

MONTHLY  
**NUSTNEWS**

Volume III / Issue IV



## Bosnian President receives Honorary PhD Degree



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RANKING ★ Among **Top 500** Universities ★ **324th** in Engineering & Technology



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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 event so as to give it timely coverage.

## Bosnian President receives Honorary PhD Degree from NUST

PM Ashraf felicitates BiH President; terms Pak-Bosnia relationship a bond forever



In recognition of his meritorious transnational services and rare leadership attributes, Chairman Presidency of Bosnia and Herzegovina Bakir Izetbegovic was conferred Honorary Doctorate of Philosophy Degree by NUST on Oct 10. Chancellor NUST, Prime Minister of Pakistan Raja Pervez Ashraf accompanied the foreign dignitary at the occasion. Held at the main campus of NUST, the Special Convocation Ceremony was attended by a large number of government functionaries, luminaries, senior management of NUST, scholars and the university students.

President Bakir Izetbegović's illustrious career reflects sustained and superlative achievements. By virtue of his leadership qualities, H.E. President Bakir Izetbegović stands tall among world leaders. It is the fruit of his relentless contribution, both as the Chairman and as a Member of Presidency, that Bosnia now is recognized as a leader towards restoring world peace. Under his sagacious leadership, Bosnia has embarked on a fast-paced economic development and is attracting vast scale investments from foreign economies. President Bakir was on an official visit to Pakistan which aimed at multifariously improving the bilateral relationship between the two countries.

While delivering his honorary degree acceptance speech, President Bakir Izetbegovic expressed heartiest gratitude to Chancellor NUST, Prime Minister of Pakistan; Raja Pervez Ashraf, Rector NUST, Engr Muhammad Asghar and all others for having bestowed upon him a great honour. He said that Pakistan-Bosnia bond was unique in many ways and there was a history of close government-to-government as well as people-to-people cooperation behind its firm foundation

and growth. Recalling the magnanimous support extended by the Pakistan government to Bosnians in times of unrest and instability, the President reiterated that together both the countries would continue strengthening the cordial relationship at all tiers of cooperation.

At the occasion, Prime Minister Raja Parvez Ashraf extended felicitations to the Bosnian President and his people. He said that the gesture of awarding Honorary Degree to President Bakir Izetbegovic will tone up the strong link between Pakistan and Bosnia. The Premier added that the level of goodwill between the people was very high and jointly would they keep pursuing the common objective of regional and global peace at international fora. He said that Pakistan would always remain steadfast in its support to the government and people of Bosnia. The Prime Minister said that the existing cooperation level needed to multiply, which could only be achieved through extended collaborations in numerous fields ranging from trade to education. The Chancellor NUST also announced 30 seats for Masters and PhD students from Bosnia.

Earlier in his welcome address, Rector NUST Engr Muhammad Asghar expressed his gratitude to His Excellency President BiH for consenting to accept Honorary Degree from National University of Sciences and Technology, Pakistan. He said that they were thrilled that His Excellency would be joining the NUST family by receiving the Honorary PhD Degree. The Rector maintained that both the countries needed to expeditiously expand cooperation at the educational front and the leading universities should take a leap forward in achieving the cherished goals.



# First Int'l Conference on Robotics and Artificial Intelligence ICRAI 2012

The First International Conference on Robotics and Artificial Intelligence was organized at NUST, College of Electrical and Mechanical Engineering from Oct 22 to 23. The conference was held under the flagship of IEEE and National University of Sciences and Technology (NUST). Chairman HEC Dr. Javaid Laghari graced the occasion as the chief guest. ICRAI is the first of its series, and this conference will be held biennially.

The conference covered latest and emerging trends in the fields of robotics and artificial intelligence including Intelligent Mechatronics and Robotics, Haptics, Tele and Medical robotics, Unmanned Vehicles, Prosthetics, Micro and Nano robotics, Artificial Intelligence, Neuro and Fuzzy control, Human Machine Interface and Automation.

Maj Gen. Obaid Bin Zakria HI(M), Commandant College of E&ME welcomed all participants and honorable guests at the opening ceremony. He highlighted the importance of research conferences around the world and said that this is how knowledge integrates into development of great ideas. He appreciated the efforts put in by the Department of Mechatronics Engineering for arranging the event. He said that "NUST College of E&ME has been a home to novel, state of the art projects and the research work being done here is no less than the work done internationally. Our students are technically sound, very talented and extremely competent and the work presented in this conference is a proof of that." Dr. Mahmood Anwar Khan, the Conference Chair informed that more than 110 research papers had been submitted to the conference and after a thorough review, 20 were accepted for oral presentation and 13 for poster. He also mentioned that the conference was graced by four International key note speakers from USA, UK and Korea. Dr. Francisco Sepulveda

from University of Essex, UK gave an interesting keynote talk on "Brain Computer Interface Systems". At the end of his talk, he praised the level of research being done in Pakistan. Dr. Lynn E Parker from University of Tennessee, USA said in her recorded message that "The conduct of such an event in Pakistan shows the research maturity of the academic institutions". She further assured to attend the conference next time. Dr. Younus Javed, Dean NUST College of E&ME, emphasized that such events and meetings give a chance to form collaborative projects and research groups.

Dr. Javaid Iqbal, Head of Mechatronics Engineering Department appreciated the turnout at the conference and said that the aim of conference is to have collaboration of national and international researchers from a wide range of academic and professional backgrounds to bridge the gap. At the end of the ceremony, the Chief Guest Dr. Javaid R. Laghari, Chairman Higher Education Commission (HEC) gave souvenirs to the foreign keynote speakers. In his address, the Honorable Chief Guest congratulated NUST College of E&ME for arranging 1st International Conference on Robotics and Artificial Intelligence in Pakistan. He mentioned that conferences like this are not only a platform for great minds to meet but also a venue for research collaboration. He said that everyone should make the most of this opportunity and socialize and discuss latest topics of research. He also mentioned that "this conference was the first of its kind and expected it to grow over the years into one of the prestigious conferences in the field of Robotics and Artificial Intelligence". A large number of participants from many Universities, colleges and research organizations of the country have benefited from this well focused and target oriented conference. Rector NUST Engr Muhammad Asghar also attended the conference.



