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Zaid Bin Khamis Butt, Anum Yousaf Khan, Taimoor Ahmad **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.

Highlights

NUST organizes International Training Workshop on Modeling Water Futures Using Environmental Sustainability Approach

NUST Institute of Civil Engineering (NICE), School of Civil & Environmental Engineering (SCEE), NUST held a two-day knowledge sharing workshop on 'Modeling' Water Futures Using Environmental Sustainability Approach from January 22 to 23. Dr Nasrullah Khan, Principal NUST School of Civil & Environmen-



tal Engineering was the chief guest. The workshop exclusively targeted disseminating the project results and further training scientists and engineers in modeling water futures using environmental sustainability/water cycle approach.

In his welcome address, Dr Nasrullah Khan cordially welcomed the participants and said that the workshop would definitely prove to be a stepping stone for future policy formulation and help researchers excel in their respective fields. He further said that Chinese National Committee on Irrigation and Drainage (CNCID) and National University of Sciences and Technology Pakistan had jointly developed a proposal 'The Impact of Climate Change on Water Stress Situations in the Yellow River Basin.' The proposal aims at investigating the water stress situations, the impact of climate change on future irrigation water demand and optimizing the water productivity with uncertainties from land and water use as well as climate change.

Prof Dr Yinong Li, China Institute of Water Resources and Hydropower Research (IWHR) in his opening address expressed his deepest concern on the escalating water crisis and scarcity of water resources. He said that both China and Pakistan had been victimized by the same threatening situation of water scarcity which needed to be overcome through enhancing capabilities of the young engineers and scientists. He also remarked that such training workshops/sessions contribute a great deal in creating sound awareness among stakeholders at a large scale. In her keynote address, Jianxin Mu, China Institute of Water

Resources and Hydropower Research (IWHR)/ Executive Secretary CNCID said that the Yellow River basin, located in the midnorth of China, had been continuously playing a critical role in China's social and economic development, despite the fact that it had relatively limited water resources. She further said that the water resources of the Yellow River basin were decreasing and water stress was the most pressing issue in basin water management. She added that Pakistan and China were among many countries around the globe confronted with the challenges of water scarcity and the major objective behind conducting joint training session was to enable water resource engineers, planners and managers to work effectively for securing water for domestic, industrial and agricultural use, protecting vital ecosystem. Later in the technical sessions, Dr Nasrullah Khan elaborated the impact of climate change on water resources in China while Prof Dr Yinong Li briefed about the phenomenon of climate change on water resources in Pakistan.

The Day 1 proceedings commenced with hands-on training sessions on Climate Change Policy of Pakistan and Institutional Arrangements for its Implementation, Climate Change Impacts on Water Resources of Pakistan and Adaptation Strategies, Investigation of Climate Change on Water Resources in Pakistan by Using New GCM Results Downscaling Approaches and Characteristics of Climatological, Dry and Wet Summer Monsoon in Pakistan by Focusing on the Upper Troposphere conducted by Dr Qamar-uz-Zaman Ch., Advisor (Met and Climate Affair/ Vice President WMO), Dr Zia-ur Rehman Hashmi, Dr Ishtiaq Hassan, Principal Engr NESPAK and Dr Shakil Ahmed respectively. The Day 2 comprised training sessions on Flood & Drought Management Initiatives in Pakistan, Introduction, Demonstration & Use of BHIWA Model by Syed Naseer Ahmed Gilani, Chief Water Planning Commission, Prof Dr Jianxin Mu IWHR/CNCID, assisted by Dr Hamza Farooq Gabriel and Dr Sajjad Haider respectively.





NUST International Model United Nations-NIMUN 2013, kicked off with high hopes; and ended with a bang! Not only was the event a huge success for NUST but it also gave the delegates something to cherish in the years to come. NUST International Model United Nations started as a sequel of the MUN organized last year. The student body was looking forward to an equally well executed event this time round and as anticipated, NIMUN was a booming success.

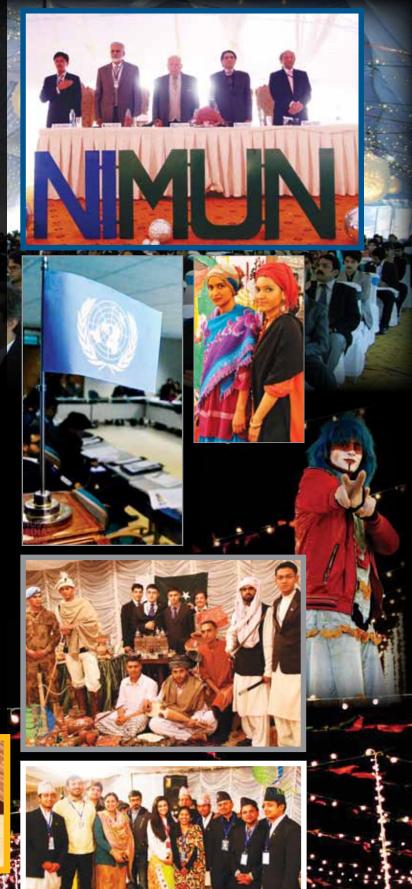
The event consisted of four days of debating and fun-filled social gatherings. The first day was spent registering the delegates and accommodating them in the hostels. The members of the registration team were busy throughout the day. The opening ceremony marked the beginning of NIMUN and was followed by the Global Village. The delegates set up stalls and portrayed the customs, culture and cuisine of the countries that they were representing. Unfortunate were the ones who missed the Ramp Walk, with the participants displaying their cultures on-stage in vibrant colors and amazingly real costumes.

The second day began with committee sessions and saw some heated debates. With a total of 12 committees and polished chairs heading them, NIMUN'2013 truly set the bars high. Day two ended with a fantastic carnival for the delegates.

The delegates eagerly raised motions for entertainment sessions which provided them with a much needed respite from the tiresome debates and lightened up the atmosphere with some singing and dancing which highlighted talents in all the debaters.

The formal dinner was themed "1920's" and the delegates dressed up displaying the vintage fashion in flesh. The ambience created via décor team's efforts blew away everyone who stepped inside the hall. A round of 'Tambola' kept the delegates entertained before the grand dinner was served.

The final day marked the end of the four day conference. The Rector and other dignitaries presented the awards to the winning delegates. Floating news of a 'surprise' event engulfed everyone in mystery, the event turned out to be a mime act by NUST Debating and Dramatics Society. NIMUN 2013 was sealed with a gorgeous lantern night and everyone bade farewell to the extravaganza under the brightly lit sky.



NUST hosts first Pak-US S&T Cooperation Program Symposium



As part of the Pak-US joint efforts to increase cooperation in science and technology for mutual benefit, the first-ever Pak-US Science & Technology Cooperation Programe Symposium: Economic Growth through Technology Transfer was held from January 31 to February 01 at the main campus of National University of Sciences and Technology. Higher Education Commission, Ministry of Science and Technology, US Department of State, US Agency for International Development and US National Academy of Sciences jointly sponsored the event. A large number of academics and researchers both from within the country and abroad attended the two-day activity hosted by NUST.

