

QUARTERLY NEWSLETTER
NUSTNEWS
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EDITORIAL

In every issue of NUSTNEWS we endeavour to present a wide range of current academic and co-curricular activities at the University.

The UG students had been on vacation for the last two months and the campus remained busy preparing for the entry tests, yet it did not hamper the academic and co-curricular activities around the campus. The fresh entry joined NUST and was acclimatised to the dynamic environment of the University.

This Newsletter is the outcome of the combined efforts of the editorial board, the staff and, ofcourse, our readership. The contribution of my team in taking on the formidable task of gathering and editing news is indeed appreciable. I am particularly thankful to the Chief Editor for his continuous guidance and support.

NUSTNEWS gives the opportunity to the NUST community to share their experiences, activities and achievements with each other that can be a source of great inspiration and motivation.

If you have a news item to contribute for the next issue, do not hesitate to contact the Editor at nustnews@nust.edu.pk

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International Conference on Emerging Technologies at NUST

Ample resource allocation must for information security: Dr. Samar Mubarakmand

The modern information edifice is based on computing machines; however, it could collapse if the machines are intruded into. Therefore, risk to information security is blatant but can be averted effectively given ample resource allocation for the purpose.

Dr. Samar Mubarakmand expressed these views during a two-day International Conference on Emerging Technologies held at the main campus of NUST on Sep 5-6. He graced the occasion as the chief guest during the inaugural session of the conference. School of Electrical Engineering and Computer Science (SEECS) hosted the event.

He said that cloud computing had made a positive difference in several fields such as defence, medicine, engineering, etc. Dr. Mubarakmand hoped that enough efforts would go into protecting computing systems from subversive elements. He lauded NUST for bringing together an array of top researchers from several countries.

Under the auspices of Institute of Electrical and Electronics Engineering (IEEE) Islamabad chapter, the event featured the participation of eminent scholars and researchers from academia and industry both from Pakistan and abroad.

Dr. Atta-ur-Rehman, former chairman HEC, was the other key figure to attend the event. Speaking on the occasion, the esteemed educationist said that the economic development of a country is directly proportional to university research. Therefore, he added, researchers and faculty should come forward and explore new avenues in the field of research. He pinpointed some important areas for research ranging from robotics to pharmaceuticals and nano-technology to biodiversity. While counting the blessings of research on mankind, the chief guest for the closing session said that based on research, very commonplace items could be utilised for the common good. He gave the example of old newspapers that could be transformed into energy.

Earlier, Rector NUST Engr Muhammad Asghar welcomed the guests to the conference and talked about the prime objective of the event. "Information security is a challenge not only in our personal lives but also in the economics, politics and defence of a country and that our entire way of life can be endangered by cyberattacks and information breaches," he said. The conference, the Rector maintained, would explore latest developments in the area of information and communication technology (ICT) and



lay bare the trends in the enabling and emerging technologies through cross-fertilization of deliberations of visionary professionals and technology leaders.

The two-day event also covered cutting-edge fields of information and communication technologies including health informatics, information security, grid and cloud computing, signal and image processing, embedded system design and verification, wireless and sensor networks, etc. Overall, 51 papers were presented during the conference.

Among other prominent scholars, who came all the way to attend the ICET 2011, were Dr. Zhizhang Chen, Dalhousie University, Dr. Murtaza Hashmi, Technical Research Centre of Finland and Dr. Muhammad Ridza Bin Wahiddin, International Islamic University, Malaysia.

SEECs students' work acknowledged at Stanford

There is no dearth of potential in our youth which they keep on demonstrating to earn acknowledgement from across the world. The news published in SLAC Magazine on July 25 regarding the work done by NUST researchers at Stanford University Linear Accelerator Centre (SLAC) is a matter of great pride for the nation as a whole.

Sadia Rehman and Amber Madeeha Zeb are pursuing their Masters degrees in Communications Systems at the School of Electrical Engineering and Computer Science (SEECs) at the main campus of NUST. They are the first women to come to SLAC as part of a seven-year joint project aimed at improving the country's Internet connections. A key feature of the project is sending two graduate students annually to SLAC to work with PingER director Les Cottrell.

The NUST students proceeded to Stanford University for one-year research under the HEC sponsored

PERN project being jointly pursued by NUST-SEECs and SLAC. The significant contribution made by these researchers has brought home pride and honour.

The news published in the magazine highlights the significant contribution made by the young researchers to the joint project. It stated "In past years, the Pakistani students have discovered that while their country's backbone network was adequate, data communications was hampered by low-capacity links to the universities themselves. Now that those "last mile" links have been upgraded, Zeb's analysis recently determined that

intermittent power outages are the biggest problems."

NUST has emerged as a premier institution for higher learning in Pakistan and is fast developing as a centre of excellence. Sadia Rehman and Amber Madeeha's research at Stanford speaks of the research-conducive environment prevalent at the University. It is because of this reason that the University is transforming into a global centre for scientific research and exploration.



NUST student's project receives int'l acclaim

Momal Mushtaq, a NUST student, is proud of her achievement for Pakistan at the World Summit Youth Award (WSYA) 2011. Her Project, the Voice of Youth (tVOY), which according to its website aims to "create a forum where the youth of Pakistan could mingle and enrich one another by their perceptions and views", came in second at the summit.

"Receiving international acclaim is a matter of pride not just for the recipient but for the whole nation," the young National University of Sciences and Technology Business School student said.

WSYA, an international organization that selects and promotes the best practice in e-content, received more than 700 submissions from 99 countries this year. The WSYA demonstrates young people's potential to create outstanding digital contents, according to its website.

In August, an international jury consisting of multimedia and information (IT) experts and social entrepreneurs from 17 countries selected the very best entries in each of the six WSYA categories. The categories under which projects were invited by the summit this year were (1) Fight Poverty!,

Hunger and Disease! (2) Education for All! (3) Power to Women! (4) Create your Culture! (5) Go Green! (6) Pursue Truth!

tVOY came in second in the Create your Culture! Category. Momal, who is also the chief editor of tVOY, said, "[The Project] is an online youth community working to cultivate relations [within the] youth, providing all with a platform to freely pursue their individuality for collective progression."

