

MONTHLY
NUSTNEWS

Volume IV / Issue II



4th Italian-Pakistani
workshop...


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*With faith, discipline and
selfless devotion to duty,
there is nothing worthwhile
that you cannot achieve.*

Muhammad Ali Jinnah

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

01 Highlights

Prime Minister's Entrepreneurial Challenge- DISCOVER'2012

Top five plans make it to finish line after rigorous evaluation



Centre for Innovation and Entrepreneurship (CIE) - NUST successfully culminated the grand finale of the second Prime Minister's Entrepreneurial Challenge, DISCOVER - Prosperity through Entrepreneurship on Feb 28. DISCOVER, a national level business plan competition patronized by NUST, has been endorsed by the honourable Prime Minister of Pakistan.

Spanning over six months, the competition came to its exciting end with a group of seasoned panelists deciding on five teams to be termed winners of the second episode of the grand event. These included *Boondh*, *Coal Ash Brick*, *Futureon Engineering Technology*, *Nanocides* and *Zarai Otaque*. Rector NUST Engr Muhammad Asghar distributed certificates among the winning teams. However, an august prize distribution ceremony, likely to be graced by the honourable Prime Minister of Pakistan himself as the chief guest, will be held shortly.

Over 1600 students from across 55 universities of Pakistan participated in the competition to showcase 376 brilliantly conceived ideas. After the registration, there started a rigorous process of training, mentoring and selection of the best among the participating teams for the final stage of the competition. In the Grand Finale, the top ten teams, presented their innovative ideas before a jam-packed audience. These included business plans related to biotechnology, electronics, power generation, agriculture, transport, health, food, education, plantation, alternative energy etc.

Addressing the audience, Rector NUST Engr Muhammad Asghar felicitated the winning teams; extolled runners-ups; expressed his gratitude to the esteemed panelists from the industry for their keen observations and analyses; and lauded NUST officials for their untiring efforts to turn the event into a real success. He said that the role of modern day universities was then by all means more productive than it ever was, as it revolved around the evolving concepts of building economies, communities and leadership within the parameters of academia.

He said that NUST was taking every measure to identify as well as nurture the entrepreneurial talent deeply embedded in the youth of Pakistan. For this among other activities, he added, Discover Business Plan Competition was being held regularly since the last year. The Rector highlighted that one of the significant benefits drawn from the competition was a platform paving the way for a close and productive interaction between the industry and the academia. It helped hundreds of students engage and work with high profile business and industry leaders. He maintained that the students trained in the previous year through this program went on to bring glory to Pakistan at international fora by reaching the victory stands in international competitions.

Earlier, the participants from the previous year's entrepreneurial challenge narrated their success stories, describing how they manifested their business ideas as viable enterprises.

Fourth Italian-Pakistani Workshop on Relativistic Astrophysics - CAMP

The 4th Italian-Pakistani Workshop on Relativistic Astrophysics was held from February 15 to 17 at Center for Advanced Mathematics and Physics (CAMP). The workshop invited participation from Italy, Uzbekistan, Turkey, Switzerland and South Korea. Participation from Pakistan came from Punjab University, University of Sargodha, COMSATS Institute of Information Technology, Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, University of Education Lahore and University of Faisalabad, along with active participation from different schools of NUST.

The Chief Guest for the opening ceremony was Pro-Rector Academics, Dr. Asif Raza. The ceremony was attended by Principals of various schools of NUST and officers from the administration Directorate of the university. An entire day was also dedicated to a visit to the archaeological sites at Taxila. The workshop series serves as a platform to make scientists of different coun-



tries meet and discuss on recent aspects of Theoretical and Observational Relativistic Astrophysics. A total of 32 talks were conducted by the scientists and participants on various dimensions of Astrophysics such as Relativity, Cosmology and Modified Theories of Gravity. The chairman of organizing committee was Professor Azad Akhtar Siddique, while Professor Francesco De Eaolis was the co-chair and Mr. Ibrar Hussain, the Secretary.

Students showcase internship and research experience at 'INSPIRE'

NUST Science Society exhibited NUST as the center of excellence in engineering education at INSPIRE – Internship Student Poster presentation on Industrial and Research Experience. The two-day event was held on Feb 23 and involved presentation of posters by participants based on the internships and research experience acquired in their respective fields of study.

The judges were experts from various industries, including Fauji Fertilizers Company (FFC), Telenor, Frontier Works Organization (FWO), LMKR, Ufone, Nexton, Agristan, NESCOM, and Oil and Gas Development Company Limited (OGDCL). Najeeb ul Islam, Deputy Director General of NESCOM, graced the closing ceremony as the Chief Guest on the first day.

More than 60 students participated from NUST, CIIT, Bahria University, Air University, UET and IST. Judges selected the winners on the basis of their communication skills and the ideas they presented. The students of NUST swept all the prizes in the category of 'civil engineering' with Syed Kashif and Sajawal Shah Bhatti getting the first and second prize respectively. Similarly in the 'chemical engineering' category, Anum Shafique Khan and Ume Salma Danish got the first and second prize respectively. Sarah Manzoor and Mohammad Ammar from COMSATS bagged the first and third prize in the 'Electronics and Software Engineering' category, respectively; second place went to the Nus-



tan, Uzair Khalid. In the mechanical engineering category, Zaid Butt from NUST stood first, whereas Asif Ali from Air University got the second position.

The competition was aimed to bridge the gap between theoretical knowledge and its applications. It was designed parallel to an 'open house' with added incentives being job and internship offers to the vibrant student competitors. Engineer Kazi Zulqadar, the CEO and founder of Tech Corp. Group of Companies graced the occasion as the chief guest and distributed prizes to the winners on the second day of the exhibition.

First LEGO League Regional Competition

NUST School of Electrical Engineering and Computer Sciences (SEECs) has been actively involved in technology outreach programs, through its annual activities such as Exylent, which has gained immense popularity in the past few years. To expand the scope of this technology outreach mission, SEECs has become a regional partner of STARFALL FIRST LEGO® League. FIRST LEGO® League is an international robotics competition, where students from around the world participate and demonstrate their knowledge and skills using sophisticated LEGO kits. Through FIRSTLEGO® League, SEECs aims to promote science and technology in Pakistan's young generation while keeping the element of fun alive along with spirit of learning and real life problem solution.

SEECs held the first regional competition among 7 participating teams from different schools of Rawalpindi & Islamabad on February 9. The teams and schools that participated were: 'Robocops' from Roots F8 School, 'An-Nasar' from EMS High School, 'Tera-Bytes' from EMS High School, 'Roots Pakistan' from Roots School DHA-1, 'Bot Freaks' from Roots School DHA-1, 'Cybertrons' from Headstart School F8, and 'Titans' from Sheikh Zayed International School. These teams participated in three rounds of heated robotic challenges, overall robot design, core values of ethics, and senior citizen research studies. 'Roots Pakistan' from Roots School DHA-1 won the overall competition. The top four teams will proceed to national championships that will be held in



Lahore. These teams are An-Nasar from EMS High, Tera-Bytes from EMS High, Roots Pakistan from Roots DHA-1 and Bot Freaks from Roots DHA-1. The winner of national competition will then compete at the world level FLL that will be held in St. Louise, USA.

This is a first of its kind event being held in Pakistan and NUST SEECs has collaborated with STAR Foundation to bring the cutting edge technologies to children.

On-campus shuttle service launched

As a corollary to the contract agreement signed between NUST and Pepsi (Haideri Beverages) Pvt., two 'Go Cart' Shuttles were provided to NUST by the latter. The two carts are an exemplary addition to the shuttle service of NUST and have been commended by students and faculty alike. A headliner of the service are the pollution free battery operated cars plying the Islamabad H-12 Campus, which are always functioning at full capacity. The project is an endeavor to bring qualitative change to the campus and is being pursued by Administration Directorate.



Celebrating *Milad-un-Nabi* (S.A.W)

The divine Milad ceremony was held in ASAB auditorium under the banner of ASAB Students' Club (ASC) on Feb 11. On the occasion, the students got an opportunity to express their love for the beloved Prophet. Students and faculty took part in this ceremony with religious zeal by reciting Naats to express their love for their revered prophet (P.B.U.H). Guests, both from within and outside NUST, were invited for this naatkhawani session.

Principal ASAB, Professor Dr. Muhammad Ashraf, was invited as the Chief Guest, who lauded the initiative by ASC. His speech invoked among the attendees the desire to reaffirm their deep-rooted link with Islam and great love for the beloved Prophet, Muhammad (PBUH). The proceedings were sealed with a prayer for all the Muslim community. Refreshments were served up to the guests and the audience, followed by distribution of sweets in the entire school. This rejuvenating ceremony received praise from all the attendees.