The purpose of the conference was to introduce the concepts of technology transfer and to foster new interactions between ongoing research projects and the private sector aimed at enhancing translation of research across several domains.

Delivering the keynote address, U.S. Ambassador to Pakistan Richard Olson said that cooperation in the field of science and technology at international level was a must towards addressing global challenges. He urged the need for extended research cooperation in areas such as water treatment to conserve and reuse wastewater, systems that rapidly detect deadly and



drug-resistant tuberculosis, and solar water-heating systems for remote, rural areas. In addition to the new funding for the *Innovate!* and *Collaborate!* Initiatives, Ambassador Olson highlighted several other ways through which the United States was promoting scientific cooperation with Pakistan. He also announced new funding for Pakistani researchers to transform their research into commercially viable projects with private sector partners.

The symposium marked the 10th anniversary of the Pakistan-U.S. Science and Technology Cooperation Agreement, focusing on economic growth through scientific cooperation. The two-day symposium brought together American and Pakistani researchers, scholars, government officials and entrepreneurs to help develop link between researchers and the private sector. The sessions included hands-on workshops on establishing private sector partnerships, intellectual property and how to 'sell' a business idea to potential investors.

Chairperson Higher Education Commission Dr. Javaid R. Laghari, Mr. Akhlaq Ahmad Tarar Federal Secretary Ministry of Science & Technology, Engr Muhammad Asghar Rector National University of Sciences & Technology Islamabad and Prof. Dr. Iqrar Ahmad Khan, Vice-Chancellor, University of Agriculture Faisalabad were also present at the occasion.

Earlier in the inaugural session, Dr. Nasser Ali Khan, Member Higher Education Commission informed the participants that over the last decade, the United States and Pakistan had jointly contributed \$38 million to 73 Pakistani-U.S. scientist-led research projects in as many as 40 different institutes and universities across the two countries. He extended gratitude to the administration of NUST for hosting this important event. Engr. Muhammad Shahid, Pro Rector NUST said that the symposium would be greatly helpful for bringing academia and industry closer to one another, which was pivotal for the economic prosperity.

The Pakistan-U.S. Science & Technology Cooperation Program will sponsor two competitive seed grant programs in 2013: *Innovate!* and *Collaborate!* Under these programs, researchers can apply for seed grants of up to \$15,000 starting in summer 2013.

NAA Governing Board meets Rector NUST

A meeting between Rector NUST and NUST Alumni Association Governing Board was held on January 4 at Seminar Hall of the NUST Main Office. The meeting solely aimed at apprising Rector NUST of the developments and future plans of NAA.

Mr Ammar Khan, President NAA, presented a brief report on the future plans and prospects of NAA, elaborating the functioning of NAA Governing Board, working groups and its committees. He further highlighted the industrial liaison and community service initiatives of NAA. Adding Mr Ammar Khan also explicated the issues of finance management and the presence of their group activities on social media. While responding to the questions of various participants in the Question/Answer session, the President NAA Mr Ammar Khan and the Senior Vice President NAA Mr Usman Ali Akbar satisfied all their queries. Later speaking at the occasion, Rector NUST Engr Muhammad Asghar assured NAA of his complete support. He further ac-



knowledged the efficient functioning of NAA Governing Board in the early phases of its journey and eulogized the endeavours of the entire team involved in making its plan a success. Engr Muhammad Asghar asserted that only those nations remain exultant in the world who actually have the courage to accept the change with open minds as change was a natural phenomenon. He further said that the strength of NUST lay in diversity, its community of diversified people and unique combination of civil and military partnership.

NUST students experience USEFP Undergraduate Exchange Program

NUST has the honour to have its students selected for the United States Education Foundation in Pakistan's (USEFP) Undergraduate Exchange Program. The students acted as cultural ambassadors where they had the opportunity to acquire world class education in a pool of cultural diversity. The Global UGRAD-Pakistan program offers cultural/academic exchange for a semes-

ter at a university in the U.S.

Ayesha Khalid, a materials engineering student at SCME, NUST went to Colorado State University in Fort Collins, USA. She describes the experience as amazing and cherishes the opportunity to interact with various cultures.

Along with community work she also dwelled in adventurous activities such as sky diving. Through active society work, she believes to have changed various perspectives regarding Pakistanis.

Seemal Mushtaq of IESE, NUST, had the opportunity of studying at Wilson College USA for a semester. Not only was she a recipient of a 3.93/4 GPA but she also completed a total of 39.5 hours of community service. She was also active in student societies, served as Staff Writer for the college newspaper, attended meetings of Franklin Renewable Energy Association and contributed to International Research & Exchanges Board (IREX) report on International Education Week 2012. She won appreciation from IREX for her video on 'Life in the U.S' and has been selected as a

mentor for future participants of the exchange program.

Another student from SCME Maha Yusuf, spent a semester at University of Mississippi, USA. As a cultural ambassador through the U.S. Department of State and the International Research and Exchanges Board, Maha experienced true Southern hospitality from UM faculty, staff and students. Maha recalls her

participation in Rebel Run, in which all new students run onto the Vaught-Hemingway Stadium field during a home football game, as the most memorable experience from her visit. She also joined the Ole Miss chapter of the Engineers without Borders.





'Stage, Characters, and Audience Synchronization' Workshop at NBS



Ms. Kathleen Mulligan and Mr. David Studwell, Assistant Professors of Voice and Speech in Ithaca, New York conducted a workshop on "Stage, Characters, and Audience Synchronization" at Seminar Hall of NUST Business School on January 7.

The workshop involved lectures on television production, role play, coordination between direction and acting. Ms. Kathleen performed on an excerpt from Shakespeare's play, Julius Caesar. Her acting was constructively criticized by Mr. Studwell who was performing the role of a Director. Ms. Mulligan ameliorated her performance based on Mr. Studwell, her Director's comments. Through this performance, the students interactively learned how influential the director can be upon performance of an actor. Students asked questions, performed different roles selected by Mr. Studwell and Ms. Mulligan and were provided comments and criticism on their acting.

At the end of the workshop, Dr. Masrur A. Khan, Head, Department of Mass Communication, presented the shields to the guest lecturers as a token of appreciation. Ms Kathleen works with actors in training on vocal production and speech. She is also a professional actress and has performed at many theatres across the U.S. from Off-Broadway to the west coast. In 2010 she was a Fulbright Scholar to India with her project "Finding Women's Voices" which focused on the empowerment of women through voice. Mr. David Studwell has been a professional actor for over twenty-five years working in prominent theatres all over the United States including The Kennedy Centre in Washington DC, The Goodman Theatre in Chicago, Off-Broadway and at the world-renowned Oregon Shakespeare Festival. In addition to his acting work, he has taught at Cornell University in Ithaca NY, the Pacific Conservatory of Performing Arts in California, and most recently as Visiting Assistant Professor of Acting at Stephen F. Austin State University in Texas.



