration with Higher Education Commission (HEC) organized a three-day workshop on Research Methodology for the publishers and Pakistan Army officers from 11-13th June at Executive Development Centre of PDC. The resource person of the workshop was Dr Peter Charles Bloodsworth, RVF of SEECS NUST. The course covered three major themes: publishing research outcomes, ensuring quality in research publications and planning for local and international recognition. A number of useful computer based technologies (LaTeX, the Open Journal System, Turnitin and a number of research tools) were also introduced during the sessions. The Pro-Rector (Planning and Resources) Engr Muhammad Shahid was the chief guest who awarded certificates to the course participants at the closing ceremony.

ASAB scholar wins best poster award

Malik Nawaz Shuja, a PhD scholar of Atta-ur-Rahman School of Applied Biosciences, ASAB was awarded the best poster award at International Conference on Stress Biology and Biotechnology Challenges and Management held at the University of the Punjab, Lahore from May 21 to 23. Renowned national and international scientists participated and shared their findings on various fields of plant virology.



Seminar series on Community Psychology - S³H

Dr. Rubeena Kidwai, a faculty member of Department of Behavioral Sciences, S3H, invited a number of eminent professionals from the service and development sector to share their knowledge and field experiences with students enrolled in MS Clinical Psychology Program. A series of seminars were organized as part of 'Community Psychology' course which aims at providing students with the knowledge and skills related to community mental health with an understanding of issues related to gender, ethnicity, and social class as they relate to mental health in the Pakistani context.

ASAB faculty presents paper at 2nd USA Nanosmat Conference



Dr. Nasar-um-Minullah from ASAB presented a paper 'Selection of Reference Genes for Quantitative PCR in wheat against Titanium Dioxide and Zinc Oxide Nanotoxicity' at 2nd USA Nanosmat Conference held in Rice University, Houston, USA from 19-23 May. Dr. Nasar-um-Minullah was the only Pakistani researcher who represented NUST and Pakistan in the conference.

The purpose of psychology is to give us a completely different idea of the things we know best.
--Paul Valery

Dr Salma holds 'Critical Thinking' sessions - S3H

Dr. Salma Siddiqui, HoD Behavioral Sciences conducted sessions on 'Critical Thinking' with faculty of COMSATS Institute of Information Technology (CIIT) on 26th June, 2014. The Faculty Development Academy of COMSATS organized these training programs to equip the existing faculty with latest knowledge and skill repertoire in their specific domains. During these 50- minute interactive sessions, she talked about the importance of critical thinking in planning a class and designing curriculum.

Earlier, Dr. Salma Siddiqui also delivered a lecture at International Conference of Clinical Psychology held on 2-3 April, 2014. This international conference was jointly organized by Pakistan Association of Clinical Psychologists (PACP) and Centre for Clinical Psychology (CCP) at University of Punjab, Lahore under the theme 'Clinical Psychology outside Clinic'.



Workshop on Lean Manufacturing for Professionals at PDC

Professional Development Centre organized a two-day workshop on "Lean Manufacturing" for industry professionals on 19th – 20th June 2014 in the Conference Hall of PDC. The resource person of the workshop was Dr Shahid Ikramullah, the HoD of Manufacturing Department of SMME NUST. This workshop was attended by a variety of participants from Coca Cola, NESCOM, College of EME, GHQ, BZU Multan, ARF Kamra and Scotmann Pharmaceu-

ticals. The course introduced lean and gave a complete picture of Lean Manufacturing with implementation from scratch. The last session of the workshop was marked for certificate distribution ceremony. Director Research Dr Riaz Ahmed awarded the best participant a token of appreciation and distributed certificates among the rest of the participants.

Lecture on Outcome-based Assessment System at MCE

Associate Prof Dr Farooq, King Fahad University Saudi Arabia, visited Military College of Engineering on 5th Aug 2014 and delivered lecture on 'Outcome-based Assessment System – Implementation Level Training / Awareness.' The dean and faculty members of College of Aeronautical Engineering and Military College of Engineering, Risaplur attended the training. The session introduced a new concept of assessment based on the expected 'Program Learning Outcomes' as being practiced by universities worldwide. Commandant MCE, Maj. Gen. Anwar ul Haq Chaudry presented the guest with a souvenir at the end of the session.