Tree plantation drive at NUST

With the winter breathing its last and the spring already knocking at the door, NUST, keeping up with its annual tradition, embarked on a massive tree plantation drive at its main campus on Feb 21. Rector NUST Engr Muhammad Asghar inaugurated the environment-friendly campaign by planting a tree sapling of Amaltas. He was flanked by an overwhelming number of university officials, faculty and the jubilant students. While talking to the attendees, the Rector underscored the importance of horticultural activities towards making the world a better place to breathe in. He acknowledged the efforts of the horticulture staff in promoting the green culture on the campus.

Director Administration Mr Arif Mahmud Siddiqui also shed light on the significance of tree plantation. He said that one of the significant functions each tree offered, besides its aesthetic addition, was the sequestering of CO₂, carbon dioxide.

Horticulturist NUST Mr Owais gave a briefing on the initiatives being taken for expeditiously improving the serenity of the university. He said that over 1000 tree saplings of Amaltas, Kachnar, Fiddlewood, Chenar and Sukhchan would be planted during the campaign.



Some officials from Capital Development Authority including Deputy Director General (Environment) Malik Aulya Khan were also present at the occasion. CDA would provide tree saplings to NUST to contribute its share in the ongoing tree plantation campaign at the university.

CES explores wind energy prospects

Mr. Rashid Wazir conducted a presentation based on Wind Energy and its Measurement on Feb 28, in Center for Energy Systems (CES), NUST. The lecture was attended by HOD Dr. Ehsan Ali, faculty and students of CES as well as faculty of other schools such as SCEE and SEECS. Mr. Wazir is an Electrical Engineer, with a Masters in Energy Technologies majoring in Wind Power (Sweden). He began his talk with a preview into the history of wind energy dating back to 5000BC, moving on to an introduction to meteorology, where he

explained the concept of wind profiles. He also explained the different types of Wind Turbines available and the latest equipment, models and softwares used in Wind Measurement. He also gave a briefing of the concepts of energy extraction and its study using mathematical models. Mr. Rashid concluded with a look into the wind energy prospective in Pakistan, quoting that 50mw of wind power has already been generated in the country.



CES collaborates with ARL for energy conservation and efficiency



ARL delegates visited CES-NUST on Feb 7 for possible collaboration in several energy related projects. Mr. Aleemud din from ARL gave a brief overview of the ARL and energy related activities, where presently ARL is celebrating energy week in which main emphasis is on energy efficiency and conservation. It was told that currently ARL has a 12 MW power plant, which is dedicated to the refinery related services and also a 165 MW independent power plant (IPP) owned by Attock generation limited (AGL) is providing electricity to WAPDA. This is a furnace oil based power plant. Moreover they said that solar energy research was also being conducted at ARL and ultimate goal of this research was to develop a solar cell totally made in Pakistan.

During this discussion ARL intends to get the ISO 50001 certification which is related to energy management in any organization for which they have implemented energy efficiency and energy conservation measures in ARL. ARL intends to co-operate with CES – NUST to get more improvement related to energy efficiency and energy conservation in ARL through energy audit. In this regard ARL also plans to engage some students from CES-NUST as internees for energy management of their power plants.

ARL is also working on manufacturing of local fabricated solar cells, and in this regard it plans to work with CES- NUST. Principal CES said that NUST can offer some professional courses / training on solar energy to ARL based on photovoltaic materials. For this purpose some training material and equipment related to PV will be provided by CES NUST. Course or training may be provided at NUST or at ARL facility depending on the situation and the participants. A course named "Computer Applications in Energy system" is presently offered at CES NUST. Dr. Mohammad Bilal Khan, Principal CES also explained the significance of coal gasification process. It was told to the delegates about the possibility of setting up a pilot scale coal gasification plant working on FT synthesis principle at ARL facility.

NCSC, students pledge to spread first aid awareness

Following the tradition of weekly seminars, NUST Community Services Club (NCSC) organized a session on first aid awareness. Dr. Najam gave a presentation on how first aid can save human life. The seminar was held at SEECS auditorium on February 22, which was well received by the audience. The speaker highlighted our community's common situations where first aid is highly needed.

The experienced speaker taught the attendees the proper ways of applying first aid in different techniques in various situations. He declared that a large number of accidents and medical emergencies take place at work, so individuals should be better trained on how to act in case of an emergency. Mainly, he focused his attention towards the daily life minor accidents like small bruises, cuts, punctured wounds, burns from the high degree sunburn, low sugar cases and similar situations. Further, Dr. Najam discussed the life threatening situations like poisoning, head injuries, choking and dangers of anaphylactic shock etc. He stressed that the ability to act quickly and appropriately during such emergency situations was crucial in saving precious human lives. Towards the end of the presentation, Dr. Najam answered questions related to emergency situations by the enthusiastic attendees of NUST.



NUST awarded PEB License renewal for next three years

It was an honor for NUST to be awarded PEB license renewal for the next three years (2013-2015) by Pakistan Engineering Council (PEC). Being a PEC registered PEB (Pakistan Engineering Body), NUST is licensed to conduct CPD (Continued Professional Development) activities under PEC Bye Laws for registered and professional Engineers. Dr. Qaiser Hameed Malik has been designated as "Coordinator" of all CPD activities of H-12 Campus- NUST, making PDC (Professional Development Center) the focal point of all CPD activities in the campus. In this regard two coordination meetings have also been convened under his Chairmanship at PDC Conference Hall. The meetings concluded with a decision to conduct awareness seminars on the importance of CPD, intended to be held in the upcoming month.

Awareness key to prevent Thalassemia

NCSC conducted another awareness lecture as an extension to its series of seminars on February 15th 2013, focusing on the fact that creating awareness is also part of community service. Guest Speaker, Brig (R) Muhammad Javed who is currently the Director, Jamalia Sultana Foundation and is serving the organization for Thalassemia patients for about 10 years, shed light on 'Thalassemia awareness'. A large number of students especially from applied Biosciences and faculty attended this interactive session.



Speaking at the seminar, Brig (R) Javed stated that Thalassemia is an inherited blood disorder wherein the human body is unable to produce adequate amount of hemoglobin in the red blood cells. Children suffering from Thalassemia have to face a difficult and painful life as a long series of blood transfusions begin at an early age. He also highlighted the psychological aspects of the patients and their family. He stressed that Thalassemia patients should never be married to each other as it strengthens the chance to give birth to child with extreme Thalassemia conditions. Further, he briefed the audience about the types of Thalassemia and the process it is inherited among generations. He also elucidated the conventional treatment methodologies and preventive measures against Thalassemia.

Towards the end of the seminar, the guest speaker also clarified the myths and misconceptions about blood donation and declared it as a healthy practice for our health as well. He also focused on the eligibility criteria for the donor and tried to encourage the audience to donate blood as it can bring smiles on the faces of a number of Thalassemia patients.

Seminar on Renewable Energy Technologies: Solar Energy

Mr. Syed Ammar Raza conducted a seminar on Renewable Energy Technologies with special emphasis on Photovoltaic Solar Energy. The seminar was held at Centre for Energy Systems (CES) on Feb 11. He mainly focused on latest devices, trends in photovoltaic fields, designing analysis & future of PV generation system in national as well as international market. He said that Grid connected PV solar systems being installed in Pakistan (with the support of Japanese Govt.) has the highest achievable efficiency i.e. 16.4 % in the world. He elaborated the Grid connected and off Grid PV Solar Systems in detail and highlighted the need to address the risks while designing these systems. He further explained the effect of prevailing environmental conditions on the PV Solar Systems like power losses and measures to overcome this problem. In addition, he provided the practical application of PV Solar devices and their current national & international market potential.

Mr. Ammar is a consultant at Japan International Co-operation Agency (JICA) to promote renewable energy technologies in Pakistan. He installed Pakistan's first 0.36MW on Grid Solar System in Pakistan Engineering Council (PEC) & Planning commission of Pakistan funded by JICA.



National Women's Day observed

12th February is celebrated as the National Women's Day in the country. 'One Billion Rising' campaign by Women's Action Forum was celebrated at F-9 Park on the day and was attended by a delegate of NUST Community Service Club. The purpose of the event was to highlight the problems that the women of Pakistan are facing, including denial from heritage, dowry, oppression and lack of education. A stage play was presented to encourage people to give women their due rights and to respect female as an equal to male. Boards were displayed for the comments of the visitors, and to pledge against dowry, a social evil. It was demonstrated that women make up more



than half of the population of the country, and Pakistan will make progress only if all of us, both women and men worked together and play their part.