Energy Technologies Expert's lecture at CES

Dr. Naveed Aslam delivered a talk titled "The Global Way of doing Business in the Energy Sector with Associated Spearhead Technologies" at the Center for Energy Systems on Jan 7. He is a Global R&D Manager for energy technologies at Hoechst-Celanese Energy Technologies, USA, especially for Gas to Liquid (GTL) and Solar PV sectors. During his presentation, he discussed the importance of shale gas and also discussed the methods for extraction of shale oil and gases through combination of vertical and horizontal Rigging. He further said Shale gas is natural gas formed from being trapped within shale formations and the U.S. government's Energy Information Administration predicts that by 2035, 46% of the United States' natural gas supply will come from shale gas.



The seminar was attended by the Principal, faculty and students of CES. Dr. Naveed further updated the audience with his proposed plant design and the ongoing research on it . He also shed light on the environmental impact of the proposed process and most importantly the feasibility analysis, which he termed crucial for any project proposal. Dr. Naveed Aslam in his versatile career holds a Ph.D from University of Florida, USA. He successfully developed target identification for novel drugs at the Texas Houston Medical School while working in parallel on CO2 sequestration and recycle to useful product.

The talk was followed by a question and answer session involving active participation of the attendees. Principal CES, Dr. Bilal Khan, urged the students to avail all opportunities for learning and identified the key to success in gaining maximum knowledge in their field of interest.

"If we all did the things we are capable of, we would astound ourselves." Thomas A. Edison

Prime Minister's Entrepreneurial Challenge: 'DISCOVER'

The Centre for Innovation & Entrepreneurship (CIE) at the National University of Sciences and Technology (NUST) has launched the second Prime Minister's Entrepreneurial Challenge: DISCOVER 2012 - Prosperity through Entrepreneurship, a national level student Business Plan Competition that has been endorsed by the honorable Prime Minister of Pakistan.

Last year, DISCOVER was truly unique in terms of innovative ideas, opportunities for entrepreneurial skill development, high level of industry-academia interaction and the sheer diversity and talent of future business leaders. Over 1200 students from 30 universities participated and registered 250 innovative ideas. Teams trained through the program went on to achieve considerable success at international events, including finishing second at the "HCT-Wharton Innovation Tournament", winning UAE AED 30,000, acquiring second position and Best Women Entrepreneur award at the "GISTech I-Dare Business Plan Competition", winning US \$40,000, being in the top five at "TiE All Asia Competition" and receiving a number of awards at the "GISTech-I Ideas Competition" amounting to US \$12,000.

This year, DISCOVER made things easier for participants through a strong social media presence and achieved maximum participation from budding entrepreneurs nationwide. An aggressive Facebook campaign was launched following which the DISCOV-



ER page on Facebook exceeded 5200 members. Over 1606 students from 45 universities participated and registered 367 innovative ideas. This comprehensive program started in August 2012 will end in February 2013. In Round I, two-day training sessions were conducted at Karachi, Lahore and Islamabad to coach aspiring entrepreneurs in the basics of business planning. After the successful completion of Round II, results were announced for the 58 Top teams that will proceed to Round III. These teams are presently working with seasoned industry mentors on their business plans and presentations. The winning team will be awarded a cash prize of Rs. 500,000, the first runners-up Rs. 300,000, the second runners-up Rs. 200,000 and the remaining finalist teams Rs. 50,000 each.

CES faculty, students attend PAS Energy Report launch



Faculty including Dr. Ehsan Ali and students of Center for Energy Systems (CES) attended the launch ceremony of Pakistan Academy of Sciences (PAS) Energy Report, titled 'Pakistan's Energy Crisis Recommended Solutions' on December 31 in Islamabad. Pro-Rector NUST and other dignitaries from NUST headquarters were also present on this occasion. The report was presented by the renowned scientist Prof. Dr. Atta-ur-Rahman, President, FRS. Dr. Asim Hussain, Advisor to the Prime Minister on Petroleum and Natural Resources, was the chief guest at the ceremony. The energy report is the first of its kind to be published in Pakistan. It maps notable events through history and their impact on the energy situation in the country and outlines short-term and long-term solutions to the energy crisis. CES students discovered the role of sustainable technologies and the significance of energy systems as a major contributor to this solution. Towards the end of the session, participants had a question and answer session which enabled them to learn about the current steps the country's government is taking to address the energy crisis. Moreover, they were clarified regarding wrongly communicated statistics.

Booklet for Technical Interviews

To make a good impression during the interview is half the job done. For this purpose the SCME Alumni Association has published a booklet titled "99 Questions Engro May Ask You in an Interview" to help students be better prepared for their technical interviews.

Engro is the biggest employer of Chemical Engineering graduates offering placements to 13 students of the first batch of SCME. To build on this accomplishment, this booklet compiled by Umair Umar and Osama Hasan, contains questions shared by alumni and final year students who were interviewed by the ENGRO panelists.

"It is certainly not the last word, but a foundation for the launching pad. We expect this would help students prepare for their internship / job interviews well," writes President of the SCME Alumni Association, M. Tippu Iqbal in the foreword. The booklet will be available through Student Associates at a very nominal price. The faculty and students have highly appreciated the endeavour.



NUST imparts training to FATA officials on Windows Server 2008



Professional Development Center (PDC) signed an MoU for a USAID funded project for capacity building of FATA professionals through M/S Abacus Consulting. The project envisages organization of three five-day trainings on 'WS 2008' and 'SQL' for

a total of 15 IT professionals of FATA secretaries.

So far two trainings have been conducted by PDC in the School of Electrical Engineering and Computer Science (SEECS), the first one being a five-day training program on 'Windows Server 2008', conducted from January 21 to 25. The Resource Person for the training was Mr. Waqar Ahmed Bhatti who is a Microsoft Certified Trainer (MCT). IT support Engineers from FATA Secretariat (FS) and FATA Development Authority (FDA) attended this program.

The second five-day Training program was also based on 'Windows Server 2008' and was carried out from January 27-31. This time IT Incharge from FATA Investment Facilitation Authority, (FIFA) also joined the attendees including IT support Engineers and Web administrators from FS and FDA. Windows Server 2008 trainings involved extensive hands-on learning experience in all areas of server deployment and maintenance. The instruction session allowed the participants to upgrade existing skills and learn new skills for this modern server technology.