## NUST students donate Rs 1 million for Balochistan flood victims

After having successfully organized a flood relief donation campaign, students from NUST presented a cheque of Rs one million to Federal Minister for Science and Technology, Mir Changez Khan Jamali for the flood victims of Balochistan on Oct 16. In this connection, Flood Relief Donation Ceremony was organized under the auspices of Student Affairs Directorate at the main Campus of the University. The event was attended by a large number of audience including Secretary MoST Akhlaq Ahmad Tarar, high-profile NUST officials, faculty and students. Speaking at the occasion, the Federal Minister appreciated the efforts of NUST Community Service Club towards collecting donations for the flood affectees of Balochistan. He said that the University's empathetic management, compassionate faculty and staff, and the students mobilized towards community service, all deserved due adulation for their selfless contribution for the well-being of their compatriots. The chief guest said that this year's floods had wreaked havoc in most parts of Balochistan, causing extreme human as well as property losses. He added that the government was closely monitoring the situation in the aftermath of natural calamity and extending all-out support to the victims. However, he maintained



that it was incumbent upon every Pakistani to realize the gravity of the situation and contribute share to the best of their capacity as there were hundreds of thousands of people who were anxiously awaiting our help and support. He eulogized NUST for having set a precedent and hoped that other educational institutions as well as organizations followed suit.

Earlier, Rector NUST Engr Muhammad Asghar expressed his gratitude to the Federal Minister for gracing the occasion. He said that the flood had devastated vast land in the country and there was a dire need to transform this challenge into opportunity. The Rector maintained that the University was proactively pursuing Medium Term Development Framework introduced by Higher Education Commission of which community service was a vital component.

Dr. Irtiza Hussain, Faculty Sponsor NUST Community Service Club, also gave a presentation at the occasion and apprised the audience of how NCSC was multifariously rendering services to the underprivileged. He said that students, in tandem with their academic activities, were effervescently involved in serving the masses.

## NUST Alumni Association First Governing Board Meeting

The first Governing Board meeting of NAA was held on Oct 12 in CIE conference room. The purpose of the event was to determine the process of election for NAA Governing Board, selection of President and 2 senior Vice Presidents, formation of NAA Working Group which includes senior members of Alumni Association and various standing committees. Furthermore, to initiate regional and international NAA chapters and introduce the concept and framework of NUST Endowment Trust Fund. Participants included all Presidents and senior members of Alumni Associations of respective schools, colleges of NUST mainly, Signalianz



Alumni Association, Amcolians Alumni Association, EME Alumni Association, SEECS Alumni Association, PNEC Alumni Association and NBS Alumni Association.

The conference was chaired by Dr Wajid Ali (Amcolians Alumni Association) and after general consensus of NAA Governing Board Mr Ammar Khan, President Signalianz Alumni Associations was elected as President NUST Alumni

Association. Mr Adnan Shahid, President EME Alumni Association & Mr Usman Ali Akbar, President NBS Alumni Association were elected as Senior Vice Presidents. The elected President took the chair and stressed on the importance of alumni networking to stimulate interest, build loyalty, increase involvement and generate support for the National University of Sciences and Technology. The members highlighted the fact that



## HIGHLIGHTS

a lot of attention needs to be directed upon results and constitution needs to be revised.

The participants later moved to faculty lounge for dinner hosted by Pro- Rector (P&R) Engr Muhammad Shahid and Director (I & C) Engr Salman Absar. NAA Governing Board was assured that NUST would provide all the support they

required. This event was an important stepping stone in NUST history as all Alumni Associations of NUST Constituent Schools & Colleges came under one umbrella and laid foundation to work for fostering the bond between NUST & its Alumni.

NUST Alumni Association was formed by the integration of all the existing Alumni

Associations of each constituent School and College of NUST and is the official platform for all NUST Alumni. NAA is a non-profit organization where all members of the NAA work voluntarily. NAA works for the unification of NUST alumni and builds association amongst themselves, the university, the students and the faculty.

## Progression with Curriculum Development at SADA



**A** Curriculum Development training session commenced at School of Art, Design and Architecture (SADA), NUST on Sept 25 and continued for 2 weeks. The school's faculty was joined by a foreign delegate, Mr. Jur Jonges, who gave a critical analysis of their present curriculum. Each faculty member was provided with the opportunity to have a one on one conversation with the guest to identify and evaluate the needs of their own respective course. Another interactive strategy employed was the 'Focus Group Technique' whereby faculties from all the relevant courses sat with the guest and developed inter-linkages between their courses. Pro-Rector Asif Raza and architectural fraternity from Islamabad also attended the workshop, with eminent names such as Ar.

Murad Jamil, Ar. Jehangir Sherpao and Chairperson PCATP, Ar. Shama Usman among the attendees.

Ar. Jonges has served as a senior lecturer at the University of Applied Sciences at Utrecht for 20 years. He also worked on design of a new curriculum based on the didactical frame work of a Project.

Mr. Jonges discussed evaluative techniques while focusing on Bench marks/Goal-Oriented Study Criterion Development. He shed light on the contemporary issues surrounding Architectural education in a global and regional context. SADA organizes these faculty trainings to meet the need to improve their curriculum with input from international sources.

## Ahmed Fauzi Bin Ali from Malaysia visits NUST

With the changing economic trends, NUST ventured into many development projects to accentuate its potential for growth at the global level. One of these unique projects is the development of Science and Technology Park. The National Science and Technology Park (NSTP) is NUST's initiative to encourage knowledge creation in the organization, exploit human and social capital to compete in the global economy. Keeping this in view, an eminent personality, Mr. Ahmed Fauzi Bin Ali who has over 30 years of experience as a technology serial entrepreneur, management consultant and systems integrator in the information technology industry, not to forget his profound achievements in conceptualizing and leadership in designing the Malaysian Multimedia Super Corridor, was



invited to NUST on Oct 3. He shared his experiences and knowledge with the NUST community in relation to the technology park initiative. The CIE team conducted him to SEECs, SMME and Research Innovation and Commercialization Directorate.

