

MONTHLY  
**NUSTNEWS**

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**WORLD ENGINEERING CONGRESS**  
Technology & Science: Creating Synergy



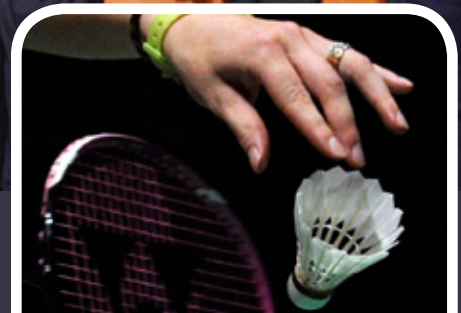
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“With ordinary talent  
and extraordinary  
perseverance, all  
things are attainable.

Thomas Fowell Buxton ”



# NUSTNEWS

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**NUSTNEWS** is a 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.



# 01 HIGHLIGHTS

## Fifth World Engineering Congress-2013 at NUST



Against the backdrop of a myriad of challenges and the alarming scenario unfolding as a consequence, the engineering profession holds the key to reverse the crises that may drag the world into a chaotic situation forbidding the human life to exist at ease. As the world population continues to multiply at a pace much faster than ever, engineering remedies to the ever-growing fundamental problems like nutrition, health and education have to be therefore more futuristic as well as enduring.

President Islamic Republic of Pakistan, Mr Mamnoon Hussain addressed these remarks to a packed-out audience at the inaugural session of 5th World Engineering Congress held at the main campus of National University of Sciences and Technology on September 23-24. The President was the chief guest for the opening session of WEC that brought together over 150 top engineering brains from across the continents.

The President welcomed the conduct of WEC in Pakistan, and reiterated that the congress recommendations should run on all cylinders and on a war-footing taking into account their relevance to mitigating issues shoddily implicating the world. He hoped that the congress would provide a good opportunity for gathering and sharing of experiences amongst the national and international community of engineers, technologists, academicians, scientists and other professionals in related fields, as well as policymakers interested in addressing issues facing the industry and R&D organizations.

He was fully optimistic that the congress would go a long way in the scientific, technological and economic development through creating synergies between the countries under the umbrella of The Federation of Engineering Institutions of Islamic Countries (FEIIC).

Federal Minister for Science and Technology, Zahid Hamid also dilated upon the greater significance engineering and technology has assumed as a result of population explosion especially in the developing countries. He was of the view that the deliberations made during the Congress would contribute to the overall development of the engineering sector, which serves as the backbone of any economy.

Chairman PEC and Patron-in-Chief of the 5th World Engineering Congress, Engr. Syed Abdul Qadir Shah welcomed all the participants to the Congress, especially those who had travelled long distances to reach Islamabad. In her address, Secy Gen FEIIC Dr Gulbazar welcomed the conduct of 5th WEC at NUST, Pakistan. Earlier, Rector NUST Engineer Muhammad Asghar expressed his gratitude to the esteemed guests for gracing the occasion with their kind presence. He also thanked Pakistan Engineering Council and other stakeholders of the congress for choosing NUST to host the prestigious World Engineering Congress.

It is pertinent to mention here that Pakistan Engineering Council, Malaysian Society for Engineering and Technology, Institution of Engineers Pakistan, Higher Education Commission, COMSATS, and National University jointly organized the three-day mega event.

WEC is an annual activity of Federation of Engineering Institutions in Islamic Countries. This year it was organized with an aim to provide a forum to engineers, researchers, policymakers and professionals in related fields of various institutions to share their knowledge and expertise for the benefit of the member countries and to establish these countries' effective networking and collaboration with the global leaders in engineering and technology.



President Islamic Republic of Pakistan  
Mr Mamnoon Hussain addressing the audience



Federal Minister for Science & Technology  
Mr. Zahid Hamid sharing his views at WEC-2013



Rector NUST Engr Muhammad Asghar delivering  
his talk



Chairman PEC Engr Syed Abdul Qadir Shah  
delivering welcome speech



Secy Gen FEIC Dr Gulbazar speaking on the significance of  
WEC-2013



President of Pakistan Mr Mamnoon Hussain receiving event  
souvenir from Chairman PEC Engr Syed Abdul Qadir Shah





A view of audience attending inaugural session of WEC-2013

President of Pakistan leaving his comments in the guest book



President of Pakistan posing for a group photograph with other dignitaries



Dinner hosted in honour of the guests at PNCA



Visit to Tarbela Dam



## CIE organises workshop on Fundamentals of IP

A workshop for education and public awareness on the 'Fundamentals of Intellectual Property' was organized jointly by NUST Centre for Innovation & Entrepreneurship (CIE), the US Commercial Law Development Program (CLDP) and the Higher Education Commission on September 23. The workshop was held in School of Chemical and Materials Engineering (SCME) and globally renowned speakers were invited as panelists to share their experience and ideas on IP.

Mr. Hasan Irfan Khan, from Irfan & Irfan Attorneys at Law supported the implementation of IP philosophy in Pakistan, and stressed that these were not just paper concepts but economies such as China, Indonesia and India had implemented them and achieved results. "By ensuring protection of IP rights we will actually be strengthening National Security in Pakistan," Mr. Khan reiterated.

Ms. Jennifer Ness of the United States Patent & Trademark Office pointed out that the founding fathers of US themselves identified IP rights as the key to their country's growth and they decided to implement it via supporting the growth of arts and sciences. She briefed the audience on types of US patents, steps to apply for one, and stages of application processing among other things. Ms. Bernice B. Donald, a Federal Judge for the United States Court of Appeals for the Sixth Circuit spoke on trademarks and how they protected brands, patent protection idea, geographic marks and copyrights. She highlighted the significance of protecting integrity of the market place and investments via trade marking.

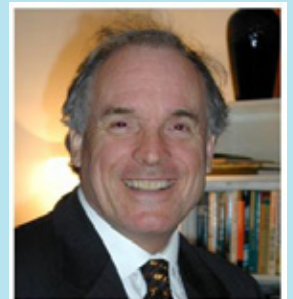
In the Q&A session, points were raised on academic/published material distribution in universities in reply to which speakers stressed on the importance of adopting a holistic approach to solve problems of privacy infringements by educational institutes. In the end CLDP organizers thanked NUST for its hospitality and Director Innovation and Commercialization Engr. Salman Absar presented NUST shields to the guest speakers.



## Workshop on How Engineering could Transform Pakistan-PDC

Professional Development Center (PDC), a constituent of NUST Institute of Leadership in Education (NILE) organized a training workshop on 'How Engineering Could Transform Pakistan'. The event was held in PDC Executive Center, CIE building on September 4. The training was conducted by Prof. James Trevelyan from the University of Western Australia. Dr. James has been associated with NUST since the year 2000 and has played a vital role in strengthening academia linkages between the two universities. Pro Rector (P&R) Engr Muhammad Shahid was the chief guest on the occasion.

The essence of the workshop was to target engineering faculty and instill in them the importance of best engineering practices that transform students to learners and faculty to teachers. Since engineers are the backbone of a country, this workshop worked towards social, economic as well as cultural progression. Prof. James discussed his work on engineering practices, allowing the participants to understand how engineering services in the developed countries seem to cost so much more than they should, often much more than industrialized countries. HOD-Department of Engineering Education Research (DEER), Dr. Qaiser Hameed, re-affirmed this by saying, "NUST is an engineering institute and its students are the eventual product. We don't want to teach math, we want to optimize the solutions. We don't just teach subjects, but their integration."







## IGIS student intern in Switzerland

Muhamamad Mateen Mahmood, student at Institute of Geographical Information Systems (IGIS), SCEE was selected for a two-month fully funded internship at Switzerland's École Polytechnique Fédérale de Lausanne (EPFL, Lausanne). EPFL is the 18th top-ranked engineering research and teaching institution that attracts some of the best intellects in the world.

The selection process was highly competitive considering that only 50 privileged students were selected from all over the world and given the honor of attending the School of Computer Science and Communication Systems which is Europe's number one department of Computer Science. Mateen was selected for internship in the Distributed Information Systems Laboratory headed by Prof. Dr. Karl Aberer and worked under the project of Swiss Experiment. The Swiss Experiment is a collaboration of environmental science and technology research projects across Switzerland with the sole purpose of bringing together field experiments and a common modern generic cyber-infrastructure on an unprecedented scale.