'RAMJET Engine' Course for NDC Professionals at PDC

Professional Development Centre (PDC)-NILE arranged a three month short course on "RAMJET Engine" for the National Development Complex (NDC) Professionals from October 3, 2012 to January 3, 2013. Professor RCMS, Dr. Khalid Pervez, was the re-

The closing ceremony was chaired by the Principal RCMS, Dr. Ahmed Ejaz Nadeem and Principal NILE, Dr. Qaiser Hameed Malik . Principal RCMS had not only provided the Super-Computer lab at RCMS for the purpose of training but also openly invited



source person of the training session, who received his PhD degree in Aero-Propulsion from University of Oklahoma Norman. The three month course gave participants a clear understanding of Power Cycle for Ramjet (Brayton Cycle), Real Ramjet, Diffuser (subsonic & supersonic), Fuel atomization and Off-design performance of Ramjet.

participants for further collaborations. Dr. Qaiser ensured the participants that their feedback was a valuable asset for PDC's growth and expressed his desire to continue collaborations with NDC to aid in their progress. This was followed by a final assessment and evaluation of the training session from participants and the certificate distribution ceremony.

Five-day Workshop on 'Methods of Instruction'



Professional Development Center (PDC) conducted a five-day workshop for Faculty of NUST on 'Methods of Instruction' from January 21 to 24. The resource persons for the training were selected professionals from different universities of Pakistan. Over 50 faculty members from CAMP, CES, SEECS, SADA, MCS, SMME, SCME, SCEE, ASAB, AMC and RCMS attended the workshop. Rector NUST, Engr Muhammad Asghar, also addressed the audience on this occasion and shed light on the eminence of perfecting teaching methods.

The first session was hosted by Dr. Samina Malik, Chairperson Department of Education, International Islamic University, Islamabad. The main objectives were to study concepts of effective teaching model framework. Day two focused on 'Testing and Evaluation Procedures'. Hosted by Dr. Iftikhar Uddin Khwaja, Dean Iqra University, Quetta. The session discussed in detail types of evaluation, including subjective and objective tests and methods for their scoring. Day three invited HoD of Foundation University, Rawalpindi; Dr. Muhammad Maqsud alam Bukhari

and Dr. Muhamad Ashraf, faculty at SCME-NUST. It involved an examination of Class Management and Teaching Skills. Participants learned strategies, styles and tips for class management through effective teaching and questioning techniques.

On the final day the audience were joined by Dr. Mumtaz Fatima Jafari, Advisor to Faculty Development Academy, COMSATS, Islamabad, who introduced the attendants to 'Education Psychology' including learners' psychology and reflective teaching methods. All concepts were communicated through presentations, group activities and comparisons with real-life scenarios with intermediate lunch and tea breaks.

The closing address was delivered by Dr. Qaiser Hameed, Principal NILE. He expressed his intent to modify content of future trainings based on the feedback received by faculty and also wished for the feature to be made regular in faculty's development program. Later, certificates were distributed among the participant by the Principal NILE.

Dr. Akram Sheikh visits CES and Biofuel Park

Professor Emeritus, Dr. Akram Sheikh visited CES-NUST on January 19 . All faculty members were present during the meeting and were introduced to Dr. Akram Sheikh. CES Faculty briefed Dr. Sheikh about their respective disciplines and projects in hand. Dr. Akram Sheikh introduced the faculty to potential sources of research funding.

Dr. Mohammad Bilal Khan, Principal CES-NUST presented CES brief history along with sponsored projects which had attracted considerable funds to NUST. Dr. Qamar Malik, Professor Industry Chair also highlighted NRG-Biofuels Canada sponsored ongoing projects, ways and means to enhance sponsored funding through applied research. On this occasion Dr. Sheikh visited the Biofuel Park. Dr. Qamar Malik explained the cultivation of algae through various types of photo-bioreactors and production of biofuel from the cultivated algae. He further added that current biofuel park is powered by Solar Energy. Dr. Akram Sheikh appreciated the team work done by CES-NUST and the progress made over a short period. He encouraged the faculty to proactively engage with the Industry from the platform of NUST Corporate Advisory Council.





02 Visits

Afghan Ministry of Defence delegation visits NUST



A seven-member delegation from Ministry of Defence, Afghanistan visited the main campus , NUST on January 30 . The delegation was led by Afghan Defence Minister General Bismillah Khan Mohammadi.

Upon its arrival, the delegation was warmly received by Rector NUST Engr Muhammad Asghar. In his welcome address, the Rector recited some verses from Allama Iqbal's poetry in which the greatest poet of the East had praised the Afghan nation, describing it as the heart of Asia. To this, Afghan Minister Bismillah Khan Mohammadi acknowledged Allama Iqbal as the great saint poet not only of Pakistan but also of Afghanistan.

Subsequently, the delegates were given a detailed briefing on the functioning, academic programmes, genesis, and constituent institutions of NUST.

Later, the delegates were conducted to School of Electrical Engineering and Computer Science. A lunch reception was also hosted in their honour.

At the occasion, the Rector, on behalf of Chairman NUST Board of Governors COAS General Ashfaq Parvez Kayani, announced 20 PhD fully funded scholarships for Afghan students in any discipline being offered by NUST.

NUST faculty at UNESCAP- APCTT China and Bahrain

Dr. Adeel Waqas, faculty member from Center for Energy Systems at NUST conducted a one-day training program on energy efficiency and energy conservation potential for the industrial sector of Bahrain. Training was aimed to create awareness on energy efficiency and energy conservation in Bahrain. Awareness training also focused on certification issues of a new energy related standard ISO 50001. Participants representing different industries of Bahrain were given introduction of ISO 50001. RETSCREEN software, an excel-based clean energy project analysis tool that helps decision mak-

ers quickly and inexpensively determine the technical and financial viability of potential renewable energy and energy efficiency projects was also introduced to the participants. He was also invited by UN-ESCAP-APCTT (December 2012) in China and India to present Pakistan case on off grid renewable energy application. During the forum, Mr. Adeel secured a funding of 2500 USD from UN-ESCAP-APCTT for compilation of the report on "Specific Information on Renewable Energy Sector of Pakistan" to be submitted to UN-ESCAP-APCTT. The report was compiled with the help of certain research students of CES and was successfully submitted to UN-ESCAP-APCTT and was approved by the higher authorities of UNESCAP-APCTT.

U.S. Ambassador visits TIC



U.S. Ambassador Richard Olson visited the Technology Incubation Centre (TIC), NUST on January 10 to interact with the TIC companies. The Ambassador visited a few TIC offices and talked to incubatees about their start-ups. This was followed by a round of elevator pitches by all TIC companies to the Ambassador, which showcased the diversity of start-ups residing at TIC in terms of sector, team size and other areas.

Ambassador Olson then addressed the TIC management and incubatees. He affirmed that the United States would continue to support the development of Pakistan's entrepreneurs through the U.S. Ambassador's Fund. "We all know that societies thrive when their people have ample opportunity, and this is why the United States supports young entrepreneurs in Pakistan," said Ambassador Olson during his visit of NUST's state-of-the-art TIC.