Guest speaker - MCE

Construction Contract Management is a subject on which great emphasis is laid all over the construction industry. In Pakistan, there is limited awareness on this topic which results in overall inefficiency. In view of the need to educate building owners, designers and contractors, Dr Rafeeq Muhammad Chaudry, Prof of Construction Engineering Management at King Fahad University Saudi Arabia visited Military College of Engineering, Risalpur on 12th July 2014 and delivered a lecture on 'Construction Contract Management' to MS students. The audience greatly benefited from the lecture.



Talk on economic progress versus environmental protection at MCE

Dr Hassan Abbas visited Military College of Engineering on 28th Aug 2014 to enlighten audience on the topic 'Economic Progress versus Environmental Protection.' The main focus of the talk was irrigation. However, he also highlighted water efficiency and stressed upon conservation of water practices as well.

Dr Hassan Abbas is a graduate of Military College of Engineering. He did his masters from Sydney Australia and PhD from Michigan State University, USA in 2010. Presently, Dr Hassan Abbas holds the prestigious UNESCO chair in Knowledge Systems for Integrated Water Resources Management at COMSATS Wah Campus.



Orientation session for NG staff - PDC-HR Dte



Professional Development Center (PDC),in collaboration with Human Resource Directorate, organized an orientation program for newly inducted NG Staff on 15th May, 2014. The program was attended by 21 participants representing different Directorates and Schools on H-12 Campus.

Meanwhile, Professional Development Centre in collaboration with HR Dte also organized a five-day workshop for LDCs, UDCs and DPAs of NUST from 7th – 11th July 2014. The workshop provided an In-depth learning of rules, regulations

and policies of NUST for better implementation; better understanding of MS-Office; in-depth knowledge of noting and drafting and office management skills to the participants. Two resource persons, Elim Din and Tauqueer Hussain from Army School of Logistics, Kuldana, Murree were specially invited to deliver the training. A brief certificate distribution ceremony was arranged which was chaired by Engr. Salman Absar, Director Innovation and Commercialization.

Faculty training program by PDC, HR Dte

A two-day training workshop for NUST faculty was organized by the Professional Development Center (PDC) from March 24 to 25 2014 at NUST. The workshop was attended by the faculty from SEECS, SCEE, NBS, SCME, ASAB, SNS, SADA and S3H.

Rector NUST addressed the opening session and congratulated the newly appointed faculty on becoming the part of NUST. Director HR threw light on polices and SoPs as well as rules and regulations concerning the HR Dte of NUST. He explained policies pertaining to recruitment, contract employment, probation period, promotion, performance evalu-

ation, leave policy and tenure track system for faculty. He laid major emphasis on the faculty development program and faculty mentoring and coaching held at NUST to ensure personal and professional growth of employees. He also elaborated the opportunities for advanced studies and Ph.D scholarships abroad. The workshop concluded with the address of Pro Rector Planning and Resources, Engr. Muhammad Shahid, who gave an overview of the resource planning activities of NUST and wished the newly appointed faculty good luck and success in their career.

MCS faculty publishes research paper

Dr Muhammad Hanif, is a faculty member at Military College of Signals, NUST. Recently, his research paper titled 'Optical Emission Studies of Molybdenum Plasma produced by an Nd: YAG Laser' was published in Springer's journal 'Journal of Russian Laser Research' in Volume 35, Issue number 3, July 2014.



Parenting Skills Workshop held by C³A

After the successful completion of the self-development workshop for the ladies of NUST community, C³A organised another session on effective 'Parenting Skills.' The participants were mostly mothers concerned about adapting to

methodologies for improved child rearing.