PDC organizes three-day 'Innovation Management and Technology Transfer' training

A three-day training session on 'Innovation Management and Technology Transfer' was organized by Professional Development Center (PDC), a constituent of NILE (NUST Institute of Leadership in Education). The workshop extended from Feb 6 to 8. It saw participation from engineers, scientists, researchers, technology executives, students and faculty from various institutes. The resource person for this session was Dr. Hironao Takahashi (PhD, Tokyo, Japan), who has 20-year experience in computer technology and has also previously worked with Mitsubishi Electronics, Intel Corp, Fujitsu software company.

Dr. Hironao took the audience through a tour of Japanese innovation, its history and social/economic evolution, development of future technologies, strategy and visionary Innovation. He

also discussed roles of Research organizations in technological advancement and shed light on management of technologies at these labs/factories. Various case studies were also discussed including ones related to Canon, Komatsu, TOYOTA, Kao, Take-da, Panasonic, SONY, Hitachi and MOT dominant design among others.

This workshop served as a platform for collaboration between industrial research sector and NUST faculty, consequently strengthening Industrial-Academia Linkages via communication. Hence PDC invited NUST faculty members to attend this workshop on gratis basis. It strived for development through exchange of experience and knowledge between the two parties.



Exciting Winds of Change (WOC) 2013 Tour at NUST

Youth Club & NUST Community Services Club (NCSC) jointly arranged an inspirational and highly motivational Islamic Seminar on "Philanthropy & Humanity" on 8th February, at NIT (SCEE) Auditorium. The guest speaker was Adnan Rashid, graduate from the University of London in the subject of history and a senior researcher at iERA (Islamic Education & Research Academy), UK. Adnan Rashid shared his great experiences of travelling to different parts of the world including Palestine, UK and Africa where he did community service and humanitarian work and cleared several doubts regarding Islam and Muslims amongst the local population. In his recent Winds of Change 2013 tour, he and other speakers from Youth Club were invited to many universities all over Pakistan and several other major universities in Pakistan and abroad before being invited to NUST, H-12 Campus. Adnan Rashid was also accompanied by Raja Zia ul Haq (CEO Youth Club) and Imran Ibn Mansour (iERA, UK) along with other members of Youth Club and NCSC.

The guest speaker enlightened the audience about the importance of compassion in Islam and also about the importance of properly following Islam as explained in the Quran and Sunnah. The session started with the recitation from the Holy Qur'an, and then continued with a short history of Youth Club. Youth

Club is a unique platform for the youth, enabling them to utilize their time, skills and energies in a positive direction. The purpose of Youth Club is to provide an avenue for the youth to collectively work towards their individual and collective benefit. Youth Club has now become a national N.G.O. with members from many universities and colleges throughout the major cities of Pakistan. Having Islam as the main ingredient, Youth Club involves today's educated youth in constructive work, helping the society towards betterment. This was followed by a speech by Mr. Adnan Rashid and ended with Q&A session.

All the students as well as faculty members expressed great satisfaction at how well the seminar was arranged and how much they had learnt about Islam. The speaker was presented a shield at the end of the seminar and refreshments were also provided to all the attendees.



SQL training workshop by PDC



Professional Development Center (PDC) a constituent of NUST Institute of Leadership in Education (NILE), organized a workshop on Microsoft SQL Server from Feb 18 to 22. The workshop was attended by IT In charge, IT Support Engineers and Web Administrators of FATA. The Resource Person for the Workshop was Mr. Arif Hasan Khan, software architect and team leader at TEO International. Mr. Arif is an expert software designer and data base Architect with more than 8 years of experience. The first day of the workshop was focused on Introduction to SQL Server and TSQL

Fundamentals. The day two lecture shed light on TSQL Fundamentals, Performance and Optimization. The third and fourth day were focused on SQL Server Administration. Advance Topics in SQL Server were discussed on the final day of the workshop. The closing address was delivered by Principal NILE, Dr. Qaiser Hameed Malik. This workshop was conducted as per the MoU signed between Professional Development Center (PDC), NUST for a USAID funded project for capacity building of FATA professionals through M/S Abacus Consulting.

MCS faculty attends workshop on Quality Assurance



Dr. Muhammad Hanif, a Faculty Member from MCS (NUST) attended a workshop on quality assurance. The one-day workshop was organized by Pakistan Institute of Quality Control (PIQC), in Park Plaza Hotel, Gulberg (Lahore). A total of 58 faculty members and quality assurance administrators from various universities and academic institutions of the country participated in the workshop. The workshop was conducted by Dr Kamran Moosa, CEO PIQC and covered the all relevant areas of academia & research.

HULT PRIZE

The Next Wave of Social Entrepreneurs

The Hult Prize recently announced that NUST, Islamabad has advanced to the regional finals of the 4th Annual Hult Prize. The Hult Prize is the world's largest student competition and crowd sourcing platform for social good, recently named one of the top five ideas changing the world by former President Bill Clinton and TIME Magazine. The 2013 Hult Prize is themed around global food security and will focus on how to get safe, sufficient, affordable and easily accessible food to the 200 million people who live in urban slums – a challenge personally selected by former President Clinton. "The Hult Prize is thrilled that NUST, H-12 Campus, Islamabad has joined the initiative," said Dr. Stephen Hodges, President of the Hult International Business School.



NUST, Islamabad's team members include Shamsa Kanwal (IGIS), Zohaib Rafique (SMME) and Kamran Saddique (EME). Each team selected was chosen from more than 10,000 applications received, totaling over 350 colleges and universities, representing over 150 countries. The Hult Prize regional competitions will take place on March 1 and 2, 2013 on Hult International Business School's five campuses in Boston, San Francisco, London, Dubai and Shanghai. NUST, Islamabad team will compete in Dubai. Following the regional finals, one winning team from each host city will move into a summer business incubator, where participants will receive mentorship, advisory and strategic planning as they create prototypes and set-up to launch their new social business. A final round of competition will be hosted by the Clinton Global Initiative at its annual meeting in September, where CGI delegates will select a winning team, who will be awarded the USD 1,000,000 Prize by none other, than former President Bill Clinton.

Laptop distribution ceremony

As a part of Shahbaz Shareef Youth Initiative program, outstanding performers of NUST in academia were awarded free laptops in February 2013. Following the laptop distribution phases in Punjab, the chief minister's program targeted NUST also, where four top merit students from each discipline were awarded laptops. This included SCEE, SEECS, SCME, NBS and all other schools and colleges of NUST. The endowment was based on 100 percent merit, being distributed regardless of caste, colour and creed. For students, it is an accolade of their hard and tireless work in one of the prime institutions of Pakistan which is not a facile task.

02 Visits

President University of Jordan



President University of Jordan Professor Ekhlef Tarawneh visited the main campus on Feb 20. The president was accompanied by Dr Zayed Eyadat, Dean at the University of Jordan. Rector NUST Engr Muhammad Asghar warmly received the esteemed guests and then the latter called on him at his office. During the meeting, the Rector expressed his gratitude to the academics for visiting NUST and offered extended collaboration between the universities in the fields of mutual interest. He maintained that Pakistan gives immense value to its brotherly relationship with Jordan and aspires to take it to new heights of trust and cooperation in diverse areas.

Ensuing was a detailed briefing on NUST held at the main seminar hall. Senior management and faculty of the University also attended the session. Subsequently, the honorable guests were conducted to School of Electrical Engineering and Computer Science, School of Civil and Environmental Engineering, School of Mechanical and Manufacturing Engineering and Centre for Innovation and Entrepreneurship. Professor Ekhlef Tarawneh acknowledged the latest research facilities NUST had erected in a short time since its inception. Later, Rector hosted a luncheon in the honour of the visiting dignitaries.

Koç University, Turkey

A delegation from Koç University, Istanbul, Turkey visited NUST on 28th February, 2013. Led by Dr. Umran Inan, the delegation was briefed about establishment, institutions, programmes, research initiatives and future plans of NUST. The briefing was followed by Q & A session. The delegation also met with Rector NUST Engineer Muhammad Asghar and discussed the matters of mutual interest. The visiting delegates appreciated NUST's infrastructure and facilities provided for its faculty and students to ensure quality teaching, learning and research. The delegates showed keen interest in establishing formal relationship between the two universities in the areas of joint research, fellowships and exchange of faculty and students.



Engineer-in-Chief



Engineer-in-Chief Lt. General Najib Ullah Khan visited the main campus on Feb 4. He was accorded a very warm welcome upon his arrival at the university.