## MoU Signing between SEECs and Texas A&M Agrilife

School of Electrical Engineering and Computer Science (SEECs), National University of Sciences and Technology (NUST) has active collaboration with both regional and international centers of excellence. In this context, SEECs is always looking forward to establish relationship with centers having similar interests in research field. Recently SEECs and Texas AgriLife Research signed a Memorandum of Understanding (MoU). Dr. Saad Qaisar representing SEECs (CoNNeKT) and Dr. Tammy Becham, Director of the Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL) from

Texas AgriLife signed an MoU of collaboration. SEECs and Texas A&M Agrilife will jointly develop a national laboratory information management system for collection of data from national laboratories and provide decision support to local agro-livestock research scientists in detection of epidemics in real-time. Initially, the collaborative effort spans a period of two years extendable based on continued support from United Nations Food and Agriculture Organization (UNFAO) and United States Department of Agriculture (USDA).



## Farewell Visit- IGT&E

Lt Gen Muzammil Hussain, HI (M), IGT&E visited NUST on October 5, 2012 for farewell call on Rector in his office. Pro-Rector (P&R) welcomed the guest at the main office building. Pro Rector (A), CFO, CSO, Comdt MCS, Comdt EME, Comdt AMC and Principals from various schools of H-12 also graced the occasion. After the tea break, the guest was presented with the souvenir by Rector Nust, Engr Muhammad Asghar, which would remind him of his bond with NUST. Lt Gen Muzammil Hussain expressed his best wishes for the University and paid his gratitude for the souvenir presented by NUST.



## Training on Effective Teaching Skills for Nust Community Schools

A one-day training workshop was conducted at C3A on Oct 5 for teachers of NUST Community Schools in Bhakkar. The training was held at the NUST main campus. Training is one of the essential functions of the Centre for Counselling and Career Advisory (C3A) for students and faculty at NUST. These are intended to train the NUST Community to strive well through issues of life and utilize their maximum potential in their respective fields of work. Teachers play a vital role in students' lives; hence, training a teacher means polishing a generation. The participant teachers were quite motivated and eager to learn and interacted well. They were made aware of the key elements of a child's progress: teacher's professional skills, teaching skills and classroom climate. In context of a rural background and low resource level, these teachers were told ways to boost their morale, fulfil their duty as a person and to maximize learning intrinsically. The training was activity based. Case studies were used and on ground examples were discussed



at length in order to add relevance to their experiences. A major part of the teaching comprised ethics of teaching and moral responsibilities for a teacher. The needs of a teacher and the concerns for her psychological well-being were also particularly emphasized. The training was well received and it encouraged the NUST Centre to continue holding such training sessions in future.



## IEEE PNEC holds 2nd Karachi Section Student Conference

IEEE Pakistan Navy Engineering College (PNEC) organized the 2nd Karachi Section Student/GOLD/WIE Conference on October 4, 2012. IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity. The basic aim of the congress was to benefit Student members by providing them a chance of networking with the members and the industry leaders, gaining leadership experience and developing interpersonal skills by getting involved in various activities.

The conference hosted a set of competitions and seminars in which IEEE Student Ethics Competition, Poster Designing Competition, Workshops, Panel Discussion and Karachi Section Recognition Awards remained most popular. In the ethics competition, participants were tested on their knowledge and application of the IEEE Code of engineering ethics while in the

poster competition, theme for poster design was 'Advancing technology for humanity'.

A workshop titled as 'Website for Dummies' was also a part of the Conference. It provided basic knowledge on designing and handling a website. It was followed by a dialogue session with PNEC Alumni in which they highlighted the importance of extracurricular activities and significance of being a part of societies. The conference also accommodated a panel discussion on "The importance of entrepreneurship and the Pakistani student" in which eminent speakers enlightened the audience with their addresses.

The most eagerly awaited Award Ceremony ended the conference and the audience witnessed IEEE PNEC student branch bagging 5 out of the maximum 7 awards.



## Rector University of Sarajevo, Bosnia visits NUST

Prof. Dr. Ozer Cinar, Rector International University of Sarajevo, Bosnia paid a visit to NBS Radio/TV studios on Oct 9. Dr. Asif Raza, Pro-Rector (Acad), Dr Safdar Ali Shah, Director Acad, Prof. Dr. Masrur Alam Khan-HoD Mass Communication, Dr. Ather Maqsood Ahmed-HoD Economics and Mr. Mehmood Ali-Project Consultant accompanied the honorable Rector, International University of Sarajevo. Prof. Dr. Ozer Cinar praised the architecture and design and state of art technology deployed in the studio. He was impressed by the development of this project, functionality of studio specifically its control rooms, recording studios and editing techniques and quality of work done by the students of Mass Communication and faculty.



## NUST represented at South Asian forum in Nepal

On the invitation of UNDP, Dr. Ashfaq H. Khan, Principal & Dean NBS attended a meeting "Regional Consultation on Human Development in South Asia" from October 10 to 11, 2012 held in Kathmandu, Nepal. The meeting was co-organized by the South Asia Centre for Policy Studies, UNDP Nepal and the Human Development Report Office.

The aim of the meeting was to discuss the policies needed in the region to foster human development and consider some of the messages in the forthcoming 2012 Human Development Report that are particularly relevant for south Asia.

The meeting provided an opportunity for a small group of leading policy makers, academics and civil society thinkers to discuss the state of human development in the region, the policies required to achieve it and threats and barriers to sustaining it. The forum also provided participants with an opportunity to learn more about the contents of the 2012 Human Development Report due for release in November and to seek their views on how to shape the 2013 Human Development Report which will look at the post 2015 agenda.





## Rector addresses new NUST entrants

**R**ector NUST, Engr. Muhammad Asghar visited NBS on October 18, 2012 and addressed the undergraduate students that joined NBS in year 2012. Rector welcomed the newly admitted students on board and offered them an opportunity to explore themselves as part of Premium University of the world.