The workshop was conducted on June 11, 2014 and was well received by the participants. The presentation was based on activities to help mothers identify existing patterns that in-

hibit healthy parent-child relationship. The affects of nurturing on children, role modeling and birth-order were highlighted to understand the dynamics and demands of child rearing. The pressures on children and parents from the society were assessed especially on working mothers and the challenges they have to face. The focus was laid on making parenting a happy experience and coping and handling of children through difficult stages.

Overall the workshop was a success with active participation and encourag-

ing feedback from the participants. NUST Community Ladies have requested more sessions where they can express themselves openly and issues affecting their lives directly are addressed.

CES takes part in three-day Energy Workshop

A three-day Workshop on Sustainable Solution of Energy Crises via Academia in Pakistan with the overarching theme of bridging Government, Industry and Academia was convened jointly by UET Peshawar, the British Council and the University of Cambridge at Serena Hotel on March 20-22, 2014. Dr. Mohammad Bilal Khan, Principal/Dean CES-CAS NUST and Dr. Irshad Hussain (LUMS) served as Mentors for the esteemed event.



CO-CURRICULARS

Open House, Job Fair at College of EME

The annual Open House and Job Fair was held on Monday, 23 June 2014 at NUST College of Electrical and Mechanical Engineering (CEME). Dr. Syed Ismail Shah, Chairman Pakistan Telecommunication Authority graced the occasion as chief guest. The objective of this event was to provide an opportunity to both, potential employers and the graduating students of the College, to come closer and share their mutual interests. Another purpose was to develop new relationships and strengthen the already existing links with Industry. Students exhibited around 70 Final Year Projects related to Electrical, Mechanical, Computer and Mechatronics Engineering. The viewing companies visited the college on later dates for job tests and interviews.

Speaking at the occasion, Commandant NUST College of E&ME, Brigadier Jamil Sarwar Malik, SI (M), said, 'We at the NUST College of E&ME prepare our students to be quality engineers in their respective fields and polish them to gain



confidence to tackle any situation in the real life.' He expressed gratitude to the chief guest and companies' representatives for their presence. He commended the great devotion shown by the college faculty and the performance of college graduates in their respective organizations.

NICE Job Fair

The third job fair of NUST Institute of Civil Engineering was organized on 25th June 2014 for the graduating batch of 2010. It was organized to provide opportunity to the Civil Engineering firms to meet graduates of the Institute to discuss career employment and other associated prospects. All the graduating students showcased their Final Year Projects in the form of stalls. A few engineering companies also set up their stalls in the Job Fair to present their company products. The Job Fair was formally inaugurated by Principal SCEE, who later on visited all the 33 laid down projects of graduating students.

The highlight of the event was the selection of best Industrial Project that was picked by a panel of judges. The Project titled "Development of a Framework of Actuated Signalized Intersection and its Implementation on an Existing Intersection" supervised by Dr. Muhammad Irfan was declared the Best Industrial Project and the syndicate leader Mr. Muhammad Farhan was awarded with



a cash prize of Rs. 10,000. The Project titled "An early earth-quake loss assessment framework of Pakistan" supervised by Asst Prof Dr. Shaukat Ali Khan was declared runners-up and the syndicate leader Mr. Waseem Akhtar was awarded a cash prize of Rs. 5,000.

NUST College of E&ME secures win at NERC 2014

The month of June saw the commencement of the 12th National Engineering Robotics Contest (NERC) at NUST College of E&ME. This mega event is the oldest and biggest robotics contest in Pakistan which attracts participants from all over the country. This year around 140 teams from various universities around the country participated in the contest.