## UNSW Delegation visits NUST



A two-member delegation from University of New South Wales (UNSW), Australia visited NUST on September 4. The delegation included Ms. Fiona Docherty, Pro-Vice Chancellor (International) and Mr. Christopher McKeena, Director International Affairs. Upon arrival, briefing was given to the delegation by Pro-Rector Academics NUST, Dr. Asif Raza about the institutions, programs, research initiatives and future plans of NUST. The delegates in their remarks greatly admired the quality of teaching, research, infrastructure, facilities provided for its faculty and students to ensure quality teaching, learning and research. The meeting was also attended by Dir QA NUST, Engr Muhammad Ismail, Dean SEECs, Dr M Hassan Zaidi and UNSW Alumni, Dr Hamood Ur Rahman and Dr. Naveed Anjum.

The head of the delegation Ms. Fiona Docherty thanked NUST officials for welcoming them and giving briefing on various aspects of NUST. She prayed that relationship between NUST and UNSW continues to develop and lead to even more interaction and collaboration between academics and students from the two universities. The delegates also visited NUST School of Electrical Engineering & Computer Science (SEECs), where they were exposed to the research facilities and laboratories.

## Department of Behavioral Sciences launches MS in Clinical Psychology

The Department of Behavioral Sciences (DBS) launched its first post-graduate program 'MS in Clinical Psychology' on September 9. A total of 20 students were selected to be the pioneer batch for this program which had been designed with a vision to deliver quality education and clinical training in the field of Clinical Psychology. Dr. Salma Siddiqui, Head of Department and faculty members of DBS gave a warm welcome to the new students. In her welcome speech, Dr. Siddiqui shared her vision and mission for the program. An important message she gave to the students was to "follow ethical guidelines in whatever capacity they are playing their roles." Students shared their thoughts, feelings and excitement about being part of this program. As part of the departmental orientation, students were engaged in experiential activities designed by Dr. Urusa Fahim, Dr. Rubeena Kidwai and Dr. Sehar-un-nisa Hassan, faculty Dept. of Behavioral Sciences. The purpose of the activities was to invite students to begin their journey of self-awareness and to begin their learning process in the program.



## Students of NBS get Six Sigma Yellow Belt Certification

Six Sigma is a set of strategies, techniques and tools for process improvement. A total of 22 students from NBS (BBA 2011 Batch) are now Six Sigma Yellow Belt certified. In spring 2013, they attended the course, themed 'Intro to Quality and Productivity' taught by Engr Nadia Zaheer Khan. The qualification exam was held on September 28, in which 23 students from NBS appeared and 22 qualified with an average score of 81%. The passing threshold was raised to 70% this year. They are certified by Gem International, an organization that also certifies the employees of companies such as Mobilink. This is very encouraging as it will increase the NUST BBA's program worth in the job market. Six Sigma has proven to be very effective at helping organizations improve customer satisfaction if they truly apply the methodology. The students of BBA 2011 Batch that are certified include Nabiha Khattak, Nahal Hussain, Ayesha Aftab, Syeda Farwa, Hassan Rizvi, Usman Ali Jadoon, Amna Khattak, Ayesha Saraf, Bisma Sajid, Misha Zafar, Osama Khalid, Rabiah Batool Muzammil, Shahmir Hamza, Samra Shaukat, Anum Hamid, Hassan Shahzad, Tanzeela Tariq, Zainab Ahmed, Tayiba Mufti, Tazkia Anwer, Yaasir Malik, Zobia Hassan and Mehak Nadeem.



## Launch of MS in Systems Engineering at RCMS

Research Centre for Modeling & Simulation (RCMS), NUST launched Pakistan's first ever MS in Systems Engineering and revamped MS Computational Science & Engineering programs on September 10. Representatives from industry, academia and military attended the ceremony. Principal RCMS, Dr Ahmad Ejaz Nadeem welcomed the distinguished guests and new students at NUST. He conveyed that RCMS since inception in 2007 has been committed to wholesome education and meaningful inter-disciplinary research in engineering and sciences in a variety of fields. While addressing the audience, he stated that the curriculum of Systems



Engineering is based on the recommendations of the International Council on Systems Engineering (INCOSE), whereas, the curriculum of Computational Science and Engineering is based on the recommendations of the Society of Industrial and Applied Mathematics (SIAM). He spoke about the expectations from fresh graduates and briefly highlighted achievements of RCMS.

Chief guest, Pro Rector (Academics) Dr Asif Raza formally launched the program of MS in Systems Engineering. He appreciated the contributions in terms of scholarly articles from RCMS in this short time since its inception. He urged the students to think innovatively and out of the box. He emphasized that modeling and simulation enables the researchers to translate their creative thinking into tangible products with minimal time, reduced project & development costs, detailed testing and validation, lesser chances of error and reducing the stakes. The event was concluded with a group photo of new students with the chief guest and light refreshments.

## ASAB and USDA plan collaborative projects to ensure food security



A four-member delegation representing US Department of Agriculture (USDA) visited Atta-ur-Rehman School of Applied Bio-sciences (ASAB) on September 4. The Delegation was welcomed by Principal ASAB, Dr. Muhammad Ashraf and faculty member, Dr. Kashif Asghar. They were given a tour of the campus's state-of-the-art Labs and meetings were also held between the two parties with the aim of strengthening partnership and developing linkages.

Presentations were given to acquaint the visitors with the on-going research in the campus. The basic aim of the visit was to discuss future collaborative projects between USDA and ASAB. Different topics were discussed by Dr. Ashraf and Dr. Kashif including dairy vaccine, cotton and wheat security.

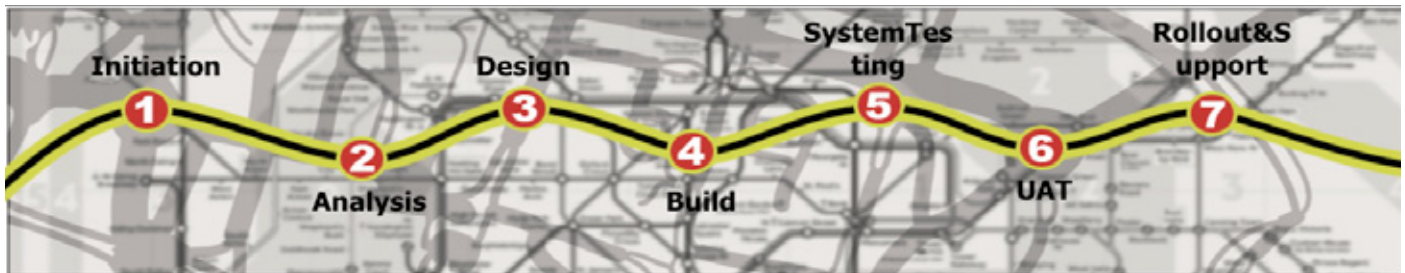
The presentations by ASAB speakers highlighted

the importance of food security and how food shortage was a dire threat to the well being of any nation, in relation to which they discussed their research in securing wheat production, wheat being the food source for over half the population. Dr. Ashraf related how he had collaborated on a PAK-US project titled 'Secure Pakistan Wheat Production through Controlling Rusts'. Nearly 20 institutes worldwide, inclusive of NUST, had worked together on publication titled 'Comparative Virulence and Molecular Diversity of Stripe Rust; collections from Pakistan and USA.'

The faculty discussed how green revolution farming methods were coming to an end leading to the attention of agricultural world towards genetic engineered varieties (GE) to face new challenges in better food provision. Agriculture biotechnology is helping today to provide people with more and better crops, and holds even greater promise for the future. Asian countries including China, India, Indonesia, Malaysia, Philippines, Thailand, Pakistan and Vietnam are giving due importance to plant biotechnology research.

## Enterprise Technology Transformation Project underway at NUST Campus

The first step of analysis started by conducting workshops for central Directorates. Over all 46 sessions were conducted in this regard. In the second step, AS-IS analysis and requirement gathering workshops were conducted for H-12 Institutions which were divided in four groups (Group 1: SMME & CES; Group 2: NBS, RCMS & SECS; Group 3: ASAB, SCEE (NIT, IGIS, IESE, NICE);



NUST has always endeavoured to make new landmarks keeping in view the future requirements. One of such ventures is the use of Enterprise Technology Transformation Project (ETTP) to integrate, streamline and enhance efficiency and productivity across all administrative, academic and financial processes at NUST. This integrated business solution is being provided by Oracle Corporation in partnership with Techlogix Pakistan for implementation.