Dr Safdar Ali Shah, Director Academics NUST HQ, gave a detailed presentation on the growth of NUST as a leading comprehensive university in Pakistan. He apprised the visiting dignitary of NUST's initiatives on research, internationalization, innovation and entrepreneurship and community service. The Engineer-in-Chief acknowledged the fast-paced evolutionary growth of the university, and lauded the meritorious efforts of its visionary management and truly sapient faculty towards enlisting NUST among the top-notch universities of the world.

Later, the honourable guest was conducted to School of Electrical Engineering and Computer Science, and School of Civil and Environmental Engineering. The Engineer-in-Chief left the campus after a lunch reception hosted in his honour.

Richard Wolfli, CFO NRG Biofuels-Canada visits Biofuel Park

Mr. Richard Wolfli, CFO NRG Biofuels Canada visited NUST Centre for Energy Systems (CES) in January 2013 to examine the various ongoing applied research projects sponsored by the Company. On this occasion he visited the recently erected Bio-fuel Park which houses three types of Photobioreactors for the production of microalgae.

Mr. Wolfli also reviewed the progress on the biomass to energy project using the DTL technology and personally witnessed the



experimental runs performed on indigenously designed and fabricated autoclave unit. He expressed his full satisfaction on the results achieved thus far. The CFO expressed keen interest in this project and promised to fund the Gas Chromatograph equipment needful for unambiguous interpretation of the carbon profile of the biofuel produced at CES NUST. NRG Biofuels has previously donated PKR thirty million worth in equipment and applied research at CES-NUST.

Prof. Emeritus at Stanford University

Dr. Khalid Aziz visited the Centre for Energy Systems (CES) on Jan 21, 2013. He enthusiastically shared research ideas with the scientists working at CES. Mr. Khalid is affiliated with the De-



partment of Energy Resources Engineering, Stanford University as Professor Emeritus. His focal area of research is the development of robust and reliable models for predicting performance of hydrocarbon reservoirs (including shale oil and gas) and CO2 sequestration.

Principal CES presented an overview of the Centre. The faculty members also discussed their research interests and projects in detail. Dr. Ehsan Ali discussed the biofuel project including a project titled "Algae cultivation on barren/Saline lands in Pakistan". Dr. Aziz was keenly interested in the applied nature of this project and said that we should focus on this project to address the current challenges to Pakistan like fuel depletion, energy storage & environmental damages.

The CES projects like Geothermal Mapping of Gilgit-Baltistan, Solar Thermal Systems in Industry, Biomass Availability & Energy utilization Potential in Pakistan, Fuel Cell Designing & Smart Grid Systems were highly appreciated by him. Moreover, he also visited the Biofuel Park at CES. He appreciated the strong CES-Industry linkage, a vital component of applied research. Later Dr. Khalid was greeted by the Rector on a working lunch and expressed the consent to represent NUST in a forthcoming Intl' Energy Conference at Stanford University.

BMAS students' orientation visit



A 66-member NIPCONS delegation including members of faculty and students led by AVM (R) Fahim Arshad Lodhi visited NUST on Jan 8. The delegation was received by Dir QA, Engineer Muhammad Ismail. Briefing was given to the delegation about establishment, institutions, programs, research initiatives and future plans of NUST followed by Q & A session. The delegates

also visited School of Electrical Engineering and Computer Science (SEECs), Research Centre for Modeling and Simulation (RCMS) and School of Mechanical and Manufacturing Engineering (SMME) where they were conducted to various sections and state-of-the art labs. The visiting delegate appreciated NUST's infrastructure and facilities provided for its faculty and students.

Delegation from Quality School

A 46-member delegation including 5 teachers and 41 9th Class students from Quality Schools Foundation Rawalpindi visited NUST on February 19. The delegation was headed by the Principal Quality School. Mr Uzair Alvi from CAC Directorate and Mr Adeel Ahmed from QA Directorate warmly welcomed the delegation. The students belonged to the underprivileged class of the society. The campus tour had been exclusively planned

to get the students familiarize with state-of-the art facilities at NUST. Later the teachers and students had a brief visit of the entire campus. The delegation exclusively visited School of Electrical Engineering and Computer Science where they were conducted to various sections and state-of-the-art labs. Students' keenness was at its peak while visiting various sections of the campus.



03 Updates from Schools

RCMS Super Computer Lab draws global attention

In the month of February, Research Centre for Modeling and Simulation (RCMS), Super Computer lab was visited by various delegates. Lt. Gen Najib Ullah Khan, HI (M), Engineer-in-Chief, visited RCMS, where he took keen interest in the Lab. A 66 member NIPCONS delegation including members of faculty and students visited the lab on Feb 8. Similarly, a foreign delegation with members from Italy, Uzbekistan, Turkey, Switzerland and South Korea who were at NUST to attend the 4th Italian Pakistani Workshop also visited RCMS. On Feb 20, Prof. Trawneh, President of the University of Jordan also visited the School's world-class facility. Rector NUST, Engr. Muhammad Asghar along with faculty of RCMS accompanied him.

ScREC is a supercomputer developed by the RCMS at the H-12 campus of National University of Sciences and Technology (NUST). With a 132 teraflops performance, it is currently the fastest supercomputer in Pakistan.



Asad Umar speaks on 'Yes You Can'

School of Mechanical and Manufacturing Engineering (SMME) continuously strives to inculcate among its students confidence, motivation, optimism and dedication which helps in paving their path to success. In continuation to the lecture series, SMME invited Mr. Asad Umar to share his ideas on the topic "Yes You Can" with the students.

Mr. Umar started his career with HSBC Pakistan, and in 1985 he joined Exxon Pakistan subsequently renamed Engro. He was President and Chief Executive of Engro Corporation Limited from January 2004 till his early retirement in May 2012. He graduated as an MBA from IBA, Karachi in 1984 and was awarded Sitara-e-Imtiaz by the government of Pakistan in 2010. The students were not only impressed by the caliber of the speaker but also by the patriotism, knowledge and thoughts he possessed. Mr Asad took the students to a ride down his memory lane and shared with them the stumbling blocks that he and his firm faced and how they converted them into stepping stones. He emphasized on students to increase the size of their ambitions with a clear vision. He further guided them to be driven by the power of purpose. In his lecture, he painted a vivid state of the country by exemplifying it to a cable car which has a nice end but flames are trying to catch it from the ground.

The lecture was followed by the Q&A session and ending note by Vice Principal SMME, Engr. Muhammad Sohail.



Session conducted on scholarships and postgraduate admissions

An interactive session on scholarships and postgraduate admissions was organized at NUST Institute of Civil Engineering (NICE), SCEE on Feb 21. The seminar focused on the concerns of undergraduate and post-graduate students who wished to go abroad for further studies. It was an initiative by Mr. Ahmed Rasheed Mirza, a faculty member at NICE who conducted the session in order to answer the queries of students regarding scholarships abroad. The seminar was attended by two hundred students and several faculty members.

An introduction by Mr. Ahmed Rasheed Mirza was given who explained his motive behind the entire activity which is to encourage Pakistani students to avail scholarship opportunities all over the world. The seminar involved a series of presentations by Mr. Nouman Khalid who has an MS degree in agriculture from the University of Tokyo and is currently candidate of two programs; Doctoral Candidate, University of Tokyo and Doctoral Candidate, Ghent University, Belgium. Another series of presentations were given by Mr. Mirza Waqar Baig who holds an MS Degree in Electronic Engineering from Hanyang University, South Korea and is currently candidate of two programs; Erasmus Mundus PhD fellow, University of Genoa, Italy and TU Eindhoven, Netherlands.

Both the presenters emphasized upon the important features of CVs, resumes, GPS and work experience needed to be submitted to obtain a scholarship. Therefore, clearing and answering any misunderstanding about the procedure of applying for scholarships. The presentations were followed by a question and answer session where the students and the presenters had a one on one discussion. Suffice to say, the seminar was very productive as it encouraged the students to take the plunge and apply abroad. A video coverage of the whole event was done, courtesy NUST Media club.

MCS introduces compendium of interpersonal skills

Taking into account the inevitability of developing effective communication skills among undergraduate students as potential leaders, the Department of Humanities and Basic Sciences at Military College of Signals has taken an initiative to compile a comprehensive reader to help students access diverse study resources within one book. The book titled Communication and Interpersonal Skills: Some Reflections constitutes curriculum in the light of HEC guidelines and encompasses all the four language skills and interpersonal communication skills.

The modern day world offers a very competitive work environment. Therefore, refutation to the importance of effective communication skills in a student's life is tantamount to leaving a question mark on their ability. Provided the unavailability of a comprehensive book addressing needs of communication in a broader perspective, the instructors have to recommend many reference books to cover the syllabus on the subject of communication skills. It not only consumes a lot of time and energy on the part of students but also increases the load on the library to provide different books to the students.