## NUST Bioreach Society organises Polio Campaign

**C**ricket enthusiasts were standing on their tiptoes in ASAB auditorium on the evening of October 2, 2012 – a day which was important for cricket maniacs and polio warriors alike. The atmosphere was crackling; a loud shout-out, “PAKISTAN JEETAY GA” saturated the entire hall. Trumpets, whistles, claps and nationalistic flavors of music were alive, swirling around in the air. Despite the favorable weather, there was a heat of ‘Jazba’ and ‘Josh’. The entire place was decked up with green color and faces being painted with green and white, flying green flags in the air. NUST Bioreach Society not only managed to hold a very well organized match screening but also manipulated it for a national cause i.e., extermination of polio from Pakistan. Pakistan is among the last 3 countries left with polio, a dreadful infectious disease which cripples life and is paralyzing hundreds of our fellow countrymen by the minute. Awareness, support and finances are the key catalysts needed for the polio eradication process, a polio free Pakistan as well as a polio free world. NUST Bioreach Society exploited the power of the youth in kicking out polio from our beloved homeland. Paired with the passion of cricket, we reiterated the message of Polio Ambassadors from the cricket world and the event served as both a means of recreation as well as a means of forwarding the gravity of the growing threat of polio in the country.

## Guest Lectures conducted at PNEC

**A** guest lecture on “The three most important steps to corporate success and the role of our educational institutions in producing leaders” was delivered by Mr Sohail Wajahat Siddiqui, Chairman, Pakistan State Oil Company Limited on Oct 12 in Bahria Auditorium. The faculty and students attended the lecture at Pakistan Navy Engineering College. The lecture was much thought provoking and well received by the students and faculty.

Another lecture on “Importance of World Maritime Day” was conducted by NCMPR Bahria University. It was held on Oct 19 at College Auditorium. Vice Admiral (R) Asaf Humayun HI(M) and Commandant PNEC graced the occasion. A large number of students and faculty were present on the occasion.





# MCE holds 20th Undergraduate Convocation



As many as 106 graduates received degrees in the discipline of Civil Engineering during the 20th Undergraduate Convocation of Military College of Engineering, NUST, held on October 3. Rector NUST Engineer Muhammad Asghar, was the chief guest at the occasion, while Major General Taufiq Rafiq, Hilal-e-Imtiaz (Military) Engineer-in-Chief was the guest of honour.

The President's Gold Medal was awarded to NUST Cadet Umais Khan, Chief of Army Staff Gold Medal for being the Best Military Student in Academics was conferred upon Captain Taimur Shahzad, Engineer-in-Chief's Silver Medal was awarded to Captain Taimur Shahzad, Commandant's Medal for being

the second Best Military Student in Academics to Gentleman Cadet Ali Nauman, and Rector's Gold Medal for best project was awarded to NUST Cadet Umais Khan.

It was a memorable occasion for the graduates, and a proud moment for their parents and loved ones. This auspicious occasion was yet another unforgettable landmark in MCE's continuous quest for excellence.

Addressing the august gathering after awarding degrees, Rector NUST Engr Muhammad Asghar congratulated the graduates, their parents and the esteemed faculty. He wished the fresh engineers all the best in their future endeavours and urged them to excel in their respective fields and careers.





## CAE-NUST Convocation

# 44 graduate with a promising future



**A**n impressive Convocation Ceremony of 73rd Engineering Course of College of Aeronautical Engineering was held at PAF Academy on October 4. Engineer Muhammad Asghar, Rector National University of Sciences and Technology was the chief guest at the occasion.

The chief guest conferred degrees upon 44 graduates in the disciplines of Aerospace and Avionics Engineering and awarded Merit Certificates and Gold Medals to the distinction holders. Merit Certificate for best Aerospace Vehicle Design was awarded to NUST Cadet Muhammad Anwer, while Merit Certificate for Best Avionics System Design was awarded to Pilot Officer Jamshaid Anwar. Rector's Gold Medal for Best Project in Aerospace Engineering was awarded to Senior Gentleman Cadet Mansoor Azhar, Rector's Gold Medal for Best Project in Avionics Engineering was bestowed upon NUST Cadet Syed Arslan Ali and NUST Cadet Atif Mehmood, while President's Gold Medals for standing first in Aerospace and

Avionics Disciplines were awarded to NUST Cadet Muhammad Junaid Arif and NUST Cadet Muhammad Umer Qureshi respectively.

While addressing the august gathering, the chief guest said that Pakistan's needs for research and development in the field of Aeronautical Engineering were multiplying at a rapid pace. Standing at the threshold of cosmic technological changes, he said, the fresh Aeronautical Engineers were expected to foster greater progress in multifarious fields, not only towards strengthening the national security but also towards stimulating economic development and making life easier for their compatriots. He advised them to wisely plan their future goals in accordance with the national needs, which would require substantial enhancement of knowledge on their part to discover new avenues of learning and undertake new enterprises.

## Lecture on 'Integrated Passive Device Chip Development' at CES

**A** special lecture on 'Integrated Passive Device Chip Development and PLZT Lessons' was held on Oct 24 at Centre for Energy Systems (CES), NUST. Guest speaker Dr. Asad Mehmood Haider, from Texas Instruments USA addressed the audience that included CES faculty and students as well as some of their colleagues from School of Mechanical and Manufacturing Engineering (SMME). HOD CES, Mr. Ehsan Ali also attended this informative session where Dr. Asad shared his knowledge regarding Chip Manufacturing, focusing specifically on PLZT High K devices' material synthesis by Spin Coating Technique. He talked about his lessons and findings in the area which is, in broad spectrum, connected to device chip manufacturing. Dr. Asad M. Haider has over 20 US patents and awards, including the SRC Technical Excellence Award as well as the Motorola Graduate Fellowship Award to his name.



## Brig Tariq Zaman delivers Lecture on Disaster Management at MCE

Disaster Management is no more an ignored topic in the developing countries. Reflection upon its vital importance was projected most emphatically by Mr. Tariq Zaman, Chairman National Disaster Management Authority (NDMA). He gave a lecture at Military College of Engineering on Oct 12. His main emphasis was on the definition of the subject and its importance to Pakistan, particularly in view of the devastating October 2005 Earthquake and 2008 Floods, the need for "Preparedness" and the elements and factors contributing to them. The triangle of life and the peculiar behaviour of animals were some of the most insightful theories pertaining to the responsiveness to a disaster. He was acclaimed by the audience for the sentimental attachment he inculcated by narrating the fable of a 80 year old man, victim of earthquake who lost 27 family members and did not bother to gather any aid being provided. All he needed was a shoulder to cry. Brig



Tariq Zaman, with his most polite, expressive and poetic way of speech presented this seemingly arid and dry subject in a uniquely interesting manner. The purpose of the lecture was to infuse a sense of awareness among the students regarding the importance of disaster management and to understand its different aspects of mitigation, preparedness, and response and recovery phases. It also benefited the future structural, environmental and geo-technical engineers by explaining to them different management techniques and fast track technologies for the recovery phase of disaster management.