The youth portal, since its launch on June 26, 2010, has amassed more than 6,000 fans on Facebook; more than 200 youth from Pakistan, India, Nigeria and Philippines contribute to it, according to Momal.

The portal aims to promote youth's perspective many views on popular social issues, promoting acceptance, tolerance and broad-mindedness, Momal said.

Momal will go to Graz in Austria in November, where she will receive her award during a four-day event. The portal can be accessed on the web at thevoiceofyouth.com



International Workshop on Safety Management and OSHA Standards Need to ensure safety at workplaces stressed

Due to lack of safety measures in place, the workers at construction sites are often exposed to health hazards and injuries. The scenario is even worse when it comes to safety management at work places in Pakistan. Every day hundreds of labourers fall prey to mismanagement in implementation of safety laws. As a result, a large number of these poor souls either lose their lives or become crippled for life.

Chairman HEC Dr. Javaid Laghari voiced this concern in his address during International Workshop on Safety Management and OSHA Standards held at the main campus of National University of Sciences and Technology on July 27. School of Civil and Environmental Engineering-NUST, under a joint Pak-US research programme, patronised the event in collaboration with Higher Education Commission (HEC).

Dr. Laghari opined that Occupational Safety and Health Administration (OSHA) has set precedence for developing countries like Pakistan to reduce fatalities at work places by implementing safety laws in letter and spirit. He said that the mission of OSHA is to save lives, prevent injuries and protect the health of workers in America, adding the vulnerability to health hazards and injuries of workers in Pakistan can also be curbed provided safety mechanism is put in place following the example set by OSHA.

While referring to high population growth rate and rapid urbanisation in the country, the chief guest touched upon the importance of safety management in the construction industry. "In the backdrop of demographic explosion, major infrastructure expansion is lying ahead, which doubles the need to address the safety issues at work sites," he maintained. The esteemed guest lauded the efforts of NUST in organising the workshop as he termed the University one of the pioneers to take up this emergent issue.

In his keynote address, Dr Syed Mahmood Ahmad, Professor at East Carolina University, gave an introduction to Occupational Safety and Health Administration (OSHA).

The agency, he said, develops job safety and health standards and enforces them through worksite inspections. OSHA also maintains a reporting and recordkeeping system to keep track of job-related injuries and illnesses. He suggested that the implementation of a similar system in Pakistan can ensure safer construction sites for workers. He also pointed out that project managers and their site-level managers as well as business professionals usually have a limited understanding of their obligations relating to occupational health and safety management. In his concluding remarks, Dr Ahmad recommended that a body should be formed with a representation from all the stakeholders including HEC to put in joint and concerted efforts to improve safety situation at the work sites.

Dr. Jimmie W. Hinze, from University of Florida, talked about Zero Accident Techniques "Best Practices" in his presentation. He was of the view that the construction industry has improved considerably in the past two decades and the rate of fatalities has decreased thereby. He asserted that there should be consistency in data collection but the ultimate objective is not to record injuries but to reduce them.

Earlier in the opening remarks, Principal SCEE Dr Nasrullah Khan said that the workshop aimed at providing construction managers, professional engineers and practitioners understanding of theory pertaining to safety management and OSHA standards representing best practices to make construction sites safer. He said that construction could be hazardous and the best way to avoid injuries is through proper management and coordination of planners, designers and supervisors. He was very optimistic that the workshop will be every useful in formulating as well as implementing safety standards in Pakistan.

Among other prominent speakers were Dr. Salman Azhar and Dr Rafique Muhammed Chaudhry. The day long workshop concluded with the chief guest presenting souvenirs to the participants.



World-famous mountaineer shares K-2 adventure with students

The quality of being undeterred, no matter what the enormity of a challenge, has often led human beings to perform wondrous deeds. Sophie Denis is one such figure who, with her matchless courage and devotion, became only the third woman in the world to successfully climb K-2, upto the height of more than 8000 meters, the second highest mountain with the reputation of being a 'killer'. Mount Everest may get the headlines, but for veteran mountaineers, reaching the top of K2 and coming down alive is a cherished dream.

Sophie, who a few days back successfully completed her latest expedition at K-2, kept the audience at National University of Sciences and Technology spellbound as she shared her adventurous experiences climbing the world's highest mountains. NUST Adventure Club (NAC) organised the event to honour the world famous summit climber on August 27. "Past several years and counting, I have been in the middle of gigantic mountainous regions with my ever-increasing desire to summit peaks" the determined Sophie said.



Sophie maintained that tough weather conditions prevent most K2 summit climbers from reaching their destination. "Though climbing to a height of more than 8,000 metres anywhere is never an easy task the expedition at K-2 is the most challenging one," she added.

Sophie's K-2 expedition was a success as she managed to face the resistance with resilience and came out victorious. "What make K-2 the most dreaded of all for summit aspirants are extreme factors may it be steep ascents, avalanche slides or the ailments caused by the frostbites. All one needs is to be highly optimistic in overcoming the bottlenecks posed

while losing hope could be disastrous," Sophie explained.

Ms Sophie was in Pakistan on her expedition of climbing K-2, which she did successfully during this trip and is looking forward to embarking on her next adventure ahead. "I have two weeks to rest and eat up before my next adventure: climbing Shishapagma (8,013m/26,289 ft) in Tibet, and Manaslu (8,156 m/ 26, 759 ft) in Nepal." Sophie said. The address by Sophie was very inspirational for NAC members, who later raised many queries with her regarding different aspects of mountaineering.

NUST, UoM collaborate for internship programme, scholarships

A one-month summer internship was arranged for three students of NUST in July at the National Composites Certification and Evaluation Facility (NCCEF), The University of Manchester as part of the British Council sponsored DelPHE project "Capacity building for enhancing R&D in designing, manufacturing, testing and certification of composite materials,"

The three students from NUST included Haseeb Shaikh, Waleed Ahmad and Muhammad Junaid. Haseeb is a student of BE-Materials Engineering at School of Chemical and Materials Engineering (SCME) while Waleed and Muhammad Junaid are students of BE-Mechanical Engineering at the college of Electrical and Mechanical Engineering (C of E&ME).