ETTP is divided in three phases out of which Campus Management System (CMS) implementation is the first and it kicked off in Nov 30, 2012. CMS helps in managing the entire student life cycle i.e. from admissions to transcript generation. This phase is further sub-categorized in seven different implementation stages.

Currently, Design stage is under way while initiation and Analysis stages of the CMS project have successfully been completed. The Analysis stage of CMS project started in on Feb 21, 2013 and was completed on August 5, 2013. As majority of the business processes in NUST are centrally managed through Directorates located in H12 therefore Directorates and Schools were grouped and their workshops were conducted in H-12, while CMS team conducted workshops for Colleges in their respective premises. The objective of these workshops was to document AS-IS (existing) processes and requirements of students, faculty and administrative life cycle pertaining to relevant directorate with orientation of CMS delivered processes.

Group 4: SCME, CAMP & SADA. In the last step of gathering requirements, CMS team visited military colleges (CAE, MCE, MCS, College of E & ME, AM College, PNEC) and managed interactive sessions with respective teams.

To sync all the major stakeholders regarding the requirements of CMS along with execution of current policies, requirements review sessions were held. In these sessions, which were led by concerned Directors, representatives of Directorates and all NUST institutions jointly reviewed and discussed the CMS requirements. The final documents of CMS Requirement stage were presented to Pro-Rector Acad by Dir ICT in 2nd Executive Committee Meeting (ECM).

Currently the Design Phase is on the go. Fit gap analysis is a major component of design phase that would be followed by finalization of To-be processes and eventually design specification would be finalized.





## 9th AURF-AAA Scientific Research Symposium

The annual Symposium was organized under the auspices of Amcolians Undergraduate Research Forum (AURF) and Amcolians Alumni Association (AAA). The objective of this annual scientific symposium is to assess the quality of student researches and inculcate a spirit of research in them. As many as 300 oral presentations, 25 table clinics and 70 posters were received out of which a selected few were chosen to be presented on the main stage. The researches of all students were outstanding and showed that the spirit of research is invested deep inside the mettle of Amcolians. The oral presentations, posters and table clinics were judged by Maj Gen Muhammad Ayub, Brig Aslam and Brig Mazhar Hussain. The best presentations were given certificates and cash prizes as a token of appreciation for their outstanding work. The

moderator for the event was Brig Javed Usman Rao, a coveted researcher himself and also the patron of AURF. The guests of honor were Maj Gen Sulman Ali, Principal AM College and Maj Gen Jawad Khalid Ansari, Medical Specialist MH, Rawalpindi.

Muhammad Hamza Jahangeer clinched top position for Outstanding Research Oral Presentations, Shafaq Mushtaq for the poster competition and Aleena Nabi Nur, Amina Ahmed, Zaaira Ejaz, Amna Sikander and Nyma Malik for table clinics. The chief guests were also presented with souvenirs by Maj Gen Muhammad Ahmed, DG Surgery AM Corps. The ceremony ended with dinner for all the cadets and faculty members thus completing the most important event at Army Medical College, Rawalpindi. Chief of Army Staff (COAS) General Ashfaq Parvez Kayani, NI (M), HI graced the occasion as the chief guest.



## SCME faculty visits Marmara University, Istanbul

Principal SCME, Dr. Mohammad Mujahid visited Istanbul, Turkey for strengthening academic linkages with the institutes from September 2 to 6. He participated in the 6<sup>th</sup> International Conference on Nanoscale Magnetism 2013, Istanbul where he delivered a talk on a joint research titled 'Synthesis and Characterization of Bio-Compatible Ferromagnetic Hydroxyapatite Composite'.

While visiting the Marmara University, Dr. Mujahid also talked about on research collaboration between the two universities in a high level meeting with the Dean of Faculty of Engineering, Prof. Dr. Ayhan Mergen. He also visited the labs of Industrial Biotechnology and Systems Biology group of Marmara University. One student, Ilker Calgeris, enrolled at Marmara University, is currently working on a joint project in SCME labs. This collaboration is an effort to strengthen academia linkages through sharing of facilities, expertise and initiatives in the interest of both institutions, for the promotion of collaboration in the fields of mutual interest.





## NCSC students meet Talat Hussain



The faculty sponsor and office bearers of NUST Community Service Club (NCSC) met Talat Hussain on September 29 to discuss the Baluchistan Earthquake Relief Campaign. Syed Talat Hussain is one of the leading journalists in Pakistan. He is mostly respected for his in depth and fair analysis and his show has been continuously rated as one of the best in Pakistan.

The need of the campaign, and the problems faced by the affected people were discussed in the meeting, and the means of generating money were finalized. As a part of the campaign, Mr. Talat will be holding a fundraising seminar in NUST. The club will also be launching hand to hand money donation campaign, movie nights, and a social event for the cause. It is to be noted that Mr. Talat Hussain has been made the mentor of NUST Community Service Club. He is the primary anchor, as well as executive producer, of the current affairs show Live with Talat which is primary on air by the Express News. Before, he has been an executive director of AAJ Television and had also worked for PTV and Dawn News.

## Career counselling & Education Programmes offered at NUST

C<sup>3</sup>A organized a full day activity to inform the students about the facilities and learning opportunities open to them at NUST, C<sup>3</sup>A and Student Affairs Directorate with a short visit to H-12 campus. The students were informed about the new programmes which have been recently launched in the C<sup>3</sup>A academic block, including Postgraduate Diploma, Advanced Postgraduate Diploma and MA in Career Counselling & Education. These programmes are the first of their kind in Pakistan. C<sup>3</sup>A speakers discussed the rationale behind starting these programmes, which is to address the need of developing career counsellors' ability to help their clients via improving their self-efficacy through self-exploration and understanding of the world of work. The programmes are designed for individuals who provide career advice, information and guidance in educational institutions and other organizations.



## COO Fuelade Solutions, USA visits CES-NUST

Robert D Christie, Managing Partner/COO Fuelade Solutions, USA visited Center for Energy Systems (CES) on September 23. He attended the inaugural session of the World Engineering Congress at CIPS NUST. Subsequently CES faculty members were introduced during the meeting. Principal CES gave brief presentation about the school and also discussed ongoing applied research projects undertaken by the faculty members. Mr. Robert D Christie appreciated that the vision of the Center justifiably includes both electrification and liquid fuel as part of the energy mix.

Robert D Christie gave an introductory presentation about his company, and also discussed how they successfully launched their product across the globe. He said that Fuelade boosts power, reduces emissions and increases fuel economy of both Diesel and Gasoline Engine Platforms to the tune of 20-30 %. He further said that extensive testing reveals that Fuelade com-

pletely burns fuel in the combustion chamber and also cleans injectors, valves, pistons, cylinders walls and improves the fuel economy. Mr. Robert D Christie further added that Fuelade can be tested on already running diesel generators in NUST Campus.





## First Aid Workshop

NUST Community Services Club organized a two-day training session on 'First Aid and Basic Life Support' organized in collaboration with Rescue 1122 and TABA Foundation. A number of students from different schools of NUST participated in the training. The purpose of the workshop was to train the participants for medical emergencies and other accidents that may happen like the typical bruises, cuts, scrapes of everyday life, life threatening accidents like puncture wounds, spurting cuts and burns, poisoning and choking etc.

The training began with an orientation of the fundamental principles, guidelines and rules on first-aid and the Emergency Plan and golden rule in providing first-aid. The topics discussed included common emergencies encountered like fractures and wounds in practical and day to day life and how to administer adult cardiopulmonary resuscitation(CPR). Later, fire extinguishing demonstration was also given by the Rescue 1122 team.

Trainers held an interactive and lively session with the right tint of humor and the participants were all motivated. To enhance understanding of the theories, practical demonstrations were given and later participants were involved in role-playing activities where they learned what to do in times of emergencies. The seminar/workshop ended with a written and practical examination. Trainers from Rescue 1122 were also presented shields as token of appreciation by President NCSC.



## Student attends OWYP Summer Training Conference in New York

Being the Project Manager of Islamabad hub of One World Youth Project (OWYP), one of Ayesha Safeer's responsibilities was to attend a week long training conference. Traveling to New York to represent NUST and especially Pakistan was a great opportunity for her these summers. The week-long STC consisted of rigorous training sessions and workshops that were designed to prepare the Project Managers to lead their hub team with positive leadership.