## Book Launch at NBS

A successful launch ceremony of the book titled "Chinese made easy: 100 lessons in spoken Chinese" was held in NBS seminar hall on October 8, 2012. Ambassador Syed Hasan Jawed, the author of the book, is currently the High Commissioner for Pakistan in Singapore. The ceremony commenced with the welcome address of Dr. Ashfaq Hasan Khan, Dean NBS who said that though China and Pakistan have strategic relations in defense and politics, trade and investment between the two countries have been low due to the language barrier. He hoped that better learning opportunities will help bridge this language divide. He also announced the start of Chinese language course of 2 credit hours in NBS from 3rd October followed by the comments of the author on the book. Ambassador Syed Hasan Jawed told the audience that the book, which covers the basic lessons of Chinese language, has been published in two languages; both English and Urdu to enhance its effectiveness and so that the masses can get benefit from it. The book has been a huge success and over 10,000 copies of it have already been sold. Mr. Akram Zaki, former ambassador to China, stated that the book has made learning Chinese easier for ambassadors and members of the foreign office. Professor Zhou Rong, a special guest, paid tribute to the book by stating that the book "is one of the first of its kinds" and highlighted the



know English to learn Chinese. Rector NUST, Engineer Muhammad Asghar, lauded the author's efforts in his ending note and said that china should also make it easier for Pakistani students to complete their formal education there and requested Chinese embassy to provide Chinese language teachers to extend the language courses at NUST. He emphasized that economic and strategic future of Asian country lies in strengthening relations with China as China will be the second largest country in terms of population by 2017. To strengthen economic and strategic relations between both the countries, learning Chinese language will foster a way forward for economic and strategic development and bridging lingual gap.

“ *A Journey of a thousand miles, must begin with the first step* ”  
Chinese proverb



## Mine and Miner Safety ICTRDF Funded Project: SAHSE team Visits Local Mine under Research Outreach and Extension Program

**R**esearch labs at NUST, School of Electrical Engineering and Computer Sciences are playing a major role in developing research culture in Pakistan. CoNNekT lab under the supervision of Dr. Saad Qaisar is among the most active labs in research at SECS. CoNNekT lab has ongoing projects to the tune of Pak Rupees 14.59 million (USD 170,000) in the domain of cyber physical systems. CoNNekT lab in collaboration with AdCom Lab, LUMS is developing a complete integrated solution for mine and miner monitoring under ICTRDF funded project; "Safety Assurance in High Stress Environments" (SAHSE). To develop better understanding of the project, CoNNekT lab has an active research outreach and extension program to engage with mining community and industry working in this domain.

A visit to Khewra Salt Mines was arranged on September 22, 2012 for SAHSE team. The members of the team were greeted by general manager and the mine engineers. The focus of this visit was to study the current safety measures deployed inside the mine and to gain knowledge about the underground mine environment. It will help the team develop an integrated monitoring system which will provide the best performance in such harsh environment. Implementation of the system under development was discussed with the mining engineers and the miners. This visit proved to be an excellent opportunity



for the project team to learn from the mining experts and an invaluable source of learning for further development of this project.

The Project Director, Dr. Saad Qaisar (NUST) and Joint Project Director, Dr. Ijaz Naqvi (LUMS) expressed their deepest gratitude to the authorities at the Pakistan Mineral Development Corporation (PMDC), for extending their fullest support for the project team and promising to do so in the future. CoNNekT lab is also looking forward to collaborating with Punjab Mineral Development Corporation (PunjMin) and Katas School of Mines.

## Dengue Eradication Campaign by NUST Bioreach Society

**D**uring the month of October, NUST Bioreach Society from Atta ur Rahman School of Applied Biosciences (ASAB) carried out a mass campaign of eradicating dengue from NUST. The campaign aimed at raising awareness among all the students and faculty of NUST of dengue control at the onset of dengue growth month. Pamphlets and stickers carrying information about dengue, potential places of dengue growth, cleanliness and other preventive measures were distributed all over NUST especially at the hostels. The Campaign also featured distribution of "mosquito repellents" among all the in-living. After dengue wreaked havoc last year, campaigns of this sort were carried out all over Pakistan to fight this menace. However, this was the first door to door dengue awareness campaign in NUST and has proved to be a success.



## Technological Advances in Nano-Material Simulation-SCME

Synergy Pakistan gave a presentation and demonstration of the ATK software at School of Chemical and Materials Engineering (SCME) On Oct 24. Atomistic Toolkit (ATK) is commercial software for atomic-scale modeling, simulation of nano-systems and their applications. The presentation was delivered by Mr. Salman Mazhar, CEO of Synergy Pakistan and attended by faculty and students of SCME.

Synergy Enterprises specializes in introducing world-class products to Pakistan, relating to IT hardware/software, telecom and allied products. It has recently embarked on a program to implement nanotechnology training/education and supplying nanotech-related products.

**SYNERGY**

# OPEN HOUSE MCE



20th Convocation and Open house of Military College of Engineering (MCE), Risalpur was held on October 3rd, 2012. The occasion is a regular feature of MCE which was held to award degrees to 107 graduates of OD 70 / CED 71 course. On the side lines of convocation, an Open House was also held on the same day. This confluence of mega events provided a great opportunity to the fresh graduates of MCE to collaborate with Industries and Potential employers for the NCs / PCs. Moreover, it also helped FMs of MCE to understand the growing market needs and to work in unison, in order to tailor their methodology and curricula. Big names in industry like National Engineering Services Pakistan (NESPAK), Frontier Works Organization (FWO) and Survey of Pakistan setup their stalls at the open house.