NERC 2014 consisted of 2 categories: the indigenous category, wherein the robots are designed and constructed from scratch, and the Modular category, wherein the robots are made from off-the-shelf robot construction kits. The 4 day event started on 18th June when the college opened its gates officially to welcome the participating teams for registrations and measurements. 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 basis of the points they earned in the qualifying rounds. These teams participated in head-to-head manner against each other on the final day of the competition. The closing ceremony of NERC 2014 was held on 21st June, 2014. The Chief Guest, Lt Gen Syed Tariq Nadeem Gillani, HI (M), Chief of Logistics Staff, Colonel Commandant of Regiment of Artillery, Pakistan Army, gave away the prizes to the winning

The NUST College of E&ME emerged victorious in this year's contest. Team 'Tamaatar' from NUST CE&ME was the winner of NERC 2014 bagging a prize of PKR 1,25,000/-. Also from



NUST College of E&ME, Team 'Jet Janguaar', team "Invictus" and team "7-UP" were the first, second and third runner ups, and were awarded prize money of PKR 75,000/-, PKR 50,000/- and PKR 30,000/- respectively. In the modular category, team 'Robot' and team 'Atom' from CE&ME who emerged as winners and the 1st runner ups bagged a prize of PKR 25,000/- and PKR 15,000/- respectively.

Various prizes amounting to PKR 1,50,000/- were also given in other categories including Best Engineering Design Award, EME Award and Participation & Performance awards. These prizes were secured by various teams including NUST CE&ME, UET, LUMS, Mehran University, SSUET Karachi, and NUST CAE.

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 representatives from print and electronic media.

Students, faculty and staff of all the campuses of NUST are requested to send their Essays, Poems, Book Reviews, Caricatures, Short Stories and Quality Jokes for inclusion in the forthcoming issue of the magazine

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Best Projects Award Ceremony, Open House of CAE

College of Aeronautical Engineering (CAE) organized Best Projects Award Ceremony and Open House on 19 August, 2014 for the graduates of BE Aerospace and Avionics Engineering disciplines. Air Vice Marshal Syed Nudrat Kazmi SI (M), Managing Director Aircraft Manufacturing Factory, Pakistan Aeronautical Complex (PAC) Kamra was the chief guest at the occasion. The best projects included 'Designing of embedded structure for detachable photo-voltaic panels and optimization of earth observation cube-satellite bus for PNSS-1 program' (presented by NUST Cadet Usama Ahmed from Aerospace department) and 'Design & development of a retro-directive antenna array for RF communications' presented by Pilot off Abdul Hannan from Avionics Dept. All projects accomplished by final year students of 77 Engineering Course were also displayed. Industries from various domains relating to aircraft, aerospace and avionics along with academia were invited for the event. SUPARCO, NESCOM (Maritime Technological Complex), PAC Kamra, Air weapon Complex (AWC), R&D Organizations of PAF and MCE are the renowned participants of the event.









What we usually consider as impossible are simply engineering problems... there's no law of physics preventing them. --Michio Kaku

Pantomime-2014 MCS



One of the most awaited and anticipated events of the year, Pantomime-2014, was held at Military College of Signals on May 10 for the male students and April 26 for the female students. This year the hosts were TCC 23 (TE 48 & BESE 17) who were all set to bid farewell to their outgoing senior course TCC 22(TE 47 and BESE 16). The chief guest for the male pantomime was Commandant MCS Maj Gen Ali Farhan while, for the female pantomime, Begum Maj Gen Ali Farhan honoured the event with her presence as chief guest. The theme of the mega event for men was 'Royal Classic' while the women followed the theme 'Egyptian Era.' Both the events were appreciated for the hard work of the décor team that was clearly visible. The high achievers in different categories were awarded medals by the chief guest and dinner was served at the end of medals distribution ceremony. The Chief guests in both events appreciated the efforts of the pantomime team and wished the outgoing course best of luck for their future, hoping that they will glorify the name of their institution and make the best use of their abilities and the lessons they learnt from there to achieve the best in their future lives.