The excursion trip to the city, sharing of cultural artifacts, dreams, inspirations, offering support and appreciation towards each other added a lot of value to the student's trainings and personal growth. When delivering their own workshops, everyone covered important topics such as being equipped with new techniques, building and sustaining connections among the teams and marketing tools to spread the word of OWYP, pooling their personal experiences and innovative thinking allowed them to help each other create a tighter global network. In short, this week long training conference added a lot of exposure and positivity to the personality of the participants. While reviving her experience, the student from NUST says, "I cannot thank NUST enough for providing me with this opportunity to work with a very professional and dedicated organization for the development of a better global community."



## 02 UPDATES FROM SCHOOLS

### SCME holds Seminar on Industrially Sponsored Projects

A seminar was held at School of Chemical and Materials Engineering (SCME) to promote Industry Academia linkages. Some of the most prominent speakers were invited to deliver lectures on September 16 at SCME Seminar Hall. The opening speaker, Mr. Rehmatullah gave an introduction to the industrially sponsored projects and the types of projects that attracts industry. He gave examples of cost reduction in packaging of water bottles which occupies large percentage of its cost. The project sponsorship is designed to cover costs of technology and chemicals required, as well as in organizing industrial trips. He informed the students that a successfully sponsored project could be a source of further earning for the industry.

This was followed by Mr. Naseem taking the stage saying, 'Every research must be applied research'. He offered to fund viable projects and their implementation in order to encourage entrepreneurship in students. Mr. Irfan from Pakistan Science Foundation introduced himself and his organization and talked about how the projects are selected for funding. An important point was that PSF encouraged only supervisor headed projects. This was followed by Mr. Shabir, R&D who discussed at length the projects undertaken by his institute. He highlighted the eminence of universities saying that the largest research organizations around the world utilize university projects and research. Reports/ Thesis were not the ultimate end to a project he reiterated. It was the implementation step that was done via design of a pilot plant that is essential in order to justify the design and economics of the process in the market. HOD Materials Engineering SCME, Dr. M Shahid thanked the speakers for their invaluable input in the Seminar.



### SCME celebrates PEC accreditation of its two Engineering Programmes

A deligation from Pakistan Engineering Council (PEC) had visited School of Chemical and Materials Engineering (SCME) in the month of April for the assessment of their two engineering programs. It was in September that SCME received good news as re-accreditation was granted to both their Chemical Engineering and Materials Engineering programs for two years. The PEC experts; Engr. Dr. Taqi Zahid Butt, Engr. Dr. Javed Rabbani Khan, panelist; Engr. Ikram-ullah Khattak with convener; Engr. Dr. Gul Haameed Awan conducted the PEC proceedings. Working papers about the two Programs were prepared by the working team, while the case for accreditation was presented by the relevant head of the departments. The PEC team also met the Pro-Rector (Acad) along with the Principal SCME. In the ensuing discussions with the HoDs, queries of the team were clarified and relevant data for assessment completion was handed over. Visits to the laboratories, central library and department library were also carried out. The PEC representatives actively interacted with the students and faculty of the school for further insight. SCME team is determined to take remedial actions on PEC suggestions.





## ASAB welcomes new Principal

In the month of September, Atta-ur-Rahman School of Applied Biosciences warmly welcomed Dr. Peter John as the acting Principal of the school. Dr. John's specialized in the area of Auto-Immune Diseases. He completed his post-doctorate from University of London, UK. He is also currently serving as the HOD of Healthcare and Bio-technology.



## SEECs conducts a training workshop on development and implementation of LIMS

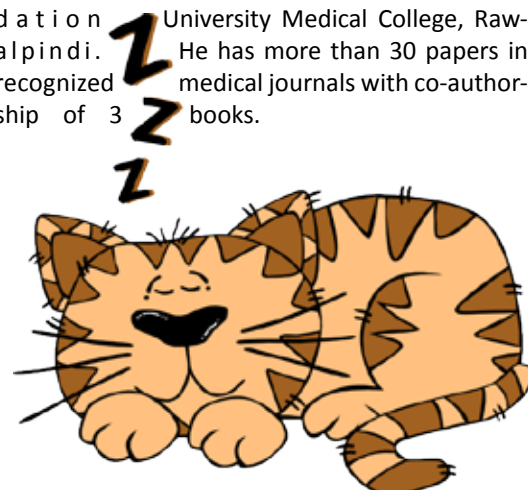


Training workshop on the development and implementation of Laboratory Information Management System (LIMS) was conducted from September 2 to 3. As many as six participants from across the country working in veterinary laboratories participated in this workshop. Dr. Saad Qaisar, Assistant Professor (EE) SEECs & Project Director, LIMS and his team in conjunction with the United Nations Food and Agricultural Organization (UNFAO) hosted the workshop in IBM Lab, SEECs. Participants were invited from Peshawar (KPK), Lahore (Punjab), Quetta (Baluchistan), Tandojam (Sindh), Karachi (Sindh) and Islamabad. The two-day workshop aimed to initiate a network between the veterinarians and technical team to communicate over the issues in system and make it more productive.

Dr. Muhammad Afzal, Project Coordinator, UNFAO in his introductory session highlighted the goals and objectives of the project. He expressed the role and importance of the system that could form basis for the decision-makers to make evidence based policies. Other member of his team including Dr. Muhammad Munir (National Field Officer), Dr. Ehtisham ul-Haq Khan (National Field Officer), Dr. Javed Arshad (National Field Officer), Mr. Shahveiz Hassan (Project Assistant) and Ms. Reem Javaid (Finance Assistant) also participated in the introductory session. Dr. Qurban Ali, Director General, National Veterinary Laboratory highlighted the importance of the LIMS project among the laboratories working in animal diseases. Engr. Habeel Ahmad, HoD SEECs, appreciated the efforts by Dr. Saad Qaisar for providing services to FAO in development of LIMS. Dr. Saad Qaisar also mentioned the development details of the system, undertaken in collaboration with Texas A&M University, USA, to be deployed nation-wide in 13 national veterinary laboratories and subsequently, to district laboratories. Mr. Muhammad Salman, Professional Software developer trained and guided the participants over the system and addressed any queries in the manner.

## Lecture on Sleep: A mysterious human behavior

A lecture titled 'Sleep: A mysterious human behavior' was held at NIT Auditorium, SCEE on September 18. The event was attended by 2010 and 2012 batch of NUST Institute of Civil Engineering (NICE). Guest speaker, Dr. Saadat Ali Khan who has been a student and professor of physiology for 48 years presented the importance of sleep in human life, which is 25% to 35% of his whole life. He commenced his presentation with several definitions of sleep, describing it as a readily reversible state of reduced responsiveness to the environment unlike coma. He explained the mechanical philosophy behind sleep in the light of science and religion. The audience listened to his depiction of sleep debt and its hazard and other sleep disorders that effect personal and professional lives of human beings. He also compared between the states of deep sleep and REM sleep. At the end, he cleared several misconceptions revolving insomnia and defined it as an inability to sleep even with the provision of prerequisites of sleep. The lecture was followed by a question answer session which further added to the knowledge of the audience pertinent to the topic. Dr Saadat Ali was presented a souvenir by Associate Dean NICE, Dr Liaquat Ali. Brig (R) Dr Saadat Ali (SI) is currently a professor of physiology at Foundation University Medical College, Rawalpindi. He has more than 30 papers in recognized medical journals with co-authorship of 3 books.



## Medical College conducts workshop on constructing MCQs

A workshop on 'Constructing MCQ one-best type' was conducted by Brig Irfan shukar SI(M) on September 14 at Army Medical College conference room. All the basic sciences and clinical faculty and Principal AMC, Maj Gen Salman Ali attended the workshop. The arrangements were made by the Department of medical education Army Medical College as part of a faculty development programme.

Multiple Choice Questions (MCQs) are being extensively used in assessment. However, despite wide usage there are concerns about their quality, content and coverage. This hands-on workshop was planned for the participants on how to construct the



MCQs. Workshop sessions covered topics including the Current trends and recommendations in Assessment, Development of MCQs and Review & feedback on MCQs. This workshop was beneficial for all faculty members involved in undergraduate students teaching and assessment.