## Seminar on Seismic Design of High Rise Buildings

A seminar on "Seismic Design of High Rise Buildings" was held at SCEE Auditorium for Batches 2009 and 2010 of NUST Institute of Civil Engineering (NICE) and Institute of Environmental Sciences and Engineering (IESE) on Oct 5. The guest speaker for the seminar, Dr. Sohail M. Qureshi is Chief Executive Officer & Consultant Structural Dynamics of Pakistan Consulting Associates. The seminar gave an in-depth insight of study, design and construction of high rise structures to converse the effects of tectonic movements on the buildings. The attendees were acquainted of various phenomena of the special designs for high rise buildings. According to the speaker, learning from the October 2008 calamity, it is of paramount importance to keep

in mind the seismic activities in Pakistan. It is necessary to observe ground behavior, site behavior, material and structure configurations and structure health monitoring to mitigate the effects of earthquakes on buildings. Methods of reducing seismic demands and the concepts of base isolation were also discussed.

Dr. Sohail has been working in NESPAK and DESCON and has the honor of publishing more than 15 papers in International reputed journals. Currently, he is running his own consultancy firm, Pakistan Consulting Associates based in Lahore. The seminar was really informative for the students of Civil Engineering for the design of high rise buildings.





## Welcome Party at NICE

The senior batches of NUST Institute of Civil Engineering, SCEE welcomed the Batch of 2012 with warmth, entertainment, gusto and thrill. NICE Extra Curricular Activities Club organized the function at NIT Auditorium on October 15. There was no better way to receive the new batch than to give them an insight of life at NICE. A video on general environment of NICE was presented in

a facetious manner. Several other seniors perked up the atmosphere with their singing and dance performances. In another spectacle of music, Raja Mehran Khan amused the audience as they heard the melodious flute in complete silence. Other plays and theatricals were a plethora of hilarity and amusement. At the end, Associate Dean NICE, Dr Liaquat Ali commended the efforts of senior batches and welcomed the freshmen, wishing them best of their time and success in NUST. The welcome party was an awesome way of easing the freshmen to life in NUST.



## ‘Explore You’ Workshop by Standard Chartered Bank at NBS

A team of four members of Standard Chartered Bank headed by Ms. Ayesha Saleem, Talent Acquisition Specialist, conducted “Explore You Workshop” in NBS Seminar Hall on Oct 23. 77 students of final year attended the workshop. SCB team welcomed all the students and set up a fun Ice Breaker where they interacted with each other. They helped the students to explore their journey of self exploration. The whole workshop was a fun and real learning experience for the students and they identified their characteristics by visually presenting and drawing themselves where they

want to be for long. Students took a lot of interest in this workshop and tried to reveal their true self and understand who they are, what employers want from them, what they want from life and what they can do to achieve their goals. At the end of workshop the team was greeted by Dr. Ashfaq H. Khan, Dean and Principal NBS and Ms. Javeria Saleem, Coordination officer NBS and exchanged views on mutual interest. Shields were presented to the members of the SCB team.



## Video Seminar conducted by Harvard Business School

Harvard Business School organized a live video seminar on “Ways in which Pakistan can develop its nascent entrepreneurship ecosystem taking lessons from India and China” in NBS Seminar Hall on Oct 19. The seminar covered the contextual constraints to entrepreneurship in an emerging economy, with important insights for fostering an entrepreneurship ecosystem in Pakistan. Professor Tarun Khanna of Harvard Business School was key note speaker. Harvard conducted this live video conference seminar in direct collaboration with LUMS, IBA and COMSATS and thus streamed it across Pakistan. HEC has arranged to enable ORICS to participate in this event through video conference. Harvard Business School is working for large scale change in the entrepreneurship and innovation landscape of Pakistan.

HARVARD BUSINESS SCHOOL



## 03 Co-curriculars Corner

### Nustians shine in EME Olympiad

The team representing NUST Adventure Club (NAC) at the EME Olympiad 2012 Wall climbing competition raised the heads of NAC with pride once again when Mir Manzar Elahi from School of Mechanical and Manufacturing Engineering (SMME) and Rabia Sakhi from NUST Business School (NBS) took the lead in speed category competition. In a spectacular show of speed, Mir Manzar scaled the 32 feet wall in less than 7 seconds, winning the competition among 30 opponents. In the female category, Rabia Sakhi completed the climb in mere 19 seconds to win among 20 opponents.

EME Olympiad 2012 was the third edition of its grandest and most eagerly awaited event of the year organized by College of Electrical and Mechanical Engineering (EME) on Oct 12. It was an honor to win among participants from all over the country. This is the second time in a course of one month that representatives from NUST Adventure Club have won competition of such a standard.



### LUDO Tournament

A LUDO Tournament was held on Oct 19 at School of Art, Design and Architecture (SADA). The tournament was an enjoyable conclusion to an assignment given to the first year students earlier, where in groups of four the SADA students were required to design a LUDO board while keeping in mind principles of Balance and Proportions Design. They employed the Relief sculpture technique to construct the board.

At the completion of this assignment, a LUDO tournament was held as an icebreaker, inviting participation from all students and faculty of the school. The organization of the event was undertaken by first year students, Sana Ijaz and Hasan Danyal. Faculty lauded efforts of the students to add amusement to educational tasks.



## A Scientific Chase: SClvenger 2012

The third installment of NUST Science Society's annual scavenger hunt came on Oct 11 and was titled 'The SClvenger'. The competition was open to all students of NUST and saw participation from 32 teams. Round 1 of the Scavenger Hunt was held in RIMMS, and composed of three challenges, comprising a 'SCI Quiz', a crossword and a Sudoku puzzle. Each was a test of basic science molded in brain teasing riddles. The contestants were graded based on their performance in this round. Following this was Round 2, a true test of thinking under pressure, where participant groups were each allotted a set of six clues, each an indicator to a specific location on the H-12 campus, which they had to reach in time to complete this test. Every year the scavenger produces a popular question which is being echoed throughout grounds of H-12 by the 'scavengers', this time it was "Where in H-12 is Ratatouille?". The much sought answer was the Animal Center! A fitting end to the thrilling hunt was a movie night, held in SCME, where the exhausted contestants and society members enjoyed the screening of 'Madagascar 3' among friends. NSS's scavenger hunts are designed to fuse thinking with fun, by promoting this feel in relation to science they aim to invite bright minds to join the society as members.