While at TIC, Ambassador Olson announced that the U.S. Ambassador's Fund, which supports small-scale, high-impact pro-

grams for communities throughout Pakistan, will now also focus on support to Pakistan's entrepreneurs. The U.S. Embassy also recently unveiled an entrepreneurship program called *Khushhali Ka Safar* (Journey to Prosperity), which provides support to innovative Pakistani entrepreneurs by connecting them with American investors and mentors, particularly from the Pakistani-American diaspora and academic institutions.

Ambassador Olson also talked about NUST's future Center for Advanced Studies, being established together by the Governments of Pakistan and the United States, which will focus on Pakistan's energy needs. The United States, through the U.S. Department of Commerce's Commercial Law and Development Program (CLDP), has also supported TIC in the past by taking TIC staff as well as Incubatees to the United States for capacity building and to learn best practices of how to bring research out of the laboratory and into the market.

NUST, FUI sign MoU

A Memorandum of Understanding was signed between National University of Sciences and Technology Islamabad and Foundation University Islamabad on January 01, 2013. A delegation from Foundation University visited NUST where Rector NUST Engineer Muhammad Asghar and Rector FUI Major General (R) Gul Muhammad HI (M) inked the MoU. The purpose of the MoU is to define areas of collaborations both at undergraduate and postgraduate levels, professional training, joint research and other academic pursuits in which the two universities desire to work for the mutual benefit. The MoU describes an intention to share each other's initiatives, expertise and working procedures and support the researches of the two universities to promote research in their fields of interest.



02 Updates from Schools

Crack the code with Dr. Thomas Nugent

NUST BioReach Society managed to pull off yet another successful event at Atta-ur-Rahman School of Applied Biosciences on January 11, which made the amateur scientists ponder over their respective lines and future endeavors. NUST had the honor to welcome Dr. Thomas Nugent, an eminent scientist from the Department of Chemistry at Jacobs University, Germany. Present on the occasion was Principal ASAB; Dr. Muhammad Ashraf, along with faculty and students of the school.

Dr. Nugent has been serving both academia and industry for over two decades and has profound knowledge of what it takes to be a scientist in the real sense. In his talk he presented his unique perspective of a scientific life, unlike the one prevalent in our society. According to him, we are here not just for the fame but for devising ways to solve the existing problems. For Dr. Nugent, success is the ability to identify and solve unmet challenges because success always follows successive failures. It develops the inclination in students to reach the unreachable. The lecture proved to be a very productive one for students. Following the Q&A session, Principal ASAB presented the esteemed guest with a token of appreciation.







Community Champions Workshop

NUST Community Services Club (NCSC) in collaboration with 'Youth for Peace' organized a conflict management workshop titled 'Community Champions Workshop.' The workshop was offered as a part of the community service course offered by NCSC. The workshop aimed to foster the very fundamental skill of conflict management within the young minds and help participants identify their personal beliefs about conflict.

Mr. Ali Shabbar, who is an accomplished organizational development professional with a strong background in group process and building organizational capacity, led the workshop and trained the young minds to resolve the issues in groups with a positive attitude and greater composure. The workshop included a number of practical exercises and group activities which kept the participants motivated and made the training an interactive session. The dynamic participants practiced positive and effective approach to deal with workplace conflict and to avoid confrontational situations to achieve positive outcome. The workshop included a primary focus on capacity building

in the core conflict resolution skills of communications. Mr. Ali amalgamated the training with some humor and real life notions to keep the spirits of the participants high. They were eager to apply the skills from the workshop to the myriad issues they will face during their professional life. Finally, the workshop concluded with distribution of certificates of participation and a closing note by the faculty sponsor Dr. Irtiza.



Introductory Seminar on Engineering Education Research (EER) at PNEC

In continuation with the efforts to promote awareness on the newly established Department of Engineering Education Research (EER), another introductory seminar was recently arranged at Pakistan Naval Engineering College (PNEC), Karachi. Dr Qaiser Hameed Malik, Acting Principal NILE & HoD DEER, highlighted the objectives of the introductory seminar. The house was informed that in addition to providing background of the new EER discipline to the audience, DEER as part of its ongoing research is also interested to know views of audience on the approach being followed by NUST to launch this discipline in fall 2014. In a comprehensive presentation on the subject, Dr Qaiser while giving details about the evolution of the concept also highlighted its relevance to NUST. The development of EER concept happening worldwide and specially in the region were shared with the keen audience.

Subsequently, in a separate presentation, the approach being followed by DEER to launch the discipline was shared with the house. A broad view about the on-going research activities was presented to the audience to appreciate the breadth and depth of the research domain. Before an interactive session, Dr Qaiser presented the road map for establishing a fully functional DEER by 2014 and shared the details of the visit of NUST delegation to U.S. universities in September 2012 regarding international collaboration in EER. The seminar ended with a lively Q&A session





to clarify role and utility of PG programs in EER being planned at DEER and likely employment of potential PG students from other NUST institutions.

For obtaining feed-back, a survey on the affectivity of the seminar and views of audience on the approach being followed by DEER was conducted. Director Research PNEC, Dr. Tahir, in his concluding remarks appreciated the efforts of the speakers and presented mementos on behalf of Commandant PNEC.

BMAS programme at NIPCONS

Bachelor in Military Art and Science (BMAS); a military specific UG programme is being conducted under the aegis of NUST by the MAS Department of NUST Institute of Peace and Conflict Studies (NIPCONS). The studies of the 7th Semester commenced from 28 December 2012 simultaneously at six Human Resource Development Centres (HRDCs) i.e., at Peshawar, Rawalpindi, Lahore, Multan, Malir and Quetta. The 8th Semester (Research) of the programme shall commence on termination of the semester.

Rector NUST, Engineer Muhammad Asghar visited NIPCONS and HRDC Rawalpindi (established at NIPCONS) on January 17, 2013. He expressed satisfaction over the facilities provided to the faculty and students and conduct of classes according to the Academic Schedule. He also addressed the student officers. In order to monitor the progress and conduct of the semester at various HRDCs, Principal NIPCONS, Mr. Ali Baz along with HoD MASS Dept undertook a visit to Multan. Subsequently, the Principal also visited HRDCs at Peshawar, Lahore, Quetta and Malir. In addition to visiting the respective HRDCs, the visits were also used for interacting with the student officers as well as the formation and garrison commanders who have played a vital role in providing necessary infrastructure and facilities to help run the programme in an efficient and smooth manner.





Eminent scientists visit ASAB

Dr. Khalid Iqbal Chaudhry visited Atta-Ur-Rehman School of Applied Bio-Sciences (ASAB) on January 2. Principal ASAB, Professor Dr. Muhammad Ashraf and faculty attended a lecture by Dr. Chaudhary, renowned for his 18 years of experience and practice in Psychiatry and Cardiovascular Disease. It was followed by another lecture by Dr. Khalid on 'Discovery of New Molecular Entities-New Paradigm for Drug Discovery and Development'. Rector NUST, Engr Muhammad Asghar in his concluding remarks appreciated the meritorious contribution of scientists to the betterment of the humanity.