In this connection, the reader compiled by MCS faculty will bring things at ease for the students. The first edition of the book has already been introduced from Fall 2012, and the next version is likely to be published in due course of time.



Results Announced

The Mensa IQ test was held in the University last December as a part of the 'Science Bee' organized by NUST Science Society. The results of the test were announced in February and numerous students of NUST qualified in the top 2% and were offered membership of MENSA. Hassan Liaqat Gondal (SMME), Muhammad Usama Malik (SMME), Syed Mobeen Hasan (IGIS), Muhammad Sarim Mehdi (SEECs), Ali Rizwan (SEECs), Muhammad Aamir Masood (SEECs), Ammaar Arshad (EME), Mohammad Yousuf Mehmood (SCME), Usama Nayab (SMME) and Irtiza Ahmed Khan (SEECs) were the qualifying contestants.

The IQ Test is held by the "Mensa International High IQ Society," the oldest of its kind in the world. Mensa is an organization that recognizes brilliance worldwide regardless of age, creed, caste, colour, religion or class. The test guarantees automatic membership in the society if a score of at least 98% is achieved. The participants have the chance to actively attend Mensa meetings and enjoy intellectual stimulating benefits such as free subscriptions to their publications.



Climate change and its consequences discussed

A debate on "Climate Change" was held on Feb 18 at Institute of Environmental Sciences and Engineering (IESE), SCEE seminar hall with the opening remarks of Dr. Fahim Khokar who was the organizer of the debate. He advocated the importance of such a debate by stating that if there was no difference of opinion, there won't be any creative and innovative ideas. The debate revolved around the existence of climatic change phenomenon with MS Students advocating its actuality and PhD scholars controverting.

Chief guest for the event was Dr. Ishtiaq A. Qazi who is Professor and Associate Dean, Institute of Environmental Sciences and Engineering (IESE). He completed his PhD Environmental Chemistry from the University of Aston, Birmingham, UK. The debate featured different concepts that ascertain the existence of such phenomenon. The case of Antarctic ice sheets, global water



budget, occurrence of extreme events, ocean acidification and disturbance of ecosystems were linked to climate change. The faculty members participated and gave their opinions on climate change while the audience also raised their queries. The debate emanated with the opposition agreeing to the existence of climate change and its destruction.

SCME bids farewell to Dr. Asghari Maqsood



In the month of February, the students and faculty of School of Chemical and Materials Engineering (SCME), NUST, bid farewell to their esteemed faculty member, Dr. Asghari Maqsood, as she retired after her 6 year long association with the school. During her stay at SCME she founded the Thermal Transport lab and supervised numerous MS/PhD students. She is the proud recipient of the Sitara-e-Imtiaz and has been elected as the Fellow of Pakistan Academy of Sciences, the only lady physicist to receive the honor. She also was the first female Chair in entire Pakistan at Department of Physics in Quaid-i-Azam University.

The students at NUST literary Circle honored her at the opening of their recent event where they presented her with a bouquet and shield, since she was the founding faculty sponsor of the society. Decorated with various national and international awards and honor, Dr. Maqsood has been an inspiration for the entire student body at SCME.

Lecture on Islamic Engineering and Business Ethics at SCEE



A lecture on Islamic Engineering and Business Ethics was delivered at NIT Auditorium, School of Civil and Environmental Engineering (SCEE) by Prof. Wg. Cdr. (R) Hameed A. Bhatti On 19th Feb, 2013. The lecture was arranged for the civil engineering batch of 2011. The guest speaker explained the etymology, definition and the code of ethics in Islam as well as engineering to the future civil engineers.

The guest speaker defined the code as "a collection of principles, norms, values, and rules which set standards for engineers' obligations for the public, their clients/contractors, employers and the profession under some charter-granting authority approved by government to issue license, charter or registration to the qualified and professional engineers." He then elucidated environmental ethics being a civil engineer as well as several theories of ethical decisions. The students found his "seven themes constituting normative perspective on ethics" and "Five goals towards moral commitment" propitious for practical applications. Lastly, he explained the graphical relationship between loss, delight, gain and sorrow.

Prof. Wg. Cdr. (R) Hameed A. Bhatti holds postgraduate degrees in Psychology and Business Administration from the Government College, Lahore and the Institute of Business Administration, the University of Karachi respectively. He possesses a forty years of teaching and eight years of research experience in the disciplines of Applied Psychology, Behavioral Sciences, Organizational/Industrial Psychology, Human Resource Development, and Management.

Lecture on Private Hydropower Policy of Pakistan



With the current electricity crisis escalating at an alarming rate, the urgency to utilize country's hydropower potential has also augmented. Pertaining to the situation, a lecture on "Private Hydropower Policy of Pakistan" was arranged at NIT Auditorium, School of Civil and Environmental Engineering (SCEE) on Feb 27. The lecture was aimed for the 2010 batch of NUST Institute of Civil Engineering (NICE).

The guest speaker, Engr. Munawar Iqbal is Senior Manager (hydropower) at Private Power and Infrastructure Board (PPIB), Ministry of Water and Power, Pakistan. He defined the two circles of focus in Pakistan that have hydropower potential of up to 60,000MW. He elucidated the future civil engineers with methods of hydropower development, relating them to real life scenarios in Pakistan and rest of the world. Then he explained involvement of private sector, evolution of hydropower models and power policies of Pakistan since the inception of WAPDA in 1958.

With the minatory circular debt handicapping the public sector, the speaker advocated the involvement of private sector in power generation. He stated the clauses, tariff determination rules and project agreements pertaining to the Private Policy 2002. Engr. Munawar Iqbal also illustrated the economic, financial and social dilemmas of the power generation industry. As a light at end of tunnel, he described the salient features of the ongoing and proposed hydropower projects which are trusted to solve the power crisis and move the way forward.

Unilever and P & G Pakistan Summer Internship Drive 2013

A team of Unilever Pakistan visited NUST on Feb 19 to conduct a session for its Summer Internship Program 2013. The session was held in SEECs Seminar Hall. Ms. Mavra Khan, Management Trainee gave a presentation on Unilever to the students of NUST. Thereafter, aptitude test was conducted in NUST Examination Hall where 55 students of NBS who applied online and shortlisted by Unilever appeared in the test. Unilever Pakistan comes to NUST every year to find best talented students for the summer internship recruitment drive.

Similarly, this year P&G team visited NUST on Feb 28 and March 1 for recruitment purposes. A presentation was given on P&G by Mr. Imran Zaheer, Mr. Adeel Ahmad, Mr. Ahsan Qamar and Ms. Najla Awan followed by a test in NUST Examination Hall. About 300 students from NUST including 52 from NBS who registered online and shortlisted appeared in the test. Over all 85 students including 11 from NBS qualified the test and then appeared in the screening stage interviews held at NBS later in February.



BMAS Programme at NIPCONS

Bachelors in Military Art and Science (BMAS), UG programme is being conducted under the aegis of NUST by the MAS Department of NUST Institute of Peace and Conflict Studies (NIPCONS). At the culmination of 7th semester of the programme, on Feb 21, 2013, seminars were held at all the six HRDCs on three topics which included 'Contemporary Military Systems – Enhancement of Pak Army effectiveness', 'Combined Arms Operations - Pak Army in LIC Environment', 'Non military Dimensions of Warfare - National Integration'.



The keen interest taken by local Formations at all the six Stations made this event highly beneficial for the YO's who attended the 7th semester. Despite time constraints, students were able to bring out relevant aspects and seminars helped in stimulating their minds on bigger issues. The guidance by faculty was highly commendable.

Principal NIPCONS attended seminars held at Rawalpindi and Lahore, while HoD MAS Dept attended seminars conducted at Quetta. Principal NIPCONS shared his thoughts with the audience at HRDC Lahore after the Seminar.

Lecture on Rainbow Concept of Life



Not everyone takes some time out of their daily routine to ponder over the purpose of life. With the youth living a fast-paced life, they tend to overlook the ulterior motive of it. On 21st Feb 2013, a lecture on the "Rainbow Concept of Life" was delivered by guest speaker, Brig. (R) Syed Saad ul Hadi at NIT Auditorium, School of Civil and Environmental Engineering (SCEE).

Brig. (R) Syed Saad ul Hadi has served Pakistan Army for 28 years and is currently CEO of Akro Protection Services. As a man with a literary background, he has published 8 books including 3 on poetry and one on major religions of the world. With this different

perspective of life, he delivers lectures in various universities and colleges as a mission to motivate the youth regarding life. His lecture started with the definition of purpose of life as described by Steve Pavlin; "To live consciously and courageously, to resonate with love and passion, to awaken the Great Spirit within others & to leave this world in peace." He stated different perspectives of different people that they have of life and then moved on to say that life is not definitive but has seven colors; Job, The family, Secondary family, Religion, Civic responsibility, Personal health and Entertainment.