The Project coordinator from Pakistan's side for this project is Assistant Professor Department of Mechanical Engineering, Dr Rizwan Saeed Choudhry and the coordinator from the Manchester side is Head of School of Materials, Professor Paul Hogg. The internship was one of the series of activities planned for enhancing bilateral



research between the two Universities and in the next year of project (starting this September) more than ten scholarships (travel grants) will be available for students who want to present research work related to composites or want to perform experiments related to composites in

Manchester. The students were extremely elated at their experience and described the internship as a world of experience, learning and recreation.

Just as composites are a merger of different materials, this internship was a unique blend of the genius at NUST and the technology at The University of Manchester, exposing the internees to the expertise required to forward research

and industrial development in Pakistan.

Head of Department of Mechanical Engineering at college of E&ME, Col Dr Waheed ul Haq, felicitated the DelpHE team and students and remarked that such activities not only provide students with opportunities to excel beyond the classroom but would also bolster the image of NUST as a world class University.

5th EXYLENT Workshop Exploring young leaders' natural talent

With a view to promoting creativity and innovation among youngsters, School of Electrical Engineering and Computer Science-NUST organised a two-week workshop titled EXYLENT-Exploring Young Leaders' Natural Talent. The workshop started on July 18 and a number of participants along with their parents attended the opening ceremony.

Dr. Jahangir Khan Sherpao, a renowned architect, was the chief guest on the occasion. He delivered a motivational speech urging the young participants to avail the wonderful opportunity and come up with creative ideas. After an introductory lecture on LEGO Mindstorms Robotics, the participants were divided into groups of two. They were given a demonstration of a simple robot and asked to create their ideal robot using LEGO kit. The second day, they were taught how to implement the principles of physics to their robots. The participants were taught to incorporate hurdle detection into their robots using touch and sound sensors on the third day of the workshop. The robots were then tested at the end of the day in a small competition.

Participants were taken to the Holy Family Hospital on the fourth day where they were shown the Laparoscopic and Robotic Surgery training systems. Professor Brigadier Mowadat Hussain Rana was invited to SEECs on the fifth day to give the participants a lecture on "Creative Thinking". Later, the participants were taken to Pakistan National Council of Arts for an Interior Designing Exhibition.

The second week started with a lecture on ultrasonic, acoustics, infrasonic waves and their applications. Participants were taken to visit the National Radio and Telecommunication Corporation (NRTC) near Haripur



where they were shown some of the NRTC products which included Software Defined Radios. Later in the day, the participants were given a demonstration of the Electroplating process. The next day, participants attended a lecture on "Ethical Values" by Dr. Inam-ur-Rahman, an eminent nuclear scientist from Pakistan Atomic Energy Commission (PAEC). Later, the participants were introduced to the Bluetooth communication protocol and were given a demonstration of a robot that imitated another robot via Bluetooth technology.

Mr Mohsin Lodhi, a competent communicator and an inspiring leader from Toastmaster International started day ten with a lecture on "Creativity".

Later, students worked on their robots for the final competition which involved robots sorting out balls of different colors by picking them up from a black box and placing them in separate boxes according to color.

The closing ceremony was attended by Mr Masoom as the guest of honor, Mr. Muhammad Tauseef Zaman as the chief guest who applauded the efforts of the organizing team and the participants to make the workshop a success. The winners of the competition were given shields and prize money by the chief guest while other participants were given certificates.



NUST entrepreneurs shine in DISCOVER final round

The Prime Minister's Entrepreneurial Challenge and NUST's pioneer business plan competition DISCOVER-Prosperity through Entrepreneurship, spanning over a period of seven months, culminated on September 20, with the selection of Top 5 Prime Minister's Entrepreneurial Teams out of the Top 10. A total of 250 participating teams had initially registered for their best business plans prepared after hectic efforts during the given time.

The Top 5 winning teams included 2 teams from NUST, one joint team from NUST and UET as well a team from LUMS and one from Fatima Jinnah Women University.

The Centre for Innovation and Entrepreneurship (CIE), NUST were the organizers of the event in collaboration with their implementation partners, The Cambridge Advisors Network. The event was sponsored by the Government of Pakistan, Higher Education Commission (HEC), Khushali Bank, Fauji Fertilizers and Askari Bank, while Channel 7 and Radio One FM 91 were the media partners.

The event which was officially endorsed by the Prime Minister, Islamic republic of Pakistan, H.E. Syed Yusuf Raza Gilani, was the first of its kind in Pakistan. The first three winners and two finalists out of the ten teams that presented at the event will be awarded cash prizes in a ceremony to be held on a later date and is likely to be graced by Prime Minister Yusuf Raza Gilani himself. While the winning team will be awarded Rs. 500,000, the first and second runner ups will receive Rs. 300,000 and Rs. 250,000 respectively. Furthermore, two more finalist teams will receive cash prizes of Rs. 50,000 each. All 5 teams will also be incubated at the NUST Technology Incubation Centre free of cost. In his closing address, Rector NUST announced consolation prizes of Rs 20,000 for the remaining 5 qualifying teams.

The Final Round of the competition constituted panel discussions, presentations on the selected business plans and distribution of certificates among the winning teams. The discussions were moderated as well as participated in by leading academics and entrepreneurs. The panelists made a strong case for inculcating entrepreneurial spirit at grass root level, which they termed was a driving force in building the country's economy.

While delivering the welcome address, Pro Rector (RIC) Engr. Muhammad Mushtaq termed the event unprecedented in Pakistan. He said that the event was a great learning exercise for participating students who came from over 30 Pakistani universities. He maintained that teaching and research (aiming at rendering community service) were the fundamental aspects for universities to focus on. NUST, he believed, was supporting research and promoting innovation, in line with Higher Education Commission's (HEC) thrusts for Medium Term Development Framework (MTDF). The focus of MTDF was now on universities building economy, universities building community and universities building leaders, he added. In the end, he thanked all the stakeholders for making the event a great success.