The next day, a Workshop on 'Effective Writing Skills' was organized at ASAB. Prof. Dr. Fatima Z. Basha T.I., PhD (Organic Chemistry, New York), from H.E.J. Research Institute of Chemistry, was present as the chief guest. Dr. Fatima had a meeting with the research students and faculty members of the school where the audience were able to benefit from her vast expe-

rience in different therapeutic areas, including neuroscience, immunoscience, infectious and metabolic diseases. Dr Bhasha delivered a lecture titled 'Drug Discovery; Examples of DPP-IV Inhibitors for the Molecular Treatment of Diabetes'. The lecture concluded with Dr. Basha's meeting with the Principal and other officials of the School.

Primary Professional Training Course at CAE

Primary Professional Training Course No. 22 was held at CAE from December 17 to January 24. During this course the primary professional and engineering management-related knowledge was imparted to the fresh graduates for taking up their responsibilities with confidence and assurance in the PAF. Air Vice Marshal M Salman Khan, SI (M), Deputy Chief of the Air Staff (Engineering) was the Chief Guest in the Certificate Award Ceremony that was held on January 24. Flying Officer Bilal Alam was awarded Deputy Chief of the Air Staff (Engineering) Best Performance Trophy for obtaining 1st position in the



Course. The Chief Guest appreciated the efforts of CAE faculty for conducting the course in a befitting manner and felicitated the course participants on successful completion of the course.

Seminar on Unmanned Aerial Vehicle Overview and Design Process

Unmanned aerial vehicles (UAVs) have gained a tremendous amount of publicity with the success of reconnaissance missions around the world. UAVs are currently used for a number of missions including reconnaissance, combat, logistics and research/development roles. Keeping in view the advancements in this field and its relevance with Pakistan in general and PAF in specific, the seminar was arranged to apprise the audience regarding the UAVs and their design process. The opening address was delivered by Group Captain Dr Abid Ali Khan, Head Aerospace Engineering Department. He welcomed all the participants and discussed the importance of this field. He also highlighted the efforts undertaken at College of Aeronautical Engineering to enhance the knowledge of students in this direction.

Squadron Leader Dr. Farooq Bin Akram gave an overview on the importance of UAV technology along with complete conceptual design phase starting from a rough sketch idea to final design output. In this presentation the audience was also enlightened with the new trends in UAV design and latest engineering advancements. Selected state-of-the-art UAVs were also introduced to the audience. The audience was apprised that UAVs have a variety of application such as law enforcing agencies, military and civil applications.



This presentation was followed by three UAV conceptual designs by students of 74th Engineering Course. They presented their work in response to the specifications given to them to design a SEAD type UAV. It is a platform used for suppression or destruction of enemy air defence. During these presentations they explained in detail the conceptual design process, which lead to their proposed UAV designs.

The Seminar culminated with closing remarks by Air Commodore Dr. Abdul Munem Khan, Commandant CAE. He expressed his satisfaction on the work undertaken by faculty and students to keep themselves abreast with the latest developments in this field.

Dr. Zareen Amtul delivers lecture at ASAB

Dr. Zareen Amtul visited Atta-ur-Rehman School of Applied Biosciences (ASAB) on December 31.

Dr. Muhammad Ashraf, Principal ASAB and faculty attended her lecture where she talked about areas within the scope of her expertise and research, including Neuroscience, Lipid Biology, Microbiology and Enzymology. Dr. Amtul is a Biochemistry Major with her PhD in Neuropharmacology/Molecular Neuroscience. She has over ten years of mulitidisciplinary research experience in the academia, industry and research institutes located in Canada, USA, Germany and Pakistan. While working with leading scientists in the field of Alzheimer's Disease like Drs. Todd Golde, John Hardy, Steve Younkin, Michael Murphy (USA), Drs. Peter George-Hyslop, David Westaway (Canada), Dr. Tobias Hartmann, and Konrad Beyreuther (Germany) she has designed and developed various diverse projects from concept to completion. ASAB hosts similar talks to provide a platform for healthy interaction between their own and external faculty.



NBS Welcome Party

Following the tradition of welcoming new entrants, the students of NBS Cultural and Dramatics Society organized a Welcome Party for the students of 2K12 (UG and PG) batches on January 4. The event started at 17:30 hrs with a theme "Desi". The auspicious get-together was conducted in the basketball court. The Welcome party was very well decorated; students from various batches were seen in traditional desi clothes depicting the theme of the party. The seniors heartily welcomed the new batch. The Principal & Dean, Dr. Ashfaque H. Khan also shared his thoughts with the students and gave them a warm welcome address.

Titles were given by the 2K12 batches which were created personally by the seniors with artistry. This was accompanied by a skit to add further entertainment to the evening. All the performances were brilliant and were enjoyed thoroughly by the audience. A scrumptious and delectable dinner was served which everyone enjoyed. Ms. Maria Qadri , President Students Affairs & Faculty and Mr. Abid Khawaja were the organizers of the event.



College of E&ME participates in DICE Connect-2012

Distinguished Innovations, Collaboration & Entrepreneurship Connect 2012 is an annual event promoting knowledge exchange and research collaborations between academia and industry. It was initiated in 2007 with first meeting held at College of E&ME thus making the college pioneer of this forum. The event was held at University of Engineering & Technology, Taxila at the end of last year.

DICE provides the platform for the industry and the research academia to share knowledge and seek possible collaborations for utilizing the modern technologies to produce innovative products. In the opening session, the Commandant College of E&ME, Maj Gen Obaid Bin Zakria, emphasized the role of academia-industry research collaboration in rapid development and economic growth of Pakistan. He highlighted the contribution of College of E&ME under the banner of NUST in promoting the research culture and involvement in local and international research collaboration. Dr Khalid Mahmood of DME was the panellist in one of the symposia sessions. In his presentation, he discussed about international dimension of research collaboration.

orations. In the exhibition, College stall was established where composite materials and related manufacturing equipments were displayed.







Lecture on Road Network System of Pakistan



A lecture on "Road Network System of Pakistan" was delivered by Dr. Shahab Khanzada on January 3. The lecture was held at NIT Auditorium at School of Civil and Environmental Engineering (SCEE) and was attended by Dean SCEE, Dr. S. M. Jamil, Head of Departments, various faculty members and students of civil engineering.

The guest speaker explained about the road network of Pakistan by giving an overview of different road projects like Karakorum Highway and Makran Coastal Highway of Pakistan. He also mentioned the problems faced by our engineers in laying these road networks in Pakistan. The total length of roads in Pakistan is 181,836 Km and present worth of this road network is Rs.2 Trillion. Since this network is the lifeline of Pakistan and more than 80% of the economic activity is carried out through this network, it is an important field of civil engineering. Dr. Shahab Khanzada is a consultant at National Highway Authority (NHA), Pakistan. He is an eloquent speaker and has been a part of many publications related to pavement design of rigid and flexible pavements.