The guest speaker also elucidated the audience with the dimensions and distribution of a day and tried to kindle realization of the time each day is wasted. He made a humorous scenario of current generation's lifestyle and kept the audience alive with an inspirational lecture on life. He mentioned that life is short but death is not the end of life, rather an inception of another. The lecture was stimulus for the students and faculty alike.

NCSC volunteers to renovate REDO Complex

NUST Community Service Club (NCSC) at School of Mechanical and Manufacturing Engineering (SMME), with its motto of making a positive impact on the humanity arranged a two day activity from Feb 23 to 24 at REDO Complex 1, Rawalpindi. Rawalpindi Eye Donors Organization (REDO) is one of the largest recognized Eye Cure Organization of Pakistan run by volunteers and has been serving the ailing humanity since 1977.

In this 2 day activity, students were enjoined to renovate the REDO complex. This renovation was further categorized in two parts: wall painting and interior decoration. For this activity NCSC teamed with NUST Fine Arts Club. A total of over 100 students turned up. These volunteers were further divided into teams and were allotted separate tasks in which they were aided by the NUST's professional staff. Apart from the technical expertise, NUST also provided all the equipment for the field activity like paints, brushes, overcoats, gloves, masks, sand paper, plaster of Paris and various other items.

NCSC's faculty advisor, Dr. Irtiza was also present at the event. Dr. Irtiza was very pleased to observe the enthusiasm and verve shown by the students and lauded them for their diligence and perseverance. After two days of relentless work, NUSTIANS were finally able to transform the dinghy, old building to more of a neat presentable site. This activity marked the half way of NCSC – REDO collaborative events.



Seminar on Explosives

A seminar on "Blasting and uses of various explosives" was organized at NIT Auditorium, School of Civil and Environmental Engineering, SCEE on February 27. The lecture was aimed at civil engineering batch of 2009 and was also attended by several faculty members. The guest speaker for the day was Engr. Malik Khuram Shahzad, Assistant Manager (Marketing and Blasting), Wah Nobel Group.

The guest speaker explained the blasting explosives and technology. He also mentioned the importance, applications and worldwide consumption of commercial explosives. Furthermore, he gave a brief introduction of their classifications. At the end, he enlightened different properties of commercial explosives used in industry today. It was an informative session for the attendees as it highlighted the significance of blasting and explosives in several civil engineering projects.

Seminar on ‘Characterization of Semiconductor Room-Temperature Radiation Detectors and Material Useful in Photovoltaic Devices’



Dr. Ruby Gul is a PhD in Applied Physics from Idaho State University, USA in the field of Semiconductor and Photovoltaic materials and devices. During her presentation she talked about her research on characterization of semiconductor materials and deep level defects associated with those materials. During her recent four-year stay at research-collaborator and research-associate, at Brookhaven National Laboratory USA, she worked on main target issue of DOE, such as search for the advanced room-temperature radiation detection materials useful in the security, medical imaging, and space research etc. She worked on projects of non-proliferation and National Security for about four years. Her research interests cover the fabrication of detectors and solar cells; and characterization of room-temperature radiation detectors, and Photovoltaic materials.

Talk on Industrial Application of Nanotechnology at MCE

Prof Dr Syed Tajammul Hussain, CCE 2 Corps visited MCE (NUST) on February 6 as a Guest Speaker and delivered a talk on the topic “Industrial Applications of Nanotechnology.”

According to Mr. Tajammul, Nanotechnology is going to bring the next technological economic and industrial revolution. It will be the largest industry in the world by 2014 and its turnover will be greater than the combined effect of two biggest industries; computer and telecom. In some cases, nanoscale technologies will provide only an incremental improvement over existing technologies. But in other cases, they can open the door to new techniques, products, and even fields. Materials will become stronger; sensors will become cheaper, more sensitive, and detect a broader range of phenomena; computers will become faster and more efficient; medicine will improve in many ways. The lecture enlightened the students with the increased significance of Nanotechnology and its practical application in our lives.



Interactive session on ‘Skills that Sell’

‘Skills that Sell’ was an interactive session organized by SCME Alumni Association on 13 Feb, 2013 at School of Chemical and Materials Engineering (SCME), NUST. The guest speaker on the occasion was Mr. Sikander Hazir, a certified Soft Skills Trainer (USAID PJP) and Career Management Consultant (USAID CDC Project), who is currently serving as Senior Manager HR at Frontier Works Organization. His dynamic lecture resulted in a packed seminar hall and saw attendance from students from all over NUST. “With more than 2000 students graduating every year in a single discipline, what distinguishes one today are soft skills,” says Mr. Hazir. The adept speaker discussed the tough competition created by the ever shrinking job market. “The downsizing and narrowing market has put everyone on their toes” he said, “An employee is expected to give more than what he was expected five years ago”. He enlightened the

audience on how to stand out stressing on the development of soft skills such as social graces, communication skills and confidence. While answering the queries, he explained to make an effective resume and shared the CAR approach, where the employer looks for a Cause, Action and Result behind every skill mentioned in a resume. On developing confidence, he advised to look at an interview as a communication opportunity between the organization and applicant to know each other better and insisted on having clear career goals before applying for a job.

The event received widespread appreciation from the university students and faculty. “This is a great attempt in helping the potential graduates in their quest for success in life,” says Mahwish Shahzadi, a final year Chemical Engineering student and Student Associate for the Alumni Association.



04 Co-curriculars Corner

Trekking - Hike 3.0

The morning of 17th February proved to be nothing short of being spectacular for the participants of Hike 3.0 as they enjoyed breathtaking views of the Margalla hills during a trekking trip in the hills organized by the NUST Adventure Club.

On the morning of the highly anticipated event, the participants along with team NAC departed from IESE at 8:30am for the trail 5 in the Margalla Hills. Having gathered at the start of the trail 5, the pacers and guides started the trek at 9:15am.

"The experience was simply amazing," said Nadia Khan, a student from NUST as she talked about the beautiful and pictur-



esque views. Having reached the top, refreshments were served. Not only did the participants enjoy the view of the hill but they also witnessed the beautiful pictures of wildlife including different species of birds. During the trek the participants came across a small stream which surely added to the memories that all the participants took from the event. After the refreshment everyone gathered at the initial point and boarded the buses ending the memorable event. The tremendous response was great source of encouragement and motivation for the organizers to hold such events in the future as well.

National ElectroniX Olympiad-2013

IEEE GIKI chapter organized 5th National ElectroniX Olympiad 2013, from Feb 8 to 10. The event included both technical and social events. Technical events included Robothon, Robomaze and Figure 8.

A team of 4 members including Zeeshan Abbasi (leader), Zaeem Ahmed Khan, Omair Iqbal and Nauman Ahad from SEecs participated in the Robomaze event representing NUST H-12 in the competition. The competition required the robots to solve a maze and get out of the exit sans touching or scrapping the walls or else they would face penalties. The team from SEecs with their robot named 'Blaturoid' qualified for the final round. Against everyone's expectations, 'Blaturoid' came out of the maze in 21.54 seconds without touching any wall even once. Another team from EME was 21.53 seconds on the watch. Whatever the result of the final round was, the victory of NUST over all other institutes was already established. In the tie-breaker, Blaturoid touched a wall once during the turn and got a penalty of 2.5 seconds while the other robot managed to come out untouched. Hence the two teams from NUST brought glory by being the winner and runners up in the national ElectroniX Olympiad 2013. The event was covered by the leading news channels, GEO and DAWN news.

Blaturoid is being prepared to participate in the NERC 2013 to be held in EME College in June 2013 and the team from SEecs aims to win the competition with their robot.



PNEC students' awards

Students from Pakistan Navy Engineering College (PNEC), Karachi bagged positions of best speakers at various debating and seerat competitions throughout the month of February. Defence Authority College for Women, Karachi organized all Karachi annual bilingual public speaking contest on Feb 7. Colleges / universities from all over Karachi participated in which Syeda Umm-e-Aymon Raza Naqvi, student of PNEC won first prize in Urdu category.

On another occasion, S/Lt Talib Ahmed PN of PNEC won the first prize in all Karachi Debate Contest and PNEC team bagged first Position and obtained trophy on 14th February 2013 from Sir Syed Govt. Girls College Karachi. Finally, a Seerat-Un-Nabi (SAW) Conference, 1434 AH was held at Bahria Auditorium on 15th February 2013 where S/Lt Mudassar Khubaib PN of PNS JAUHAR representing COMKAR Command was declared as Best Speaker. A large number of Officers, CPOs / Sailors and civilian from different PN Commands attended the event. Vice Admiral Tahseen Ullah Khan HI(M) Commander Logistics graced the occasion as chief guest and gave away the prizes to the winners.