Rector NUST Engr Muhammad Asghar graced the occasion as chief guest.



Course on Career Counselling

NUST will launch a career counselling course for education professionals by the end of 2011 in collaboration with the British Council and Warwick University to fulfill the urgent need for career counsellors in the country.

'Arrangements for the career counselling course are close to completion' said Sikandar Hazir, Manager Industrial Relations at the Industry Liaison Office. 'Trainers from Warwick University will hopefully be visiting us in November to train the trainers, i.e., faculty of NBS and staff in our department.' Explaining the significance of the course, he said that Pakistan has a huge population of young people who are often confused about choosing their career paths and that their teachers are not qualified to provide them proper career guidance. With this course, NUST would be producing qualified career counsellors who would eventually work with organizations across Pakistan, he added.

Explaining the deplorable state of career counselling in the education sector, a psychologist at Centre for Career Counselling and Advisory, said that 'even elite educational institutions often do not have career counsellors'. Due to this lack of guidance to our students, many are later dissatisfied with their careers. Citing a study by United States National Career Development Association, she pointed out that 69% adults would study different subjects if they got a chance to go back to college.

PDC offers training under HR Development Programme

The University is dedicated towards development of Human Resource, faculty and staff to improve the quality of education at this premier education centre. Following this practice, NUST Human Resource Department in collaboration with Professional Development Centre (PDC) organized Orientation Trainings and provided fully funded scholarships to those at NUST.

NUST being one of the leading Universities aims to achieve its strategic objectives through continuous Human Resource Development. HR directorate trained 188 faculty and staff members from July 25-29 under the “Faculty Development-Orientation Program” at PDC. The purpose of this workshop was to introduce and train newly-appointed faculty about organizational structure, planning and processes at NUST. The Professional Development Centre (PDC) also organised

a 3-day training session on “Reliability Engineering and its Applications in Industry” from July 20-22 at NUST Islamabad. This session was organised, keeping in view the importance of Reliability Engineering in today’s world given that no industry can progress effectively without the knowledge and implementation of the said subject.

Furthermore, NUST explored 132 fully funded scholarships from different sources, of which 83 were given to the faculty/staff in July. The scholarships were provided under the Faculty Development Program at the university. This practice not only guarantees high quality teaching and research, but also helps faculty and staff to regularly develop their potential and realize aspirations for progress in their career.

IPO files new NUST patents

The Intellectual Property Office has had the NUST Intellectual Property Policy endorsed by the Academic Council of the University; thus making NUST the first University of Pakistan to have drafted and endorsed such a policy. The NUST IP Policy has been drafted in consultation with the World Intellectual Property Organization (WIPO) and other relevant experts; both nationally and internationally.

Apart from this the NUST IPO has filed for 3 additional national patents this July, taking the number of NUST patents filed so far to 42. A total of 7 patents have been awarded in the name of the University so far.

The three recently filed patents are as follows:

- A High Throughput, Low Interrupt Generic Micro-coded Architecture for Ultra High Speed Communication Protocols by Dr. Nazar Abbas, Muhammad Umar, Muhammad Afzal Khan, Dr. Rehan Hafiz and Dr. Arshad Ali - SEECs –NUST
- Construction and Purification of HCV NS3 Recombinant Single Chain Serine Protease with NS4 Peptide of Genotype 3a from Pakistan Population” by Dr. Ishtiaq Qadri and Dr. Kaneez Fatima - NCVI-NUST
- Development of Robust in Vitro FRET Based Assay for Recombinant Pakistan HCV NS3 4A Protease by Dr. Ishtiaq Qadri and Dr. Kaneez Fatima - NCVI-NUST

Pak-US joint S&T project

Professor Dr. Umar Khattak, Head of Department at the Institute of Geographical Information Science (IGIS), National University of Sciences & Technology has embarked on management information system project which will be executed in collaboration with Center for Natural Hazard and Disaster Research (NHDR) and the Remote Sensing Hydrology Center (RSHC) at the University of Oklahoma.

The goal of the project is to build national capacity of Pakistan in flood disaster risk mitigation through research and training in geographical information science. The project will carry out research activities in two key areas to strengthen flood disaster risk management: 1) investigate the

current status of the flood disaster risk assessment and management setup in Pakistan and initiate quantitative research studies; 2) develop skills in flood disaster risk reduction research and applications with focus on hydro meteorological disaster; 3) conduct research studies for a practical decision-support system for early warning of flood disasters and evolving crisis situations; and 4) establish a link and improve collaboration between government, non government and academic institutions to respond to flood emergencies more expediently. The project will be completed in three years with a total budget of nearly US \$360000; about US \$145000 on Pakistani side and about \$ 215,000 on US side.



NUST Community Service Club girdles up for flood relief

A meeting was held under the chairmanship of Pro-Rector (RIC) Engr Muhammad Mushtaq to envisage a policy and programme thereupon to help the flood victims in the affected areas of Sindh. All the Principals of the institutions at H-12 Campus and Directors attended the meeting which started with an elaborate briefing by Director Administration Mr Arif Mahmood Siddiqui. The briefing highlighted the efforts of Nustians under the banner of NUST Community Service Society. Different ways and means were suggested and discussed to help the brothers in trouble. Besides other measures and steps, it was decided that NUST employees serving in grade 1 to 16 will donate their one day salary and all the officers will donate their two days salary for this noble cause.

Administration pursuing development projects

Mindful of the requirement of on-campus accommodation for students, the Administration Directorate continuously pursues construction of new buildings like hostels and Day Care Montessori at the central campus in Islamabad. These initiatives go a long way in facilitating the students and faculty both at NUST.