## C<sup>3</sup>A conducts orientation sessions for parents of students

The Centre for Counselling and Career Advisory (C<sup>3</sup>A) organized an orientation lecture which was attended by freshmen of NBS along with their parents. They were habituated with the purpose and functioning of C<sup>3</sup>A. The half an hour interactive lecture was arranged to reaffirm the new inductees and their parents about the quality of emotional health and psychological well-being provided to their students. They were familiarized with the services offered at C<sup>3</sup>A for the students and their immediate families.

The Interactive session mainly focused on university life issues such as; adjustment, home sickness, study schedule, failure to achieve academic pursuits and difference among the students in morality and values that they adopt from home. At the same time the emotional setback of parents was discussed when they see their child moving away from them for years at a stretch. Since all issues directly affected their lives, parents showed their keen interest and shared their concerns with the counsellors.



## Google start-off at SEECS



'Start-off with Google' was the pioneer event by Google student Ambassadors from NUST on September 17 at SEECS. It was a stall-based event on which followers of the G+ page 'Google at NUST' were eligible to play a small game and win Google Swag. This event was organised to introduce students to the Google Student Ambassador Program and to create excitement among them for the future events and activities. The stall was set up in the SEECS UG lobby from 1130 to 1400. Students signed up for G+ and followed the page if they weren't following it already. For the game they were provided with a piece of paper to write any alphabet, word or phrase, which according to them has more Google search results than their competitor's written word or phrase. The winners got different Google gifts including shirts, bottles, mouse-pads, caps, stickers, pens etc. Around 135 students visited the stall within the short time span and it turned out to be a really fun event. Students came up with search words like Google, how to, Facebook, 'e' and much more and won gifts. All in all, it was a great response for the pioneer batch of Google student Ambassadors from NUST.



## Industry Liaison Office holds career development sessions

The Industry Liaison Office (ILO) is a key element in the university's drive for industry engagement, relations and partnership. In line with this mission; ILO planned a series of career development sessions in the month of September. Mr. Mustafa Abbas, Director Institute for Career and Professional Development and Mr. Usman Gilani, Manager Career Counseling & Corporate Relations conducted a very useful and informative three-hour session at NUST Business School for the students of NBS, SEECs, CAE, ASAB and SCEE on 'Deciding career choices' and 'Importance of extra-curricular activities in personality development'. In addition to this, ILO also arranged a joint career development session at SCME for the students of SCME, SMME and College of EME. Mr. Shazil Pervez, Assistant Product Manager Mobicash from Mobilink and Mr. Ammar Khan, Managing Director Middle East from Nexus Telecom AG gave a brief presentation on the topic of 'Getting hired' which included resume writing and interview tips, and their personal experiences of working in the corporate world.



## Mobilink career development session by NAA



NUST Alumni Association (NAA) organized a Mobilink Career Development Session on September 16. Ammar Ahmad Khan, president NAA, addressed the packed seminar hall at School of Chemical and Materials Engineering (SCME). He started with an introduction to NAA relating to the importance of alumni, how the society started off with a vision and its mission to serve NUST community in particular and the society in general. He shed light on importance of engaging the alumni to be i.e. the students in NAA, while they are young and can devote time to society activities. He then shed light on the Association objectives, working hierarchy and its planned activities. Ms. Rubab extended her invitation to students to volunteer for scholarships fundraising.

The speakers talked at length about the growth of the society which had now developed into a global network. The second part of this session focused on guiding the students in Career management and planning by Mr. Shazil Pervez, NBS Alumni & gold medalist and currently working Assistant Manager, Mobile Financial Services, Mobilink. The subject of scholarships was discussed in conjunction with educational planning. Important aspects of CV writing and interviews were also discussed. The speakers pointed out how entrepreneurship and adding a business edge to your ideas is the key to creating jobs, and is a dimension not to be ignored in academic goals and plans.

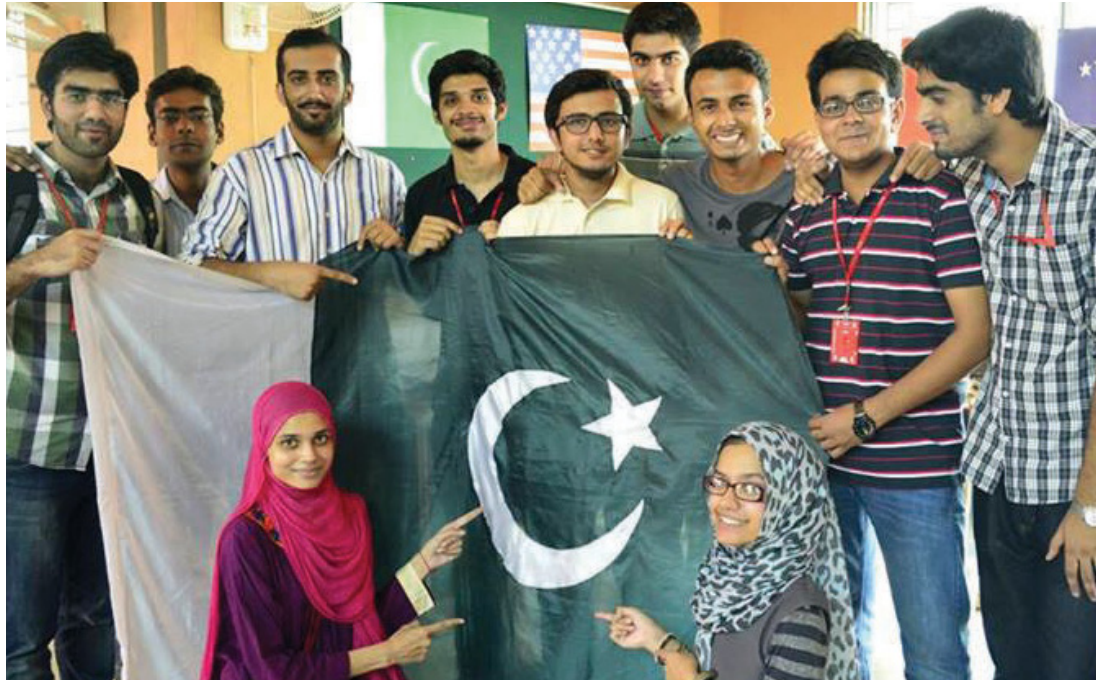
## NSS online orientation for freshmen

The NUST Science Society orientation was an online event, the aim of which was to educate the freshmen regarding the different academic offerings at NUST. The online event comprised of introduction to the various courses provided; Computer Science, Geo Informatics Engineering, Computer Science, Electrical Engineering, Mechanical Engineering, Environmental Engineering, Aerospace Engineering, Mechatronics Engineering, Civil Engineering and Chemical Engineering. The event aimed at being the guideline for the students' deciding their respective discipline which they intend to follow later in their career paths. The requirements of every course were discussed in detail by posts on the official Facebook page by Alumni and relevant Industrialists. The event also aimed at clearing students' ambiguities not only regarding the major they would choose but also in reference to the right and practical job for them.



# Nustians celebrate One World Day

One world Youth Project's Islamabad Hub decided to mark September 11, 2013 as One World Day to celebrate unity and peace in the world at SEECS, NUST. The event was held with an objective to understand the history, geography and economy of different countries with the basic idea of creating cultural understanding and harmony across the globe. One World Youth Project (OWYP) is a program of El-Hibri Charitable foundation based in Washington D.C. in US. OWYP partners with universities and colleges to establish an innovative service-learning



program that empowers university students as cross-cultural facilitators in local, public middle school classrooms and links campuses across the world to a network of engaged universities, allowing for student facilitators to work together across borders as advocates for their classrooms.

OWYP partnered with National University of Science and Technology in 2012 and is currently operating in Islamabad through an eighteen member team of highly talented and diversified students from NUST.

The event started with a display of the flags of the partner countries and an information desk was placed for anyone who was interested in learning about the culture and tourism of these countries alongside with cuisines from these countries open for everyone to taste.

With the arrival of more students at the stall, the team of OWYP at Islamabad Hub started different ice breakers and energizer activities to uplift the participants' interest and build better and interactive environments especially among the freshmen students and senior batches. These activities included game of seven and Simon says (OWYP Style) in which the participants formed a circle and acted out according to the rules of the games. Small side activities included a game called 'Guess the currency' in which currency coins from several different countries were randomly placed and the player had to try and identify the country to which the coin belonged. The most interesting game was 'battle of the bands' game in OWYP styles where a word was given to the four teams and all of them were to sing songs which had that word in it until they were out of songs.