NUST faculty participates as guest speaker in seminar at NDU

National Defence University organized a Seminar on "Energy Security of Pakistan: Challenges and Prospects" the event was organized as a joint panel discussion. Dr. Mohammad Bilal Khan Principal-CES from NUST, Mr. Shahid M. Sattar, Member (Energy) Planning Commission of Pakistan and Mr. N.A. Zuberi, MD Private Power and Infrastructure Board were invited as member of the panel. Dr. Bilal was privileged to present his thoughts on Importance of Thar Coal Project for Energy Security of Pakistan: Recommendations and Way Forward. He emphasised that Pakistan is blessed with huge coal reserves, bulk of these are subsurface. It is imperative to utilize these indigenous reserves to provide import substitution of diesel and furnace oil worth USD 12 billion per annum. Comparing the CAPEX and OPEX of competing technologies i.e. dry batteries, fuel cells, it was highlighted that GTL derived petrol and diesel offer lowest OPEX to run the vehicle, thus bringing coal to the cheapest platform available for commuting. Moreover Syngas obtained from coal gasification is the raw material for a variety of products including Electric Power, Synthetic Diesel, Hydrogen for Fuel Cells and Urea Fertilizers, and several petro-chemicals.

Welcome Party-SMME

Keeping up with the tradition of School of Mechanical and Manufacturing Engineering, a spectacular welcome evening for their freshmen was arranged by the sophomores. The theme of this year's welcome party was "the village of NUST. The stage was decorated as a village room, with fans and lanterns on the walls and a beautiful straw ceiling. A tractor stood beaming at the crowd in one corner, adding to the village-ness of the night. On both sides of the stage were 'chaarpaiyaan' to seat the participants of a splendid and hilarious show planned by the students of sophomore year. It was good to see that everyone had taken the theme to their hearts and came dressed as close to villagers as possible.

The freshmen also had plans of their own. They pulled off something spectacular which has never been seen before at NUST. A convoy of cars and motorcycles



roamed around on the roads of NUST with sirens blazing before making their way to SMME. Sitting in the VIP car was the faculty member and the only girl in the freshmen class. On either side of their car were bikes. The group of 40 people danced their way into the tent with their teacher leading them. The function formally started with Ibrahim Asghar of the host team giving the welcome speech and the welcome video which brought tears of laughter to everyone's eyes. Usama Khan mesmerized the audience with his musical talents followed by standup comedy performed by Ali Ahmed Khan (as Tariq Aziz) and Zulfigar Asim (as former PM Gillani). The audience already knew them from 'Do Dooni Aik', and gave them a huge round of applause. SMMEians then displayed their Qawali talents, before Chaudhry Danda crashed the party. Chudhary Sahab took comedy to another level with his Punjabi and an awesome Punjabidubbed video of teachers and the freshmen.

Principal SMME hailed the students' effort in arranging the event. After a wonderful desi dinner, the students made their way to the stage and danced to the Punjabi songs.

03

Co-curriculars Corner

Team from NBS stands third in National Debating Competition

NUST Business School team participated in the Lahore School Debate Competition which was held from December 30 to January 2, 2013. This team was represented by students namely; Muhammad Abdullah Khan, Syed Ali Tahir and Nida Mahmud. The Lahore School Debate is regarded as the biggest Asian parliamentary tournament in Pakistan and NBS finished in the Semi-Finals ranked third in the tournament just behind LUMS and UCL notwithstanding the fact that the tournament had more than fifty teams attending.

Abdullah Khan and Nida Mahmud were ranked within the top 20 speakers of the tournament, in a circuit which was dominated by institutions from Lahore and Karachi. The team beat UET, SISA, Forman Christian College and GCU Lahore to reach

the quarter finals where they beat SISA again to reach the semi finals. The semi final was lost to UCL on a 2-1 split decision but the team from NBS progressed further in this tournament than any other team from Islamabad so far. The team won four out of the first five preliminaries and ended up breaking above fifty teams from all across Pakistan.







'Dafa 302' steals the show at IBA Enigma'13

NUST Drama and Debating society took their patent performance, 'Dafa 302' to Karachi which won accolades at the IBA Enigma'13. Enigma is an annual IBA event which sees participation from universities and institutes from all over Pakistan. NUST students shone in the drama category and bagged all the awards; Best Actor (Waleed Chaudhary, General Secretary, NDDS), Best Actress (Omaima Nadeem) and the Best Play. The team of six included Kunwer Faran (actor), Sarah Ansari (Press Secretary, NDDS), Areeb Arshad (actor) and Hassam Ghaffar (lights and sounds).

The judges praised the performance of the actors and appreciated the message that was highlighted. The performance also received a standing ovation and loud gasps at the execution scene. This play was earlier presented as the opening act by team NDDS at the first Intra-NUST Drama Festival'12, which was held at the Islamabad Club, organized by NDDS.





Field trip to project site

A field visit for the final-year students of NUST Institute of Civil Engineering (NICE), SCEE was arranged on January 3. The visit included a tour of the ongoing project site of the NUST Auditorium and Gymnasium. Several faculty members; Prof. Dr. Syed Ali Rizwan, Engr. Mansoor Azam, Maj Dr. Wasim Khaliq, Asst Prof. Ansar Iqbal, Asst Prof. Dr. Shaukat Ali Khan, Lec. Muhammad Ammar, Lab Engr. Saqib Hussain, Lab Engr. Annum Aqib, RA Kamran Shakir also accompanied the students.

The purpose of the visit was to introduce the students to several construction methodologies, practices and elements. It was thought provoking and informative. Two way grid, waffles lab, columns, beam joints and structural drawings were shown to the students. "Build Fast" contractor employees briefed the students about the construction activities which are being under-



taken at the site. Also Build Fast contractor welcomed the students and highlighted the construction methodology and later on entertained the students and faculty with refreshments.

Red Bull Cricket Tournament

NUST H-12 competed in the Red Bull Cricket League (RBCL) where the 1st match was played between NUST H-12 and College of E & ME .The team bowled EME out quite easily and won the seemingly one-sided match. Then H-12 team battled with the team from COMSATS in their next match and bowled COMSATS out on 120 but their own batting order started to crumble right from the beginning. The nail-biting match ended up in favor of COMSATS with H-12 falling 10 odd runs short of victory. As a result COMSATS and H-12 qualified from their group while FAST and Beacon House qualified from the other group.