Three new hostels namely Attar-1 and Razi-2 for boys and Ayesha Hostel for girls have been constructed to accommodate maximum number of

students. With the construction of these new hostels at the main campus, the number of hostels has reached the figures of four and eight for girls and boys respectively. These hostels now have the capacity to accommodate 2,700 students. It is pertinent to mention here that such facilities are scarcely provided by other universities in the country.

Similarly, NUST Day Care and Montessori have started functioning in the Islamabad campus from Sep 15.



NUST takes steps to prevent Dengue spread

As Dengue Fever epidemic has claimed many lives across the country and remains to be a potent threat, NUST has geared up efforts to raise awareness among its students, faculty and staff. The university's administration and medical directorates have been very active to counter the epidemic by holding anti-dengue campaign.

In his lecture on Dengue Fever, Director Medical Sciences Dr Mustansar Mujib ul Haq talked about the nature, causes and remedies of the disease. The presentation, held at School of Civil and Environmental Engineering, was attended by a large audience.

Dr Mustansar said, "Demographic explosion in urban areas has resulted in housing problems. Consequently, slums have grown like mushrooms in the cities and as a result, the standard of life has declined drastically. Therefore, unhygienic conditions in these areas serve as an impetus to the spread of Dengue Fever."

Dr Mustansar emphasized that use of substandard and ineffective mosquito sprays should be avoided as these sprays only make the flying insects more resistant towards repellants. As a result, mosquitoes instead of dying get used to these remedies and live longer, he added.

He said that the disease is curable but failing to get timely and proper diagnosis may prove fatal.

Banners, leaflets, and plenty of study material on Dengue Fever have already been distributed in all schools/colleges of NUST.



Convocation at College of E&ME

272 engineers graduate with a promising future

As many as 272 students were conferred bachelor degrees in the disciplines of Electrical, Mechanical, Mechatronics and Computer Engineering in a simple but graceful 17th undergraduate convocation ceremony held here on Sep 17 at the College of Electrical and Mechanical Engineering (C of E&ME), National University of Sciences and Technology (NUST).

Rector NUST Engr. Muhammad Asghar graced the ceremony as the chief guest. Held at the College auditorium, the ceremony was attended by graduating students, their parents and faculty members. Gold Medals were awarded by the chief guest to the students for their well-deserved and distinctive achievements. President's Gold Medal was awarded for overall best academic performance to Haris Ikram. Prime Minister's Gold Medals for best academic performance in each discipline were bestowed upon Haris Ikram, Zafar Iqbal, Amna Jamal and Rabbia Asghar. The COAS Gold Medal was awarded to Technical Cadet Asad Nisar. Rector's Gold Medals

for best project were conferred on Ali Salahuddin, Bilal Anjum Ahmed, Ameer Hamza and Shaheryar Baig.

Speaking on the occasion, the Rector expressed his gratitude over the splendid performance of the students. He extended his heartiest felicitations to the esteemed faculty, graduating students and their parents.

The Rector in his speech talked about the significance of engineering education in the socio-economic uplift of the country. He advised the graduating students to get maximum benefit from the knowledge gained at the University in their respective disciplines in order to serve the dear motherland.

Engr. Muhammad Asghar also lauded the Higher Education Commission (HEC) for revitalizing the role of universities in Pakistan. Since its inception, he maintained, the Commission has taken several initiatives towards increasing access to higher education as well as ensuring quality at all levels. He highlighted the role of NUST in higher education, saying in a relatively short span of

time NUST had achieved a globally acclaimed 250th ranking in the world. "The College of E&ME has made a significant contribution in attaining this high rank of NUST," he noted.

While delivering the welcome address, the College Commandant, Maj. General Muhammad Shahid, highlighted the achievements of the College during the recent years.



19th MCE Convocation Degrees conferred on 166 Civil Engineers

Risalpur - Military College of Engineering (MCE) held its 19th convocation on September 15 to award bachelor degrees to 166 graduates of two degree courses in the discipline of Civil Engineering. Rector NUST Engr Muhammad Asghar was the chief guest on the occasion. Lieutenant General Muhammad Ahsan Mahmood Engineer-in-Chief was the guest of honour.

In Officer's Degree Course 66 and Cadets Engineering Degree Course 67, the President Gold Medal was awarded to Captain Engineer Assad Jamal, Engineer-in-Chief's Silver Medal was awarded to Captain Engineer Zeeshan Bashir. Rector Gold Medal for best project was conferred upon

Gentleman Cadet Engineer Muhammad Husain Masood. In Officer's Degree Course 68 and Cadets Engineering Degree Course 69, the President Gold Medal was awarded to Captain Engineer Muhammad Nadeem Akhtar, Engineer-in-Chief's Silver Medal was bestowed upon NUST Cadet Engineer Sohail Ahmad Raza and Commandant's Medal was awarded to Captain Engineer Salman Rashid. Rector Gold Medal for best project was received by NUST Cadet Engineer Sohail Ahmad Raza.

The convocation was coupled with Open House in which the students displayed their innovative projects.



Workshop on retrofitting of buildings at MCE

A workshop on "Retrofitting of High Rise Buildings in a Metropolitan Area" was held on July 22 at Military College Of Engineering Risalpur to educate professional engineers about different aspects of evaluation, design, planning and execution of retrofitting. The workshop was conducted by Engr Abbas Shah, PE Civil Engineering, PE Mechanical Engineering.



College of E&ME participates in 'Shell Eco Marathon', Malaysia



Team Emenents from NUST participated in 'Shell Eco Marathon 2011' held at Sepang international circuit in Malaysia. The competition took place from July 6-9. Project Kaar by nustians successfully managed to grab 8th position in prototype category in the mileage completion. The Shell Eco Marathon is the largest and most prestigious environment focused competition in the world. The participants build vehicles that attempt to cover an allotted distance using as little fuel as possible. Teams from all over the world participated in Sepang. The completion provided a challenge in two categories, mainly, "Prototype" in which cars focused on minimizing fuel consumption with few restrictions on size and shape and "Urban Concept" where the cars are nearer in design to real cars, including features like upright driving position, head-and taillights, as well as more realistic average speeds.