## Reunion of 7th batch of Army Medical College

The reunion of 7th batch of AM College was organized at Ayub Auditorium AM College on September 30. All the officers and doctors of the 7th batch joined in this event to rejoice together. Dr Wajid Ali opened the ceremony followed by the addresses of Principal Army Medical College, Maj Gen Salman Ali HI (M), and Maj Gen Syed Imran Ma-jeed, the founder of Amcolians Alumni Association (AAA) and commandant of AFIC. Rector NUST, Lt Gen Asghar along with the senior general officers of AMC and GHQ also attended the ceremony. Army Chief General Ashfaq Parvez Kayani HI (M) NI (M) graced the reunion to appreciate the officers and doctors. Rector NUST addressed the

occasion with joy and wished good luck to the officers of 7th batch for their career. The guest of honor praised the Army Medical Corps for inculcating a spirit among the officers to cater for the best medical education, producing competent physicians and technical health facilities for the troops. He further discussed financial grants offered to the corps and his plans on uplifting and revamping the Army health care facilities in different cities of Pakistan to ensure provision of better care to the troops and mainstream officers. The address was followed by a formal tea break for all the officers and the closing ceremony.



## NUST Science Society Welcome Gala

NUST Science Society held a gala of activities under the banner of 'NSS Welcome' on September 26. The event was aimed to acquaint the new batch with the society and boost their on-going registration. The event started with the inaugural speech by Qassam Sarmad, President NSS, in the SCME Seminar hall. He described the working of the Society, its past achievements and hierarchy. After that a SCI-venger hunt was organized which was basically a scavenger hunt with a peppering of science. Students had to solve different puzzles regarding science, leading to clues scattered throughout the campus, ultimately leading to the winner, decided by most points scored in the allocated time. In one such clue, students had to guess the place where photons were being used to heat water. The clues led them to the building of IESE. The SCI-venger hunt lasted two hours after which the participants enjoyed refreshments and a movie screening of 'Monsters University' in SCME Seminar Hall.



## Workshop and lecture organized by PNEC

A guest lecture on 'Healthy Eating Habits' was delivered by Dr Pirzada Muhammad Hazrat Agha on August 30 in Jauhar Auditorium of PNEC. The subject invited interest from a large number of PNEC students, officers and faculty members. To wrap up the session the speaker was presented by a memento by the Deputy Commandant.

Professional Development Centre (PDC)-PNEC arranged a one day workshop on 'Risk Assessment and Incident Investigation' in collaboration with Fire Engineering Design Solution (FEDS) on August 31. The workshop focused on grooming students to foster their engineering skills. A large number of students and faculty members attended the workshop.



## Principal CES delivers talk at Command and Staff College, Quetta

Principal/Dean CES-NUST Dr. Mohammad Bilal Khan delivered a lecture titled 'Research Methodology' at the Command and Staff College Quetta on September 10. A new paradigm in research was introduced comprising Insight, Imagination, Correlation and Reinvent Thinking to supplement the established project sequence namely, Design, Synthesis, Measurement, and Analysis. Relevant examples were cited from advanced research conducted at NUST to highlight the efficacy of the new paradigm. 464 Officers and College Directing Staff including 39 allied officers from 27 different countries attended the talk.



## Ashfaq Hussain stirs nationalism in students at NICE

NUST Institute of Civil Engineering (NICE) organised a lecture on 'Why and How Pakistan?' on September 12 at NIT Auditorium SCEE. Associate Dean NICE, Dr. Liaquat, faculty members and civil engineering students of Batch 2k10 attended the event. The guest speaker at the event was Col. Ashfaq Hussain who is a renowned scholar with several published books and publications including Witness to Blunder, a book on events of Kargil.

Colonel Ashfaq commenced his lecture by stating that Pakistan came into being with the first Muslim stepping in the subcontinent. He briefed the audience regarding the advent of Islam in present day Pakistan, rise of Muslims, fall of Mughals and a brief history of independence of Pakistan. He explained the purpose of the struggle behind independence of Pakistan to stir the feeling of nationalism among the audience. The lecture was followed by a comprehensive question answer session relating to several conflicts and crisis affecting Pakistan today.

## Orientation Sessions for Freshmen

### NBS and S3H

NUST Business School and School of Social Sciences and Humanities (S3H) organized orientation sessions for the new batch from September 8 to 9. The event was successfully managed by the Student Affairs office where a group of volunteers were present to pay a warm welcome to their newly admitted juniors. The purpose of hosting such a program was to familiarize students with the campus and to assure the parents that their children are in safe hands. Following the NUST policy, students promoted a ragging free welcome for the new batch by carrying out some interesting ice breakers and 'getting to know you' sessions. A highlight in this regard was a mug shot photo-booth where every student who got admitted had a photo shoot for fun. Another highlight of the day event was a seminar organized in collaboration with C3A, where parents were informed about NUST policies to handle their university going students.



### SEECs

During the orientation session, Parents along with their children attended the welcome seminar at the NUST Auditorium in CIPS. The seminar began with the recitation of Holy Quran followed by the welcome address by the President of Student Government Association, Mr. Hadi Mahmood. The video of NUST Lipdub was screened which was followed by the welcome address of Dean SEECs, Dr. Zaidi. After that, the HoD of Electrical Engineering, Engineer Habeel Ahmed and HoD of Computing, Dr. Shareef Ullah delivered an introductory speech in their respective fields.

At the end of the Seminar, the parents were directed to RIMMS seminar hall where all their queries and questions were answered by the faculty and assigned orientation leaders. They were also entertained with refreshments. In the meanwhile the students of CS and Software Engineering were taken on the campus tour, which included the complete tour of SEECs Undergraduate and Postgraduate blocks. The students of BEE were seated in classrooms in SEECs UG block where they were given presentations on SEECs grading policy, SEECs Plagiarism Policy and were introduced to LMS. The registration process of ITS/LMS was computerized this year and the students had acquired their mailing addresses before the orientation day. The registration for transport and exam branch was carried out in the classrooms.





## SCME

School of Chemical and Materials Engineering organized an orientation for the freshmen batch on September 6. The parents, students and faculty took part in the ceremony which was arranged in SCME Seminar Hall. The aim was to welcome the audience and give them an insight into life at SCME. They were told how SCME gives weightage to extra-curricular activities, nurturing societies such as NUST Science Society, NUST Literary Circle, SCME Alumni Association, SCME Event Management Society and SCME Sports Society, along with multiple teams that are sponsored for competitions all over Pakistan. A presentation was given, highlighting the origin of NUST and evolution of the H-12 Campus, in terms of its diverse schools and world-class facilities. Policies, rules and regulations tied to education at NUST were also discussed. HOD Materials Engineering Department, Dr. Mohammad Shahid, assured the parents that SCME is a stepping stone to developing their children's future career, mentioning how the school has established strong industrial-academia linkages for both engineering disciplines. The parents were given a guided tour of the School to acquaint them of the facilities available such as laboratories, class rooms and the School library.



## SMME

9th September marked the day when ME-05 became a part of the School of mechanical and manufacturing engineering (SMME). An orientation session was held in which senior students performed their duties in guiding the new entrants by standing at the gate #10 and the entrance of the school. After seating all the new students and their family members in the auditorium of the newly built building of the school, Dr Yasar Ayaz and Dr. Irtiza gave a general briefing to the students which included discussion about NUST's ranking in Pakistan/World, NUST schools/Institutions and various clubs/facilities, SMME/faculty/different offices, semester system and relative grading system, hostels and facilities and procedures to resolve day to day routine problems. This was followed by welcome address of Principal SMME, Dr. Abdul , after which the formal registration and of the students commenced.



## PNEC

The new batch comprising 118 civilian students of Semester 1 joined Pakistan Navy Engineering College (PNEC), NUST, Karachi on September 6. Upon joining, Deputy Commandant addressed the new entrants and their parents/guardians and welcomed them to the college. After the welcome address, the students were briefed on examination systems and routine of the college. The orientation was aimed at assisting the new students to ease into the new university life. A familiarization visit was also conducted around the campus where the students visited different buildings of the campus.