## World T20 sets stage in NUST

Cricket fever was high again this start of the fall when cricket giants of the world took over one another in the T20 World Cup in Srilanka. So to goad the spirit of supporting Team Pakistan, NUST Media Club screened all the matches of Pakistan at H-12 NUST.

The cheers of diehard fans of NUST, hooting for their team is quite indescribable watching a cricket match. Let it be Umar Akmal's sturdy sixes, Umar Gul's toe breaking yorkers or Ajmal's deceptive spin, all cheered and approbated their favorites at every shot and ball. The cheers of fans, going crazy with every success of Pakistan, were a spectacle in itself. So to say, you have to be there to feel the real gaiety and drama.

NMC hosted the group matches, Super Eight and the Semifinal between Pakistan & Srilanka. Every match was a houseful of cricket enthusiasts. From the tail-end win against the Proteas to the meeting with arch-rivals India, the spirit of NUSTIANS was always high in support of Pakistan. It was indeed a month of blatant cheers and intense pressure.

## NUST Adventure Club's Trekking 1.0

**W**ith the onset of winters and the offset of exams, the NUST Adventure Club organized its first trekking trip, "Trekking 1.0", of the year to Trail 3 Margalla Hills on Oct 20. For 100 trekkers from NUST, the memorable trekking trip was an exhilarating experience into the heart of nature. The participants included students from various schools of NUST along with a few faculty members. Although the stunning view of Islamabad from the top makes the trip more than worthwhile, it's the experience of discovering awe-inspiring wonders along the path with peers on the beautiful trail that makes the whole journey stand out.

The course was a fierce test of endurance and stamina but exhilarating hike on the winding trail leading up to the Monal is a memorable experience for everyone. Overall, it proved to be a great trek. The participants were all served food and refreshments organized by the NUST Adventure Club, on their arrival at Monal. After the refreshments and a little stay at the top, the trek back to the starting point began. The experience promised to be a feast for all senses and NUST Adventure Club aims at bringing much more for its young enthusiastic adventurers.



## HEC Allama Iqbal Bilingual Declamation Contest

NUST Debating and Dramatics Society (NDDS) organized the second intra NUST bilingual declamation contest on 24th October, 2012 in NBS seminar hall. The contest aimed to hone the oratory skills of students and to encourage them battle the 'stage fear'.

Students from various schools of NUST H-12, College of E&ME and AMC participated enthusiastically in the competition to showcase their talents. Mr. Ilyas Chishti from NUST Student Affairs Directorate and Miss Sehrish Ejaz, alumnus London School of Economics graced the occasion by judging the bilingual declamation contest. Mr Mahmud Bashir Bajwa, Director Student Affairs was the chief guest on the occasion.

The event commenced with the recitation from the Holy Quran after which the sessions were opened. The topic for the English round was: "Am I to blame" and that of Urdu round was "Zuban sub say taqatwar hathyar hay". The audience was enthralled by fiery oratory of speakers. The English round was dominated by females as Shaheera Syed (NBS), Shiza Durrani (AMC) and Sadaf Basharat (NBS) clinched the Winner, first runner up and second runner up titles respectively. Abu Bakar Daud (EME) won the Urdu round and Sahar Sajid (EME) was the first runner up. Cash prizes and shields were awarded to the winners who would represent NUST in HEC leg of debates.

Shafaat Gilani, President NDDS, in his ending remarks lauded the efforts of entire NDDS team to have pulled off the event on such short notice and constrained circumstances and emphasized on significance of self expression in all forms.



## T-Shirt Design Competition held at SADA

A 'T-Shirt Design Competition' commenced in School of Art, Design and Architecture (SADA) on Sep 24 and the challenge was to design a T-shirt that best captured the essence of the school's spirit. The themes were generally anything creative, focusing on student life, Art Movement, play on words or 3D/Sci-fi. Allowable Techniques for designing were Illustration/Sketch, Typography and Photoshop/Digital Media. A set of regulatory guidelines was laid out to the students within which they were required to produce an original, entertaining and contemporary T-shirt design. The students appreciated an artistic break and a positive response was evident as 67 entries were received within the deadline which was 8th Oct. 38 entries managed to get to the 2nd level, out of which 10 entries were shortlisted. Final decision was made by the judges' panel comprising Principal SADA; Mr. Sikander Ajum, Former Lecturer, Ms. Sabahat Nawaz and Asst. Prof Mr. Waqar Aziz. The winning design will be printed on SADA's official T-shirt.

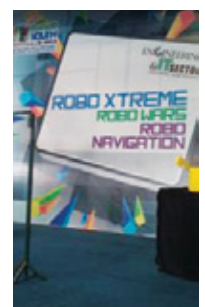
## Students from College of E&ME win laurels at Punjab Youth Festival 2012

The opening ceremony of the youth festival was held on Oct 20 in Lahore. A total of 6 teams from College of EME, Department of Mechatronics Engineering participated in Robo-Navigation event which was spread over two days. The students from NUST prepared diligently for the event and all the teams qualified for the second day of competitions. It is a matter of great pride for the University that the three top positions were won by the teams from the Department of Mechatronics Engineering.

In Robo-Navigation event, engineers from around the country participated with self-fabricated robots and competed against each other in a knock out competition. The robots had to autonomously navigate through a Maze in the fastest possible time. The Maze consisted of many false alleys, dead-ends and a single correct path. Points were added for correct path identification and subtracted each time the robot took the wrong path. The names of the robots that won the positions

were RoboBlitz, Alysian and Gen-X produced by the students of E&ME College.

Punjab Youth Festival is a nationwide event that takes place under the supervision of the Punjab Sports Board. The event had 196 Categories and over 60,000 participants and is one of the largest festivals to be held in the World. The aim of the festival was to provide an environment of healthy competitions and an opportunity for the talented to test and prove their skills. Winning such a prestigious event at the national level was indeed a proud moment for the College of EME. This not only reflects the excellence of the School in the field of robotics but at the same time shows the professional acumen of Nustians .