After successful safety and technical inspections the urban concept vehicle evolved by the Nustians was on track on the last day. The hard work of team paid off and the vehicle covered a distance of 35 KM per liter. The vehicles were a result of a year's effort of student teams from NUST College of Electrical and Mechanical Engineering. The effort was managed by the Automotive Research Group of Mechanical Engineering department.

Professor Mehmood Anwer khan, Associate Prof Col Dr Waheed and Assistant prof Raja Amer Azim supervised the effort of students. Furthermore, Dr Qasim Sheikh Dir I&E, Salman Absar Di, Dr Bilal , Dr Abdul Ghafoor supported the team for this project.

The exposure to new technologies and strategies would help students evolve and also extend efforts to the automotive research group.



C³A conducts workshop on stress management

NUST staff often work in a high pressure environment so for them stress is inevitable' said Naila Mir, psychologist at the Centre for Counselling and Career Advisory after conducting a 2-hour stress management training session for 22 NUST staff officers from various departments at NCVI conference hall on July 8.

The purpose of the course was to help NUST employees



handle stress better at work and in their personal lives. The participants were given training in using various stress coping strategies to avoid being overwhelmed at the office such as easy-to-follow tips, physical and mental exercises, breaking down stress into small chunks, avoiding procrastination, striking work-life balance, etc.

The participants of the training learnt how to measure their stress level through a questionnaire and participated in a lively discussion in which everyone shared their personal experiences with one another. The feedback forms of the participants indicate their positive response to the training session. Since this workshop included only staff officers, C³A, Centre for Counselling and Advisory recommends that stress management training should be given to faculty members and clerical staff as well to enhance their productivity and quality of lives. Students at NUST are also encouraged to contact C³A situated at SADA building whenever they face overwhelming situations in both professional and personal lives.

National Engineering Robotics Competition

The Department of Mechatronics Engineering organized the 7th NERC from 28th June to 2nd July. National Engineering Robotics Contest (NERC) is a joint venture between the Department of Mechatronics Engineering, NUST and HEC STEMS career projects to promote research in robotics and its related fields in Pakistan.

This contest provides a common environment for the integration and evaluation of various mechanical and electronics designs, control and path planning algorithms and agent architectures. There were two main categories in the competition; the indigenous category and the LEGO category. The aim of the indigenous contest was to build an autonomous robot which is capable of picking colored blocks and placing them in slots of their respective color on a pre-designed arena. Crossing each point carried specific marks. Winning teams were decided on the basis of maximum points scored in minimum time. The LEGO category was designed to ensure the participation of younger candidates, mostly from high schools. The aim of this category was to use robotics kits to design a robot capable of placing pre-loaded colored blocks in slots of their respective colors.

A total of 160 teams from different universities, colleges

and schools all over the country participated in the contest that was marked by brilliant performance, extreme accuracy and high spirits. The actual contest was preceded by two days of 'heats' (qualifying rounds) and finally a total of around 40 teams were selected to compete on the final day.

Major General M. Shahid HI(M), Commandant College of Electrical & Mechanical Engineering in his address welcomed everyone to the National Engineering Robotics Contest 2011, he appreciated how the number of participants had grown over the years and the standard of the competition has risen. He said "Winning or losing is



not the aim of this contest, it is to show the world the potential of Mechatronics engineers of Pakistan and to encourage students to join this engineering field". Cash prizes worth Rs 4,25,000 were allocated for the contest with awards ranging from winners, runners up, engineering design awards to participation prizes for the competing teams.

The Honorable chief guest, Dr. Ansar Parvez, Chairman Pakistan Atomic Energy Commission distributed the prizes and appreciated the hard work done by the participants. In his address he congratulated the qualifying teams of the heats and the winners of the competition and emphasized on the importance of putting knowledge to practical applications and called "National Engineering Robotics Contest" its best example.

NUST students undergo foreign internships through IAESTE

For technical and professional development of students, NUST encourages and promotes high quality practical training exchange programmes. Almost 10 students from NUST received internships this year through 'The International Association for the Exchange of Students for Technical Experience' (IAESTE) Pakistan.

IAESTE received 25 opportunities for the year 2011. Out of these 9 were realized, 2 through the Karachi chapter and 7 through the Islamabad chapter. The Islamabad chapter achieved significant growth with an addition of over 40 members to the local chapter. 10 students alone from NUST successfully completed their internships at some of the renowned institutes from Japan, Turkey, Hungary, Iran, Syria, Brazil and Austria.

Arsalan Ahmed, Saadia Qamar, Muhammad Taha Ali, Hashaam Masood and Nauman Zahoor (SEECs), Neelam Ejaz (NBS), Haaris Ghafoor (E&ME College), Jibraan Khalid (SMME), Fatima Abbas and Ali Abbas (PNEC) are some of the students. These internships provided them the relevant experience in their field of studies.

IAESTE Pakistan also entertained

four exchange students from abroad, from Iran, Syria and Hungary. Two students namely, Raza Noorian and Szilvia Hinkel from Iran and Hungary respectively were placed at National University of Sciences and Technology in Islamabad working in the civil and robotics department, and two did their internships at the Pakistan Naval Engineering Complex at the mechanical department.



Hungarian exchange student completes internship at NICE

Ms. Szilvia Hinkel a foreign student from "HUNGARY" under International Association for the Exchange of Students for Training Experience (IAESTE) joined NUST Institute of Civil Engineering on June 21, as an internee for 3 weeks. Lec. Ammara Mubeen was her co-ordinator during her stay at NUST Institute of Civil Engineering (NICE).

She spent some time in each laboratory of NUST Institute of Civil Engineering. She has performed various experiments and tests in the laboratories of NUST Institute of Civil Engineering. She had been guided and supported by cooperative staff of all the laboratories. She also visited Pakistan Monument, Shakarparian, Daman-e- Koeh, Loke versa.