## Lecture on Character Building

A lecture on 'Character Building' was arranged at NUST Institute of Civil Engineering on September 11 at NIT Auditorium, SCEE. The guest speaker, Professor Israr Muawia is a professor at GC University, Faisalabad. The lecture encouraged the students to follow the ethical values that are not politically, culturally and socially biased. Character building excludes no one and is an essential part of human life. The speaker urged the young audience to follow the fundamentals of character building that are respect, trustworthiness, fairness, caring and responsibility. These values later define a person and are consequential in his success in life. The attendees were moved by the lecture and acknowledged the importance of the topic.



## Materials Engineering student defends PhD thesis

NESCOM nominee and SCME Materials Engineering student, Mr. Rizwan Saleem successfully defended his PhD Thesis titled 'Design, Fabrication and Analysis of Photonic Device Nanostructure' on September 17, 2013. Part of the work was conducted at the University of Eastern Finland under HEC Split PhD Program and also supported by the Academy of Finland, Finish Optical Society and the EU Optical Society. The excellent work resulted in 10 ISI Impact Factor Publications (Total Impact Factor of 22) and 13 International Conference Proceedings. The Scholar gave oral and invited talks in 12 countries including USA, France, FRG, Austria, Sweden and Netherland.

Supervised by Dr. Mohammad Bilal Khan, founding Dean SCME and currently Principal/Dean CES NUST, the thesis is reviewed by Professor Antti Saynatjokky of the University of Arizona USA and Professor Seppo Kalevi Honkanen of the University of Eastern Finland.

## HRD facilitates faculty development programs

Human Resource Directorate is the most important component of any university to keep its staff prepared for the university needs and requirements through faculty development programs, training workshops and short courses both nationwide and abroad for faculty as well as support staff.

Faculty development programs are run at NUST and abroad to prepare its faculty to meet their research and instructional responsibilities in a befitting manner. In this regard, NUST is in the process of developing requisite faculty resource for conduct of Postgraduate Programs in Mining/Tunneling at NUST Institute of Earth Sciences and Energy (NIESE), which is being established. With this in view, following scholars were sent abroad for higher studies. Four scholars were sent to Wits University, South Africa for Post Doc, PhD and MS degrees. Another scholar was sent to SLAC, USA for research work.

The Directorate explored 75 fully funded scholarships in foreign reputed universities from several sources and forwarded the same to different schools, colleges and centers for dissemination to faculty members under Faculty Development Program at NUST.

## CAMP renamed as School of Natural Sciences – SNS

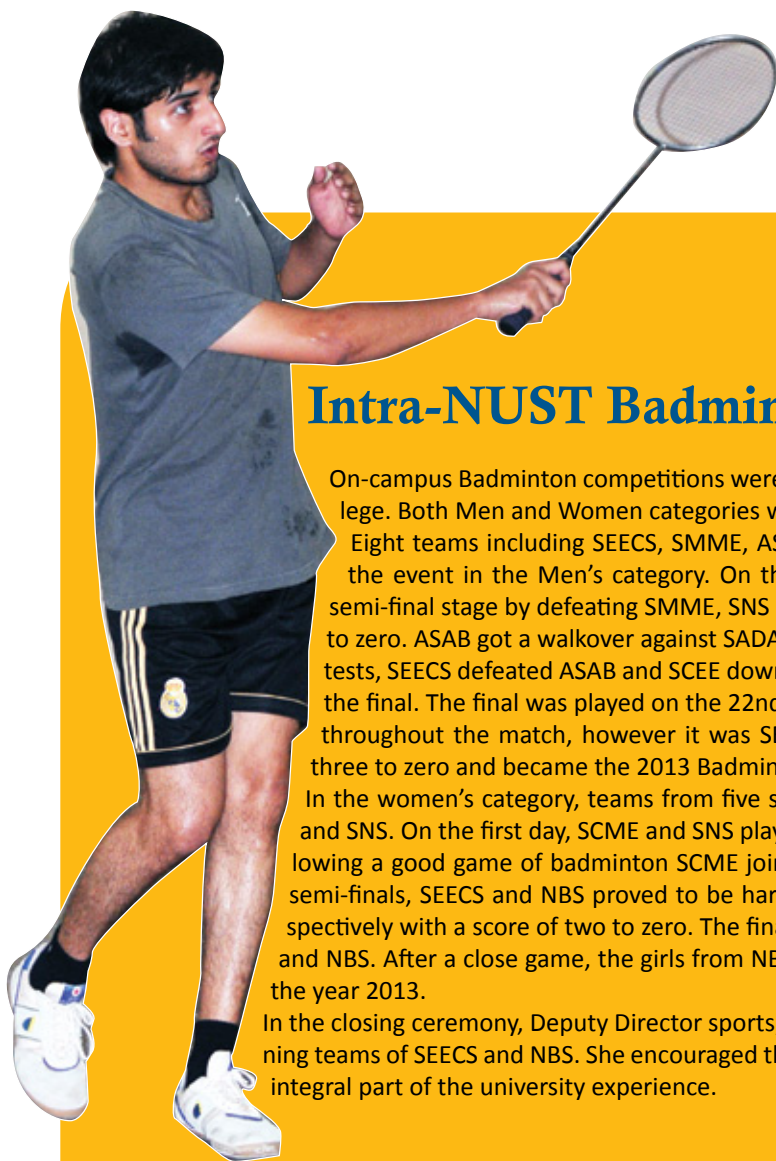
NUST has made significant progress in the field of engineering and technology. It was the vision of Rector NUST to achieve similar advancement in the field of Natural Sciences. For this reason, Centre for Advanced Mathematics and Physics (CAMP) was established in May 2004. As a step forward, the CAMP was renamed in September 2013 as SNS, School of Natural Sciences, so as to include other fields of natural sciences in the School in the near future.



"I said at the interview I was honest and hardworking - I never said I was competent."



## 03 CO-CURRICULARS CORNER



### Intra-NUST Badminton Championship 2013

On-campus Badminton competitions were held on 21-22 September 2013 at Army Medical College. Both Men and Women categories were included in the championship.

Eight teams including SEECS, SMME, ASAB, SCEE, SCME, NBS, SADA and SNS participated in the event in the Men's category. On the first day, SEECS, SCME and SCEE advanced to the semi-final stage by defeating SMME, SNS and NBS respectively with a convincing score of three to zero. ASAB got a walkover against SADA and proceeded to the semi-finals. After thrilling contests, SEECS defeated ASAB and SCEE downed SCME, both with a score of three to zero, to reach the final. The final was played on the 22nd September. Both the teams displayed excellent skills throughout the match, however it was SEECS that emerged victorious with the final score of three to zero and became the 2013 Badminton Champions.

In the women's category, teams from five schools participated namely SCME, SEECS, NBS, ASAB and SNS. On the first day, SCME and SNS played a play-off match to qualify for the semi-finals. Following a good game of badminton SCME joined the other three teams for the next round. In the semi-finals, SEECS and NBS proved to be hard nuts to crack as they defeated ASAB and SCME respectively with a score of two to zero. The final was played on the 22nd September between SEECS and NBS. After a close game, the girls from NBS emerged as the Women Badminton Champions for the year 2013.

In the closing ceremony, Deputy Director sports, Ms Rubina Anser presented the trophies to the winning teams of SEECS and NBS. She encouraged the players to work hard on their game as sports are an integral part of the university experience.





# Intra-NUST Football Championship

With the start of the new winter semester and the entry of new Nustians, it was time for one of the most waited tournaments to commence: Intra NUST H-12 football Championship. Eight teams from NBS, SCME, SMME, SEECs, SCEE, SADA/IESE, SNS and ASAB participated in the event.

The defending champions, NUST Business School (NBS) had their first match against SCME who were clearly strong contenders for the trophy. SEECs had their first match against ASAB who was participating in this championship for the very first time. SNS, also making their first time appearance, had to face SMME in their first match whereas SCEE was going to face SADA.

The tournament kicked off on 27th September, with the first match played between NBS and SCME. From the starting minute to the final whistle, the match was very thrilling. The final score was 2-1 with NBS going to the semi final. The second fixture for the day was between SEECs and ASAB. SEECs dominated the whole match and took the victory with 3 goals to nil. The third fixture took place the next day between SCEE and SADA/IESE. The entertaining match ended with SCEE being the glorious side after beating SADA/IESE with 3 goals to nil. The fourth fixture was between SMME and CAMP. CAMP was clearly the weaker side and the score line indicated that as SMME won the match with 7 goals to 1.