## Intra-NUST Women's Table Tennis Tournament 2012

The intra-NUST Women's Table Tennis championship took place in the Atta-ur-Rehman School of Applied Biosciences, H-12 NUST, on oct 13. As many as 6 teams participated from SEECS ASAB, SADA and SCME. The tournament consisted of both singles and doubles matches, both categories consisted of 6 sets with participants playing 3 matches each set. Teams from ASAB and SEECS qualified for the final match in both categories. Maryam Farukh, Sumeira Shaheen and Anum Riaz of SEECS eventually claimed victory. Winning teams will face teams from EME and AMC in the regional championship.



## Intra-NUST Men's Table Tennis Tournament

Sports at NUST have always been considered significant as a vital ingredient of healthy lifestyle. Representation of NUST in national competitions leads to glory for the university at national level.

To make a team that would represent NUST in the national table tennis competitions, an intra-NUST table tennis tournament was organized in college of E&ME in which constituent schools of NUST including EME, H-12, MCS, MCE and AMC participated. Each swing of the racquet and each merciless smash that the orange-colored ball experienced brought streams of emotions into play as the audience witnessed exhilarating and nail-biting action which landed teams from H-12 and EME competing for the honor of representing NUST in national event. The boys from H-12 outclassed all the teams remaining unbeatable grabbing the title.

The team of H-12 consisted of Muhammad Kamran (Skipper), Abdullah Shafin & Saad Bin Shakir from SEECS, Hamza Jamil from SMME and Yasir Shabbir from SCEE.

The zonal competitions would commence from 5th of November in which team of H-12 would represent NUST. NUST wishes their team all the best for the national event and hope that they would make us proud by bringing the title home.



*"Gold medals aren't really made of gold. They're made of sweat, determination, and a hard-to-find alloy called guts." Dan Gable*



## MCE organises Football Championship

Intra-NUST football championship was held at the grounds of Military College of Engineering from Oct 21 to 22. The enthusiastic crowd cheered as they were met with the football teams of NUST College of Aeronautical Engineering (CAE) and Military College of Signals (MCS) in the final match of the NUST Football Championship 2012. CAE upheld its honour and won the Cup, taking maximum advantage of the home ground.

The defending champions, the gallant team of H-12 Campus were knocked out in their first and only match of the semi-finals. A total of six teams from MCE, MCS, College of E&ME, H-12 Campus and AMC participated in the Championship. Brigadier Anwar-ul-Haq, Commandant MCE, the Chief Guest of the day, commended the excellent display of sportsman spirit by all the teams and awarded prizes to the winning team.



## Intra H-12 Football Championship

One of the most awaited tournaments in H-12, the intra H-12 football, was organized by SEECs on the second weekend of October in which teams from various schools of H-12 participated. All the teams played with enthusiasm keeping the only aim of grabbing the title and loads of pride for their respective schools. Knockout rounds lead to NBS and SCEE facing each other in the grand finale.

Amidst the many slogans chanted by the crowd in support of their teams, an exciting and heart throbbing match was witnessed in which NBS successfully defended their title and completed their hat-trick of consecutive titles. The guest of honor, DD sports; Madam Rubina, presented NBS with the trophy and congratulated them on their consistent performance.





## Intra H-12 Table Tennis Tournament

Intra H-12 Men's Table Tennis Tournament for this academic year was organized by the School of Mechanical and Manufacturing Engineering (SMME) on the second weekend of October. The event witnessed the participation of 9 different schools from H-12. The participants from all the schools played with zest and zeal to be triumphant. The initial group stage matches were followed by the semifinals which resulted in SMME facing SEECs in the finals event. After a nail-biting match, team representing SEECs emerged as deserving winners of the tournament. DD sports Madam Rubina Ansari, chief guest of the event, handed over the winning trophy to SEECs and congratulated the Students Council of SMME on the successful completion of the event.



## Student from SEECs wins ITU Young Innovators Competition 2012

Iram Tariq Bhatti from SEECs won the "ITU Young Innovators Competition 2012, held from Oct 14-18 at World Trade Center, Dubai. The competition at ITU Telecom World 2012 offers social entrepreneurs between ages 18-25, from around the world, the platform to shine a global ICT spotlight on their innovative ideas and digital creativity.

After a comprehensive evaluation process, Iram from NUST was declared the winner, out of the 12 finalists from different institutions. Her submission on 'LabMagic' received much appreciation by the judges. 'LabMagic' focuses on a

new method of teaching Science using virtual laboratory environment, that not only is a less expensive method than the traditional method but it also inculcates the desire to learn and allows students to perform creative experiments. 'LabMagic' intends to develop a framework where students will stand in from of a kinect-based system and use its gesture tracking and depth sensing features to immerse themselves in an augmented virtual laboratory to perform practical experiments of subjects like Physics, Chemistry or Biology.

### MCS Faculty Presents Paper in IEEE Int'l Conference

Dr. Muhammad Hanif, Head Department of Humanities & Basic Sciences from Military College of Signals (MCS) has recently published and presented a research paper titled 'Plasma Diagnostic Study of Nickel Alloy Generated by Fundamental and Second Harmonics of a Nd: YAG Laser' in '39th IEEE International Conference on Plasma Science' from 08 to 12 July, 2012 held in Edinburgh, UK with the financial support of NUST. He is regularly presenting research work in international conferences and publishing papers in International journals.

### NUST Faculty publishes research monograph

Dr. Mubasher Jamil, an Assistant Professor at Center for Advanced Mathematics and Physics (CAMP), NUST has published a research monograph with title "Generalized Teleparallel Gravities: Resolution of Dark Energy and Dark Matter Problems" through Lambert Academic Publishing (LAP), Germany on Oct 2. His co-authors in this book, Dr. Davood Momeni (Iran) and Dr. Ratbay Myrzakulov (Kazakhstan) are also eminent physicists. The aim of this book is to address the fundamental problems of cosmology including the mysterious dark energy and dark matter puzzles. This is the second book published by Dr. Mubasher on Cosmology during his job at NUST.

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