Second HL7 training and certification session held

HL7 Pakistan successfully completed its second five days training session from 27 – 31 July. The training was organized in close collaboration with Shaukat Khanam Memorial Cancer Hospital and Research Centre (SKMCH & RC), Lahore, which shared their best practices through standards. The purpose of the training was to provide knowledge and practical techniques in making use of HL7 standard. HL7 received active participation from various health and health IT professionals and academia across various cities of Pakistan.

The four days session covered tutorials and various interactive sessions. The participants were given different case studies for their evaluation and also practice for the HL7 International RIM Certification Exam, which is going to be held on 16th August 2011. In the concluding session, the participants were awarded certificates on successful completion of the training. NUST -SECS has been working with HL7 Pakistan to bring positive change in the health sector in Pakistan.



MCS organizes Open House

An Open House was organized at Military College of Signals (MCS), NUST, Islamabad. Open House offers a unique opportunity for our graduating students to display their creative skills and knowledge through their final year projects. The event also showcased the technological vision of faculty of MCS for their contribution in provision of solutions to society at large. A large number of high quality application oriented telecom and software engineering projects were displayed for the visiting representatives of industry, academia and students of MCS.

More than 200 representatives from industry and the corporate sector attended the Open House. Commandant Military College of Signals highlighted the achievements of MCS and its students. He also further said that our graduates are employed at leading Telecommunication and Software sectors at national as well as international levels and contributing usefully. He expressed that like previous years, this year also we expect majority of our graduating students to be employed within months of their graduation. In fact a number of students have already been employed by top rated industries. Representatives from industries and corporate sectors also set up their Recruitment Booths at the Open House. The recruiters shared their organizational requirements with the graduates, reviewed their resumes also conducted follow-up interviews. At the closing session he appreciated the efforts put by MCS faculty for organizing the Open House to exhibit the talent of its graduates and to induct them in their professional careers.



NICE faculty undertakes field trip

NUST faculty including Nasr-ul-Haq, from the Survey Department at NUST Institute Of Civil Engineering along with all survey Lab staff visited the Sangjani, Taxila and Hattar to observe Geodetic Survey Control points in the area. The educative trip was made on September 14. These survey control points are used as reference points for making the map of area. Part of the geodetic control network which was established for mapping of Pakistan. The visit was extremely educative and informative for the faculty & staff of NICE.



1st PEC Accreditation Status Tracking Conference held

1st PEC Accreditation Status Tracking Conference was held on 28th September at main campus, NUST Islamabad and was chaired by Pro-Rector (Academics) Dr. Asif Raza. Deans and Head of Departments (HoDs) of all the NUST Engineering Colleges attended the Conference along with Registrar, Director Human Resources, Director Research and Deputy Director Academics. Recitation from Holy Quran was followed by the Welcome Note by Pro-Rector (Academics) Dr. Asif Raza and a brief presentation by Director Quality Assurance Engr Muhammad Ismail highlighting importance of accreditation process and the desired details that institution should present during the conference.

All the NUST engineering institutions presented the PEC accreditation status of their programs. They also provided update on the actions taken on the observations made by the PEC Teams during their previous visits to the respective programs. Various decisions were enunciated by the chairman to improve the quality of NUST Engineering Programs. Pro-Rector (Academics) urged the institutions to follow the decisions seriously.

NBS conducts Project Management Professional workshops

This year NUST Business School held three Project Management Professional (PMP) workshops in July owing to a tremendous demand of the industry professionals. These workshops are a great opportunity to increase industry academia linkages and learn about the issues faced by the businesses. Several members of the alumni and staff have also attended these workshops.

The resource person of these workshops was Muhamamd Kamran Khalid (PMP, Six Sigma Black Belt, ISO 9001/14001/18001 Lead auditor). The highlight of the workshop was the collaboration of NBS with Operations 360 to provide a test simulation software exclusive to participants of NUST Business School PMP trainings.

Several industry professionals participated in the workshops and belonged to diverse industries and multinational corporations including Western Union, Ericsson, Telenor, MTBC, British Council, NGO's and Armed Forces personnel.

There is a tremendous demand for professional certifications and NUST is always one step ahead having the perfect combination of professional trainers, required infrastructure, and user friendly atmosphere.

Many candidates also requested to launch MS degree program on Project management, Supply Chain Management and other professional certifications.

NUST participation in conference on entrepreneurship

Lahore School of Economics organized a four-day conference on entrepreneurship jointly with the World Entrepreneurship Forum from July 27 to July 30. Junior World Entrepreneurship Forum (JWEF) is based on the model of the World Entrepreneurship Forum that was founded by EMYLON Business School France. This was the first time JWEF Pakistan organizing a conference for younger generation in Pakistan. TIC coordinated with NUST Entrepreneurial Club (NEC) to finalize the submission of student proposals for the competition. 8 proposals from NUST students were examined and reviewed by TIC Staff and submitted to JWEF. All the papers were accepted and authors of the proposals were invited to present the papers in the event. General Manager TIC represented NUST in the forum in Lahore and presented an update on relevant NUST initiatives including DISCOVER and CIE to encourage Entrepreneurship.

Maiden visit by Secretary MoST

The newly appointed Federal Secretary, Ministry of Science and Technology (Parent Ministry of NUST) Akhlaq Ahmad Tarar arrived at HQ NUST on his first visit to the University on 22 July 2011. He was accorded a very cordial welcome at Rector's office and was given detailed briefing

on University's journey towards excellence over the years especially after the commissioning of H-12 Campus. After the briefing Secretary MoST visited Centre for Innovation and Entrepreneurship (CIE), School of Electrical Engineering and Computer Science (SEECs) and School of Mechanical and Manufacturing Engineering (SMME). He was very pleased to observe the students and faculty busy at research and exploratory work. He wished the University greater successes in their endeavors and assured his unstinted and all-out support to NUST.