The highlight of the male pantomime was the opening speech by President Pantomime'14, GC Roheb Ali followed by a motivational video that showed the ongoing crisis in Pakistan and yet the faith of the people for a better tomorrow. In the skits performed, the participants portrayed best of their acting skills to mimic their seniors in a humorous style. The audience were entertained by some energetic dance and song performances as well. Khabarnama was the rendering of the events passed. The unexpected and yet very appealing appearance of HoD CSE Lt Col Dr. Naveed Iqbal Rao on stage added more charm to the show. Adding to that, the ladies pantomime also had a variety of colourful skits and dance per-

formances by all the courses that were thoroughly enjoyed by the audience. The show also included different videos of the outgoing batch and farewell videos made by telecom students. The senior students were given souvenirs and titles by TCC-23.

The ladies event was organized by Lt Col Amer Waseem, OIC Ladies Pantomime, Capt Qurat-ul-Ain, Member Organizing Committee, NC Nabiha Raza, Software Coordinator, NC Agsa Hassan and Telecom Coordinator along with MCS Trg Bn, CHQ and AQ who provided full support for making the evening a success. From eye catching décor to the brilliant on stage performances these events most certainly did leave a mark on the memories of those who attended the event. It was indeed a night worth remembering for the outgoing course. The efforts put up by the hosts were commendable and they certainly gave a farewell worth remembering to their seniors.



Brilliant Amcolians stand out at RMC-MUN'14

RMC – MUN'14 was taken by shock on June 12 as a wonderful and ballistic performance was given by a young, talented and enthusiastic lot of MUNers from NUST Army Medical College. Representing USA and India in the Model United Nations sessions, the teams bagged eight awards at the national contest.

Amongst individual committee awards Muhammad Sherdil bagged the best delegate award and Nimra Klair received an honorable mention at the Pakistan National Alliance committee. Meanwhile, Dessar Zahra won the best delegate award and Fahd Farooq Ashraf won the outstanding diplomacy award from the World Health Organization Committee. Hareem Azhar won the outstanding diplomacy award and Zarrar Rehman received an honorable mention from Disarmament and International Security Committee. At the UN Human Rights Committee, Aaisha Shahbaz won the best delegate award while, Salman Wazir received an honorable mention. All these students represented NUST Army Medical College and proved their skills as good debaters and speakers for Model United Nations.







Student elections for Software Society - MCS

Student societies are an indispensable part of campus life. It is a forum provided to students to let them organize their activities within the campus and participate in similar activities outside the campus. Military College of Signals, recruits student members for the Literary Society and IEEE MCS Chapter on the basis of their interests and performance in respective domains, whereas, telecom and software societies hold elections every year for the selection of their members. This year, elections were held for Software Society at the Department of Computer Software Engineering on 29th April, 2014. The elections were conducted under the supervision of Faculty Member, Gp Capt Retired Umar Faroog. The electable candidates for 2014-2015



were Team Eminents and Team Envisage. After nerve shattering suspense and a well-fought battle, the results were announced as Team Eminents led by Hassan Bin Faiz triumphed with a convincing lead of 142 votes over Waleed Bin Haider's team Envisage. We wish the new software society the best of luck, and hope they will perform their duties to the best of their abilities.

COMMUNITY SERVICE

Energy Conservation Drive at FDC

As part of the energy conservation drive, faculty and students of CAE conducted a lecture on Energy Conservation Methods under the directive of AOC Academy, at Fazaia Degree College Risalpur on 30 May, 2014.

The lecture on Energy Conversation was divided in different modules. Introduction was given by Wg Cdr Ali Hashmi and other modules were delivered by different UTOs. Lecture was attended by a large number of students and faculty members of FDC. The attendees showed a tremendous enthusiasm in relation to the knowledge shared during the lecture.

After the lecture, the visiting team, along with Principal FDC and staff, visited different sections of FDC, including class rooms, offices, library and progress section etc. to carry out the Energy Audit of FDC. It was observed that a lot of energy savers were already installed at FDC. However, observations



related to Energy audit and possible improvements in Energy efficiency were shared with the Principal FDC. At the end, UTOs handed over a panaflex related to 'Energy Conversation' to Principal FDC, so as to install at an appropriate place. He appreciated the efforts made by PAF Academy team, and emphasized that similar lectures may be continued in future also to the students of classes, who could not attend the lecture due to paucity of space.