The first semifinal between SEECs and SCEE took place the next day. SCEE broke the deadlock with an absolute stunner. From that point onwards, there was no coming back for SEECs and SCEE won the match with 3 goals to nil. The second semifinal between SMME and NBS proved to be even more eventful. The match started with SMME creating a few

chances because of their attacking play, but then fell victim to a sudden counter attack by NBS. Muneeb with his amazing pace and Qazi with his mesmerizing finish were very entertaining to watch as NBS emerged victorious.

The final between SCEE and NBS took place on 30th of September. SCEE's defense proved to be a difficult challenge for the NBS strikers. The final whistle blew and SCEE was the happier side as they had defeated the defending champions by 2 goals to nil. Birg Arif Mehmud Siddiqui, Director Administration NUST was the chief guest on the closing ceremony and he presented the championship trophy to the SCEE Football team.





# Student study tours to a brick kiln and Pakistan Meteorological Department

NUST Institute of Civil Engineering (NICE), SCEE arranged two study tours on Sep 25 and 26 for Batch 2013 and 2011 respectively. Batch 2013 was taken to a brick kiln as a corollary to their course of materials engineering. The students were accompanied by Dr. Kamran Akhtar, HoD Geotechnical Dept. and their course instructor, Mr. Abdul Jabbar Khan. The purpose of the event was to acquaint the students with the working of a brick kiln. They were taken to different parts of the kiln and explained the purpose of each. Moreover, it enabled the students to understand the production of different grades of bricks. The tour was informative for the students as they witnessed the processes and types of bricks that are a part of the course work.



Batch 2011 visited the Pakistan Meteorological Department as a part of their Hydrology course. The department is concerned with Metrology, Agro-meteorology, Hydrology, Astronomy and Astrophysics, Seismology, Geomagnetism, Atmospheric Electricity and studies of the Ionosphere and Cosmic Rays. The students visited the on-site hydrology equipment, weather surveillance radar systems and other sections of the department engaged in met-activities.

## Hiking trip to Margalla Hills Trail 3

NUST Adventure Club (NAC) endeavors to bring a tinge of adventure and excitement to the students' life at NUST. On Saturday September 21, the first event of this semester was organised; hiking trip to Monal via Trail 3. With only 100 seats available for the trip, the response was overwhelming. With hot weather conditions prevailing at the heart of Islamabad, the participants trekked the trail, making their way through the rock strewn paths. The water bottles, the lunch and refreshments helped them to balance themselves despite the dwindling energy and stamina. As the sun set in its horizon, the participants made their way back home. This trip added to another memory of participants with NAC, a memory worth cherishing. With its promising tradition, NAC has planned a multitude of activities and trips in the coming days. So stay tuned and stay active.



## THE NUSTIAN-2013

Students and Faculty of all the campuses of NUST are requested to send their essays, poems and caricatures for inclusion in the current issue of the magazine.

It is a bilingual annual issue of the University.  
Contribute in the language of your choice  
(Urdu, English)  
**First come, first served.**

**Phone: +92-51-90851363**  
**e-mail: [studentaffairs@nust.edu.pk](mailto:studentaffairs@nust.edu.pk)**

**Mail your contributions to the**  
DD Student Affairs, Ehsan-ul-Haq,  
SA Dte, NUST, Sector H-12, Islamabad.

## 04 ACHIEVEMENTS

### Nustians stand out in Pakathon'13 competition

NUST was among the partner institutes participating in the first 'Pakathon' competition which was a three day event to connect entrepreneurs in Boston with entrepreneurs in Pakistan to launch projects that will aid Pakistan's progress. The NUST team made their country proud by achieving the runners-up position for their project 'i-Track': an eye mouse for physically challenged individuals which enabled them to use computer with the help of their eyes. Team i-Track has been awarded \$2,000 in funding to implement their project.

The event was held on September 13 and it invited professionals, engineers, and students to come under one platform to create, design and implement technology projects with positive social impact. It was a 3-day, hackathon-style event aimed at creatively harnessing technology to address social issues in Pakistan. The Mentors for NUST team were Aunn Rehman and Imran Saeed. Akhtar Ali Qureshi and Sanna Choudhary were the organizers on behalf of NUST Technology Incubation Centre (TIC).

The teams were required to submit videos of their ideas and projects alongside a financial and marketing plan. On September 15, a panel of judges determined the winners of 'Pakathon 2013' from 28 participating teams as the event was streamed live around the globe. The keynote speaker, Dr. Adil Najam pointed out that Pakistanis are ingrained with a spirit of enterprise due to scarce resources available to them, which was evident by their creative efforts in the event.



### HEC Best Research Paper Award won by IESE (SCEE) Faculty



The research paper titled 'Performance of Suspended and Attached Growth MBR Systems in Treating High Strength Synthetic Wastewater' authored by Dr Sher Jamal Khan, Associate Professor at Institute of Environmental Sciences and Engineering (IESE), SCEE and co-authors Ms. Shazia Ilyas and Ms. Sadaf Javed has been selected for the Best Research Paper Award under the programme 'HEC Outstanding Research Awards'. This award will be conferred upon him in a commemorative award ceremony to be held in HEC Auditorium, Islamabad. The Award will consist of the certificate and Cash Prize of Rs. 50,000. Dr. Sher Jamal Khan earned his PhD Degree from Asian Institute of Technology (AIT) Thailand. His research interests include Water, Wastewater Treatment and membrane bioreactors (MBR).



## SNS, SMME students stand triumphant in 3rd All Pakistan Mathematics Olympiad



A NUST team comprising students both from the Department of Mathematics (SNS) and from School of Mechanical and Manufacturing Engineering (SMME) represented NUST at the 3rd All Pakistan Mathematics Olympiad held at GIKI, Topi. The event was organized by GIKI Mathematics Society (GMS) on September 22, where more than 300 participants from various universities and colleges all over Pakistan participated.

The SNS team including Hassan Nadeem, Rehan Ameen and Khadija Mohiuddin won 1st position in the Mathematical Modeling module by developing a highly efficient and sufficiently practical mathematical framework to model the given problem of 'budgeting the political campaign of a presidential candidate'.

The students of SMME also proved their mettle by winning one of the four modules and by finishing runners up in another one.

The experience as described by the participants was unique in the sense that they were outgunned when it came to the knowledge of mathematics but still won through improvisation and sheer dedication. Team SMME won 'Shaping your thoughts' and finished runners-up in 'Mathematical Modeling'. They were given specific tasks such as designing a model of a hotel using bamboo sticks which required complex calculations and critical precision, and planning a political advertising campaign which required the difficult task of integrating the knowledge of mathematics and the diverse world of economics and business studies.

## SNS faculty wins HEC's Best Research Paper Award

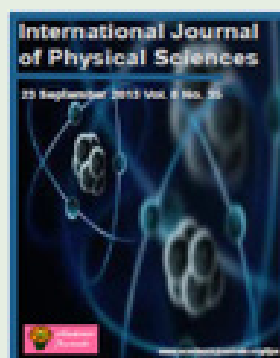


Dr. Mubasher Jamil, an Assistant Professor in the Department of Mathematics at School of Natural Sciences has recently won the prestigious HEC's Best Research Paper Award 2010-11. He received this award on September 25 at the HEC's Auditorium from the Federal Minister for Science and Technology (MoST), Mr. Zahid Hamid in a graceful ceremony. His paper titled, 'New Agegraphic Dark Energy in Horava-Lifshitz Cosmology' was published in Journal of Cosmology and Astroparticle Physics (JCAP) in 2010. This journal has impact factor 6.23 and is the top ranking journal in the field of Cosmology.

## MCS faculty publishes research papers in International journal



Dr Muhammad Hanif, a FM at MCS has recently, published two research papers. First research paper titled "Diagnostics of a Potassium Plasma Produced by Visible and IR Nanosecond Laser Ablation" in ISI indexed "Journal of Russian Laser Research, Volume 34, Number 4, (August) 2013, and second paper titled "Plasma properties of nano-second laser ablated iron target in air" also in ISI indexed "International Journal of Physical Sciences, Volume 8, Number 35, (September) 2013.



“The greatest enemy of  
knowledge is not ignorance, it is  
the illusion of knowledge”  
Stephen Hawking



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