Semi finals set up the stage for the clash of NUST H-12 and Beacon .Much-awaited final match was played between the teams of NUST H-12 and FAST University in Shalimar cricket ground on Jan 3. FAST won the toss and elected to bat first. The best bowling attack of the tournament proved their decision to be very wrong when FAST was suffering with an embarrassing situation of 28 for 8 down with Faizan Khan getting rid of their two of the most reliable batsmen very early in the innings, both bowled out. The 9th wicket partnership managed another 28 runs and FAST ended up with a pitiable score of 56 all out. H-12 chased it down in just 7.3 overs with only 1 wicket down.



NUST H-12 had one thing that the others did not have. A pace attack capable of demolishing any opponent and consisted of all wicket taking bowlers. After winning the region, the team had to go to Karachi for the next round that was to be played among the winners of all the eight regions. The winner of that round would qualify to compete against the winners of India and Srilanka in Srilanka.

NCSC members spend time with special children

In order to appreciate and celebrate the skills of special children, Standard Chartered Bank held a session in which the aim was to interact with them and to encourage and motivate them further. A group of students from NUST, including members of NUST Community Service Club visited Jinnah Sports Complex to participate in the event. Special children from many different schools were invited in the event. Arrangements were made for the children to play different sports and games, including a match of basketball between the children and employees of the bank. Students also got to meet their heroes like the para-olympic medal winners including Mehwish Iftikhar who clinched gold medal for Pakistan in table tennis in the para-olympics



held in Athens in 2011. The activities were aimed at making the children realize that they are very much capable of leading a life as complete and energetic as any other person on the face of earth, and that these physical ailments are just a small impediment in the walk of life, which can easily be bypassed and defeated.

04

Achievements

SCME student awarded 2nd Best Poster Presentation Award

A PhD Student from Materials Engineering department, SCME, NUST, Ms Sadia Sagar presented the poster presentation in an international conference '6th Vacuum and Surface Science Conference of Asia and Australia' held from October 9 to 13, 2012 in Islamabad, on the topic titled 'The effect on dielectric, electric and thermal properties of polydimethylsiloxane polymer with the reinforcement of functionalized multiwalled carbon nanotubes' by Sadia Sagar, Nadeem Iqbal, and Asghrai Maqsood. She was awarded 2nd prize (Rs. 10,000) on her poster presentation among the hundred participants from the national and inter-



national universities. She collected her prize from Chairman Senate of Pakistan, Mr. Nayyer Hussain Bokhari on the closing ceremony of the conference.

Airex Innovation Challenge

Airex Innovation Challenge 2012, a nationwide competition was organized by the GIKI Student Chapter of American Institute of Aeronautics and Astronautics (AIAA) from 30th November to 2nd December, 2012. The competition provided an opportunity for the students to apply their theoretical knowledge for solving the real world challenges. AirEx Innovation Challenge 2012 comprised eight modules namely High in the Sky, Aero Biz, Boomerang, Beat the Gravity, Conquer the Sky, Sky Wars and Angry Wings. A total of 43 teams and around 500 students

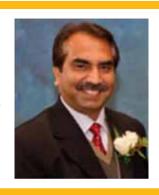
from various institutes of Pakistan participated in AirEx Innovation Challenge 2012. A total of 17 students represented College of Aeronautical Engineering in the competition. CAE teams participated in six modules and showed outstanding performance. They stood first out of 17 teams in Aero Biz module, whereas secured second position in High in the sky, Boomerang and Air Lanterns modules. CAE teams were declared fourth in Beat the Gravity and Conquer the Sky modules out of 24 and 17 competing teams respectively.





AM College Librarian publishes paper in high impact journal

A research paper 'Developing Competencies for Medical Librarians in Pakistan' by Midrar Ullah & Dr. Mumtaz A Anwar has been published in Health Information and Libraries Journal (HILI), having impact factor 0.889. Midrar Ullah is Librarian & Literature Search Officer (LSO) at Army Medical College (NUST) who has formerly published 12 papers in national and international journals and represented NUST and Pakistan in various international conferences in the USA, Hong Kong and Turkey.



NUST researchers triumph in Future Technology Prediction Competition

The IEEE organized a "Future Technology Prediction" competition last December as part of its centennial Celebration. The competition was open to all IEEE members worldwide. It was an international competition and teams from all over the world participated in it .Participants were asked to exercise both their imaginations and their technological predictive powers to outline future technological trends and evolution as they personally see them developing over the next 20, 50, or even 100 years. They were requested not only to describe the expected device or innovation but also provide a roadmap as to how the breakthroughs described will be achieved.

Salman Ali and Noman Akbar from School of Electrical Engineering and Computer Science (SEECS) - NUST participated in the competition and secured First Position internationally among all teams. Submissions were evaluated and the top five contest winners were selected through screening by Proceedings of the IEEE Editorial Board and Editor-in-Chief. The article by Salman and Noman titled "i2CSmart: An Identity Management Based Cognition-Enabled Cooperative Smartphone" not only won the grand cash prize of \$5000 but will also be published in 'Proceedings of the IEEE' Journal. The journal according to Thomson Reuters Citation



ProceedingsIEEE

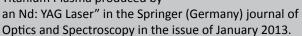


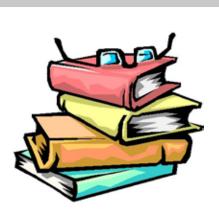


report has currently an Impact Factor of 6.81. Both of them are currently working as Professional Researchers at the Communications, Networks and Multimedia Laboratory at NUST (CoNNekT Lab) lead by Dr. Saad Bin Qaisar. The achievement was highly appreciated by the Director General SEECS Dr. Arshad Ali and Dean Dr. S. M. Hassan Zaidi. The team members dedicated this success to their mentors and teachers at NUST.

Research Publication in Int'l Journal

Dr Muhammad Hanif, a FM at MCS (NUST), published research paper titled "Optical Spectroscopic Studies of Titanium Plasma produced by





MCE faculty authored Research Papers draw appreciation

The 2nd International Multidisciplinary Conference towards Better Pa-



kistan was organized at Sarhad University of Science and Information Technology, Peshawar in which attendees from various fields presented their research papers. Technical/ research papers, authored by Military College of Engineering, NUST faculty members received immense appreciation during their presentation at the conference. Dr. Muhammad Bilal Khurshid, Dr. Sarfraz Ahmed, Engr. Kashif Ahmed Khan and Engr. Israr Munir presented their research paper on "Utilization of Polyethylene in Bituminous Mixes in Pakistan - A Step Forward in Pavement Construction and Waste Management". "An Analytical Framework for Optimizing the Highway and Civil Infrastructure Interventions" was presented by Dr. Muhammad Bilal Khurshid, Dr. Muhammad Irfan, Dr. Sarfraz Ahmed and Dr. Shahid Igbal. In addition to these, "An Analytical Review of Traffic Congestion on Murree Road Rawalpindi" was presented in the conference by Dr. Muhammad Bilal Khurshid, Dr. Sarfraz Ahmed and Dr. Muhammad Jawed Igbal. All of the technical/research papers presented by MCE NUST faculty members were highly appreciated by the participants.



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