Team from SCME bags second prize at GIKI Science Fair

A team from School of Chemical and Materials Engineering (SCME) participated and won second Position in the 14th GIKI All Pakistan Science Fair, held from Feb 15 to 17 in Ghulam Ishaq Khan Institute of Engineering Sciences and Technology. Team members including Faizan Anwer, Sharoze Ahmed, Saim bin Farooq, Farzan Sohail, Muteeb Raza and Haider Ali Khan participated in one of Pakistan's most coveted Science Fairs.

About 400 participants from prestigious institutes from all around Pakistan came and showcased their talent. Three days of Science, Innovation, Creativity and Entertainment left the participants baffled. The Event was divided into two categories; the first being a series of Science contests comprising of two rounds of a Science Kasoty, Eureka, Pop It, Span the Bridge, Flight of Fantasy and Champions Round, each round innovatively designed to test the scientific knowledge of competitors in practical problems. The second round was a Science Exhibition which invited original and creative projects from two categories for both College and University Level students. SCME team also expressed thanks to their fellow team members from CAMP, which supported them throughout the competition.



Crazy English Competition

SEECs literary society keenly organizes such events that inculcate in students the passion for literature. Literature is called the mirror of life; it is also called a mode of expression of feelings and emotions 'Crazy English' competition was organized by SEECs Literary Society on Feb 27 in RIMMS seminar hall. A total of 12 teams participated with each team having 4 members eager to display their literary skills. The competition consisted of 3 rounds. First round called "Word Schrades" was the most exciting one in which three idioms were assigned to each team and one member of the team had to act the idiom to let his team members identify it. "Spelling Bee" was the second round in which different words were pronounced to the teams to spell them. Third and the final round consisted of "story writing and delivering". The teams were given 20 minutes to write the story on the pictorial topic which not only judged the depths of their creativity but also the race against time judged their time management skills. Mr. Muhammad Kamran and Miss Haniya

Arif were the esteemed judges. After the compilation of results from the three rounds, team 'American born confused desi' won the Crazy English competition. Team 'D-graders' and team 'Power' clinched second and third spot respectively. Souvenirs were distributed among the winning teams.

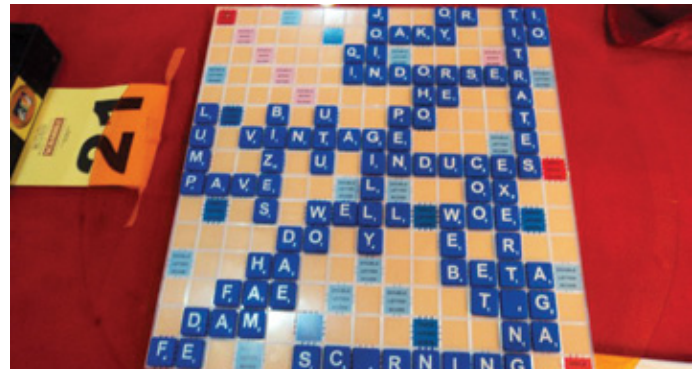


Shahroz Zamir participates in World Youth Scrabble Championship

Shahroz Zamir, a student at School of Chemical and Materials Engineering (SCME), NUST, qualified for participation in the 5th World Youth Scrabble Championship (WYSC) held in Manila, Philippines.

After an All-Pakistan Inter-School Scrabble Event, a pool of top 20 Under-18 players were selected and trained for 3 months. A qualifying round was then held among these individuals where Shahroz emerged among the top four. This was the first time Pakistan ever took part in the WYSC. Shahroze bagged the first position in the friendly team event held a day before the Championship started.

He describes the Championship as an exceptional experience. During the tournament he got as high as the 9th position with an overall 41st position worldwide. He was the 2nd best Pakistani player in the Championship and the second best player from a new country. Shahroz received a trophy and a cash prize for the highest game score of the entire tournament.



Interview with Javed Iqbal

By NUST Bazm-e-Pakistan

NUST Bazm-e-Pakistan team visited Justice (R) Javed Iqbal at his residence in Lahore for a small interview. The interview was held on 11th November, 2012. Irha Siddique, Rabab Rabbani, Hamza Qazi and Uzair Arif interviewed the esteemed judge. The agenda behind conducting the interview was to bring forward Iqbal's philosophy and the ideology of his son on Iqbal Day. The team questioned his views about the youth, the future of the country and specially his father 'Allama Iqbal'. An interesting dialogue between the interviewee and Mr. Javed Iqbal, specifically about his father was recorded.

To start with, Team NBPK asked the guest if getting a separate homeland was the end of the right to self-determination, to which he responded by referring Iqbal as a territorial nationalist who could be considered the successor of Sir

Syed Ahmad Khan who made an observation that if democratic reforms were to be introduced Muslims would be in deep loss. Team NBPK was curious to ask about Iqbal's thoughts on the decline of the Muslims and the rise of the Europeans. Mr. Javed Iqbal told them that while Iqbal was in England, he wanted to know the reason behind European progress. He noticed that there were three things which changed the face of Europe: reformation, renaissance and French revolution. And fall of the Muslims was due to monarchy, "Taqleed" and "Khanqiat". When asked about Iqbal's opinion on adapting European culture, he responded that Iqbal was of the opinion that European culture is prolongation of Islamic civilization. There is no offence in adopting European culture but youngsters must not go deep into this culture



to see faults of secularism. Since nowadays a lot of debate is going on if Iqbal was secular or not so to clear the doubts team NBPK enquired it from his son to which he stated that Iqbal's views were very radical. According to Iqbal, message of Islam is spiritual democracy. And his interpretation of "Tauheed" is human solidarity, human equality, and human freedom. An interesting dialogue arose when team NBPK painted a picture of Iqbal being alive and asked what advice would he have given to improve current scenarios in Pakistan. To that Mr. Javed Iqbal paused for a while, smiled and stated that, for a start if this would have been the condition while

he was here, he would have committed suicide (Jokes about it), because having made the State is not enough. Iqbal wanted a Model State, which we are far from now. And eventually we haven't even been able to have real leadership

The interview was concluded by asking him about the future of Pakistan, to which he replied "I personally think that the nation needs not to worry because if we keep democracy alive in the country and do not allow military empowerment, we'll make our way out of these hard times."

Mr. Javed Iqbal is a man of great persona, a role model for many and a great philosopher like his father.

04 Sports News

Intervarsity Badminton Men's Championship held at E&ME

Intervarsity Badminton Men's Championship was held from 24th to 26th Feb 2013 at Indoor Hall in the College of EME, Rawalpindi under the arrangements of National University of Sciences and Technology (NUST) H-12, Islamabad. 10 Badminton teams from Zone "C" Universities participated in the said championship with full enthusiasm. NUST provided the pick and drop facility to outstation participants from their lodging

to the venue of competitions. Whole championship was held in friendly atmosphere. Total 28 matches were played on knock out base system. NUST won their three matches out of four and won 04 points but could unfortunately not reach the final. Quaid-e-Azam University won the tournament, Preston University and AJK University clinched second and third positions respectively.



SEECs, MCS score win in intra-NUST basketball championships

A game is won by the strength of unity, discipline, teamwork, willpower, dedication and most certainly intelligence in the court. To cultivate all the aforementioned characteristics, an intra NUST basketball tournament was organized from Feb 8 to 10. Six teams including those from SCME, SEEC, NBS, SADA, SEECs and SMME participated in the contest.

An exciting series of matches landed SEECs and NBS teams in the much-awaited final. Both the teams had outclassed teams from other schools. The enthusiasm, skill and dedication of both the teams resulted in a nail-biting match which kept the spectators on their toes till the final whistle was blown. SEECs won the final match against NBS with the final scores being 28-20 in their favor. DD Sports Mrs Robina Anser & Mr. Umar, Assistant Prof. NBS were the chief guests and handed over the trophy to the jubilant team of SEECs.

Continuing with the basketball-mode, an inter NUST basketball tournament was also organized to conclude the best team of NUST and to form a team consisting of best players from different campuses who would then represent NUST in the intervarsity matches. MCS, the defending champions showed brilliance in the court and proved that they were still the best team of NUST by beating CAE in a nail-biting match by 64-63. The spec-

tators were on their toes till the final whistle and enjoyed each bit of this very close encounter of two extraordinary teams of NUST. DD Sports Mrs Robina Anser handed over the trophy to the delighted players of MCS.