MRC arranges Technical Training Workshop for Economic Independence

The School of Mechanical and Manufacturing Engineering (SMME), Mechanical Resource Centre, organized a four week vocational training course for electricians, welders and machinists from 6th August to 28th August 2014 at the main campus. The classes were held four days a week, from Monday to Thursday.

A total of 49 students were registered free of cost for a four week course, however due to the unforeseen political situation in Islamabad, only 42 students were able to attend the course fully. The students came from various underprivileged backgrounds. There were very few students who had some diploma certification in their respective fields. However, a majority of the students were matriculate pass. The course was completely designed in Urdu language as to cater everyone.

A two hour entrepreneurship workshop conducted by Lec. Majid of NBS was also arranged on 20th August. The workshop was based on basic en-



trepreneurship skills. Mr. Majid also guided the participants on how to run a small business, how to sought funding sources, cost-effective marketing techniques etc. to use the skill that they are learning from the course in order to become financially independent and support their families.

The pass percentage of the course was 100%. A small ceremony was also arranged at MRC on 28th August, Wednesday. The successful candidates were distributed certificates. Engr. Naveed, in charge of DMRC and the head of this training workshop lauded

the efforts of his staff and urged to continue with their efforts to use this skill to help themselves. Dr Irtiza, Faculty Head of NUST Community Service Club (NCSC) also congratulated Engr. Naveed for his efforts and stressed upon the need to work hard.

The students were overall very satisfied with the course and all of them were positive that they would use these skills and lessons learnt from this workshop in order to be economically independent.

Students' services acknowledged at NCSC Award Ceremony



Each year NUST Community Service Club commemorates its council members and their achievements in the academic year. Keeping up with its annual tradition NCSC held its Appreciation Ceremony on May 30th, 2014. Honorable guests, who graced the auspicious occasion with their presence, included Director Administration Brig. Arif Siddiqui, Director Student Affairs Brig. Mahmud Bashir Bajwa and Principal

SMME, Dr. Abdul Majeed Ghafoor.

The event started with the new President Rida Aleem apprising the council about her experience in the past academic year. Souvenirs were then presented to the old office bearers for their service to the society and support to the council in all endeavours.

The council recognized and praised their efforts by awarding 'Executive' and 'Director' of the year, Team of the year, 'Debutant' of the year, and many more.

NCSC ended the night on a high note, heralding the launch of their official website by Brig. Arif, Brig Bajwa and Dr. Majeed. Copyrights of the domain 'ncsc.nust.edu.pk' have been reserved. NCSC praised the efforts of the team solely responsible for making this website, headed by former Press Secretary Nida-ul-Fatima.





President NCSC visits Indonesia

Rida Aleem, President NUST Community Service Club (NCSC), attended the Community and Technology Camp 'COMTECH' held in Surabaya Indonesia from August 25 to September 2, 2014. She also presented a thorough lecture about NUST and NCSC at ITS to the freshman batch and faculty of the ITS. After a long journey to Juanda International airport with many pit-stops, Ms. Rida arrived at the participants' residence which was deeply located in the center of the city. On the arrival of the participants; the accommodation committee greeted them with warm smiles and many souvenirs. The first day was mostly about arrival and meeting new stu-





dents.

The following days were jam-packed with a tight schedule and included various activities such as visiting ITS-Surabaya, attending workshops and seminars about robotics, batik, globalization, marine transportation etc. Participants were especially enthusiastic for the field activities such as rafting, a visit to mud volcano and Mount Bromo which is an active volcano that erupted three years ago.

The participants also visited the war museum, and the monument of heroes of war. Furthermore, they were taught the traditional music instrument called Anklon and dance called Sanan to perform during the Cultural dinner with the Mayor of Surabaya. Ms. Rida presented souvenirs from NUST to the Mayor and the coordinator of CommTech 2014.



God's dream is that you and I and all of us will realize that we are family, that we are made for togetherness, for goodness, and for compassion. --Desmond Tutu





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