SCEE outshines NBS in volleyball

In the Intra NUST volleyball tournament, students at NUST witnessed some exciting and breath-taking matches that resulted in the emergence of new players for NUST H-12 team. After the group matches in which six teams including those from SCME, SEEC, NBS, SADA, SEECs and SMME participated with all their zeal and zest, H-12 witnessed the grand finale of SCEE versus NBS. The spectators witnessed an exciting match which took several turns but after a close fight, team from SCEE emerged as worthy winners of the intra NUST Volleyball championship after beating NBS by 3 games to one. DD Sports Mrs. Robina Anser was chief guest and handed over winning trophy to SCEE.



Intra-MCE Badminton Tournament

The wooden courts of MCE might never have witnessed a more thrilling set of games of badminton than those exhibited at intra MCE Badminton Competition that took place at MCE courts from 12th to 19th Feb 2013. A total of 11 teams participated. The final match, in fact the most breath-taking of all, took place between the teams of CED-75 and CED-77. TC FarazArif, the team captain of CED-77 finally rifted the trophy for his team with CED-75 as runner-ups for the tournament.



2k12 Spartans beat Black Jacks by 37 runs in cricket match -SMME

The Students Council Society of SMME (SCS) remains very active in organizing festive extracurricular activities for the students of SMME. These activities not only promote healthy competing environment but also help the department in building its team for different Intra H-12 events.

SCS organized an intra SMME cricket tournament from February 11 to 26. A total 12 teams participated with great enthusiasm in the tournament out of which 3 were from 2k09 batch, 4 from 2k10, 3 from 2k11 and 2 from 2k12 batch, so the event witnessed the participation of the entire department. The matches were played in the newly created SMME cricket ground which is also an achievement of SCS being relished by the students who now don't need to get permission from any other department to play cricket. Final was played between teams from 2k11

(Black Jacks) and 2k12 (2k12 Spartans) batch.

'2k12 Spartans' scored 155 in 10 overs but 'Black Jacks' were unable to reach the target and got out for just 123 runs. Final was witnessed by the UG coordinator, Sir Vaqas Arshad and Controller Examination, Brig. Zafar. '2k12 Spartans' were awarded Rs. 1500 cash prize and 'Black Jacks' 1000rs for their brilliant performance throughout the tournament.



Cricket Tournament - SCME

An intra-SCME Cricket tournament was held on Feb 25 in the School of Chemical and Materials Engineering (SCME). There were two teams from SCME competing for the cup i.e. faculty staff and the students from Batch 04. Faculty Staff went first and Batch 04 needed a score of 110 to win. Eventually Faculty Staff won by 10 overs. The cup was received by captain of the triumphant team, Dr. Aamir Habib as the match was witnessed enthusiastically by Principal, Dr Muhammad Mujahid, faculty and students of SCME.



Sports gala kick-off ceremony - SEECS

School of Electrical Engineering and Computer Sciences (SEECs) has always put great emphasis on outdoor games, which not only shape their personalities but also enrich them with the vital ingredients of life like patience, tolerance and sports-man spirit.

The much awaited sports gala kick-off ceremony was organized on Feb 22 in which zealous students of each of the four houses and the faculty participated. And there was no better way but the yummy bake sale which was a treat for the taste buds of all those who participated. The house members of each house showed their cooking skills to win the hearts of the judges which included Sir Ali Haider, Sir M. Yousaf and Sir Majid Maqbool. The students had put a lot of their efforts and time in setting up the stalls and embellishing them. The bake sale was won by the red house which had a variety of tasty delicacies including cup cakes, 'gol gappay', soda, coffee delight, samosas and many more.

The sports gala kick off was formally concluded with the cake cutting ceremony and it also became thrilling as the cake had the logos of each house on it which added to the fun. All those who witnessed the event enjoyed it and now the houses gear up for the sports gala 2013.



04 Achievements

Junaid wins Outstanding Learner's Award

Junaid Saleem, a freshman at NUST School of Mechanical and Manufacturing Engineering got first position in the world in Further Mathematics. CIE announces 'Outstanding Learner's Award' every year for one who has got the highest marks in a particular subject in the entire world.

Further Mathematics is considered to be one of the toughest subjects in A-levels and some foreign universities even regard it as a double credit subject. Junaid joined NUST as a freshman applicant in 2012 and has opted for Mechanical Engineering as his career path. Since it requires numerous calculations and mathematical concepts, he has been consistently getting excellent results and his

teachers say that they have clearly noted different intellect in him. Besides this astonishing achievement, he also got an award from CIE for getting best 4A's in Lahore region. SMME is proud to have him and would nurture his skills and guide him towards his dream career.



RCMS faculty member awarded distinction

Dr. Meraj Mustafa Hashmi, Head Computational & Applied Mathematics Division, in the year 2012, has generated 19 scholarly contributions in ISI indexed journals. The contributions are of multidisciplinary nature that span from Nanofluid flows, Peristaltic/Blood flow Problems to Non-Newtonian Flows. Most of the research papers have already received significant citations as the research is related to modeling and simulation of applied problems. His active and recognized publications have earned him a distinction in the journal.



RCMS student appointed as GS of ISCB Student Council

Mahum Riaz, student of RCMS, MS CS&E (Batch IV), has recently been appointed as the General Secretary of Regional Student Group (RSGP) of International Society for Computational Biology Student Council. Her selection was carried out based on a volunteer project she carried out as a member of the society, followed by which the president nominated her for the position of general secretary. RSGP is working for the development of the field of Computational Biology in Pakistan.

It aims to increase collaborative research between Research Institutes across the country for rapid development of Computational Biology in Pakistan.



NUST need-based scholarships awarded

NUST from its limited resources is making concerted efforts to help meritorious but needy students in achieving higher education by giving NNBS. This year also Rector NUST has very kindly approved the award of NUST Need Based Scholarship for all the eligible Undergraduate students, almost 79 and 16 Postgraduate students of session 2012. Day Scholars are given 50 % tuition fee waiver and boarders 100 % tuition fee waiver.

"If you can't do great things, do small things in a great way." Napoleon Hill

All Pakistan Presentation Competition 'SOFe' - SMME



IMEchE Student Chapter NUST-SMME organized first All Pakistan Presentation Competition 'SOFe' at SCME Seminar Hall on Feb 28. Keeping in line with the international leg of the competition, participants were required to present on a subject related to mechanical engineering or any of its branches such as materials, industrial, aerospace and aeronautical engineering. In addition to students from undergraduate and postgraduate programs, research assistants were also encouraged to participate, highlighting their area of research.

As many as 15 students from all over Pakistan participated in the competition, presenting on a wide array of topics ranging from 'Fear of Flying' to 'Endoscopic Robots'. Faisal Qayyum of UET Taxila, whose topic of presentation was 'Utilization of Kiln

Shell Waste', bagged the first position and Ammar Arshad from EME – NUST, whose presentation was on 'Eddy Current Braking System', finished as the runners-up. The winner will represent Pakistan at South Asian level in SOFe organized by IMechE Southern Asia.

Monetary rewards were presented to the winner and runner up, while participation certificates were distributed amongst the participants. Speaking on the occasion, Mr. Bilal Bashir, In-charge Equipment & Plant at DESCON Engineering Limited, a jury member, underlined the importance of good verbal skills in today's world. He also appreciated the efforts of IMechE Student Chapter NUST-SMME for providing a platform to polish ones oral skills.

Research papers presented in conference - IGIS

The Pakistan Academy of Sciences (PAS) and the National Centre of Excellence in Geology (NCEG) organized a one day conference on the sustainable utilization of natural resources of the Khyber Pakhtunkhwa and FATA regions. The conference brought together all those scientists/engineers/planners who have been actively involved in the development of natural resources of these two relatively unexplored, yet highly potential, regions.

A team from IGIS led by Dr. Javed Iqbal and his three graduate students participated in the one day conference entitled 'Sustainable Utilization of Natural Resources of the Khyber Pakhtunkhwa and FATA (SUN-R)' which was held in Peshawar Pearl Continental Hotel on Feb 11. The IGIS team presented 4 research papers in the conference which included "Evaluation of Hyper spectral Imagery for Identification and

Mapping of Minerals in Chitral" by Junaaid Aziz Khan and Javed Iqbal, "Geo informatics Based Multi-criteria decision support systems for selection of Renewable Energy sites:



A case study of KPK province, Pakistan" by Sajjad Ali and Javed Iqbal, "Spatial modeling of groundwater quality assessment: A case study of Peshawar District by Adnan and Javed Iqbal and "Modeling Shigar Basin glacier changes in relation to climate variability" by Iqra Atif and Javed Iqbal.



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