Visit of IGT&E

In another high-profile visit, Lt Gen Muzammil Hussain, Inspector General Training and Evaluation (IGT&E), GHQ visited NUST on 03 Aug 2011. He was extended a very warm welcome on his arrival. Cordial and informal chat at Rector's office preceded a detailed briefing at the main Conference Room which was also attended by Pro-Rectors, Dir P&D, Chief Editor and Principals of NBS, SMME and SEECs. After the briefing IGT&E acknowledged to the participants of the meeting and was pleased to note that the University had achieved momentous growth and progress in a very short time. He commended the accomplishments of NUST as indeed a premier university. He was also conducted to a round of some schools of NUST including SMME, SEECs, CIE and NBS where he visited the labs and interacted with the students.



The general assured the Rector of his support to NUST and felt proud the

University had come a long way under the patronage of Pakistan Army.

MoST delegation

A delegation consisting of heads of organizations under Ministry of Science and Technology (MoST) along with senior officials of MoST visited NUST on September 14.

During the meeting, lasting two hours, with NUST officials, the delegates, after being apprised of the programmes of studies offered at the University and its growth as a centre of excellence internationally, reached a consensus that there was a need to strengthen the bond between the University and the parent ministry and its subsidiary departments/ organizations.

It was also deemed appropriate in the meeting that MoST organizations work actively in liaison with NUST and give their input in the curriculum development and promotion of research culture in the University simultaneously.

The ministry officials were all praise for the rapid growth NUST had experienced and its global stature thereby



in a relatively short span of time. They showed their commitment towards cooperating and supporting the University in all respects.

Later, the guests went to various NUST constituents and departed after a lunch hosted in their honour.

Students from Quality School, Wah

On the invitation of Pro Rector National University of Sciences and Technology (NUST), Engr Muhammad Mushtaq, a 45-member student delegation along with five teachers from Quality School, Wah Cantt visited the University's main campus.

"Revolutionary steps must be taken to increase female literacy in the country. Educating one girl means educating an entire family" stated Muhammad Asghar, Rector NUST while speaking with a group of 9th class students and their teachers from Quality Foundation School on July 13.

The students were given a detailed briefing on the functioning of NUST. They were told that NUST, over the years, has developed into a research-intensive university, which is a result of untiring services rendered by its faculty and staff. The students were all praise to know that NUST is counted among the top 400 universities of the world and also has the privilege to be ranked among the top 100 Asian universities.

During the question and answer session, the Pro Rector, responding to a query, described the two types of scholarships, i.e., merit-based and need-based, that the University offers to deserving students. He highlighted that the major chunk of the University's student population either belongs to middle class or lower middle class, adding that more than 33 percent students at NUST are given financial assistance. The Pro Rector also hinted at community service initiatives that NUST undertakes in order to provide relief to conflict or disaster-hit masses. He insisted that such humanitarian acts inculcate the spirit of compassion among students who in turn prove to be very helpful citizens.

Later, the students visited different schools in the main campus where they took special interest in the state-of-the-art laboratories. They also availed the opportunity to speak to some of NUST faculty members and students. In the end of their visit, the students reiterated their resolve to work hard and expressed their interest to be a part of a university like NUST in the coming years of their educational careers.

It is pertinent to mention here that being a premier educational institution for higher learning in Pakistan, NUST often arranges such study tours for the students of different schools and colleges in urban and rural areas of the country. Such trips encourage them to work hard and strive for better prospects in top-notch comprehensive universities.



Defence Attaché Tajikistan

Defence Attaché Tajikistan, Lt Col Shaukat Sharipov visited NUST on 16th September, 2011. He met with Director Acad, Director QA and Manager IC. The guest was briefed on the genesis of NUST, its constituent institutions and academic programs. The possibilities of entering into academic collaboration were also discussed. A visit to library and research labs at NUST School of Electrical Engineering and Computer Science was also arranged. This visit to NUST was organized by Joint Staff Headquarters, Rawalpindi.



VC of Sardar Bahadur Khan Women University

Ms Sultana Baloch visited NUST on September 15. Upon her arrival at the main campus, VC Ms Sultana Baloch was received by Pro Rector (RIC) Engr Muhammad Mushtaq. A detailed briefing on the achievements made by NUST in diversified academic endeavours impressed the visiting dignitary who expressed her interest in strengthening ties between the two universities at all levels. During the visiting guest's meeting with the university high-ups, it was agreed to boost the cooperation especially in the field of research. NUST offered supervisory assistance for students in preparation of dissertations in Doctoral and M.Phil-level programmes offered at Sardar Bahadur Khan University.

NUST officials not only assured the Vice Chancellor of taking measures helpful in inter-faculty cooperation but also extended coaching services for the students in the preparation of NUST entry test. Later, the esteemed guest was taken to various schools of NUST in the main campus.



Sri Lanka Command and Staff College delegation

A 25-member delegation of Sri Lanka Command and Staff College led by Group Captain H.M.S.K.B Kotakadeniya visited NUST on July 18. After a briefing on NUST, the delegation visited library and research labs at NUST School of Electrical Engineering and Computer Science.



NUST student shines in international debating contest

An international debating competition was held in Kuala Lumpur under the title "Malaysia Debating Fest 2011" from June 29 to July 02. Teams from 40 nations took part in the debates with each team comprising four speakers. Hashim Mufti, from SEECs-NUST, was among the four-member Pakistani squad. After remaining unassailable in a series of cut-throat contests with various teams, Hashim finally managed to grab the runners-up slot.

The four-member squad of speakers was selected on the basis of countrywide trials conducted by the Government of Pakistan. In the event, five rounds on different themes took place. In the semifinals round, two Pakistani speakers came out victorious among 26 others. Hashim Mufti kept the audience spellbound with his scintillating performance throughout the competition and brought honour to the country.

MCS orators excel in All Pak Parliamentary and Bilingual Declamation Contest

12th All Pakistan Parliamentary and Bilingual Declamation Contest was held at King Edward Medical University, Lahore from 20th to 23rd of July 2011. 35 teams from different universities from all over Pakistan took part in this competition. Participating Universities included Govt University Lahore, FC University Lahore, GC

University Faisalabad, UET Lahore, SEECs-NUST, Khyber Medical College and Rwp Medical College etc. Hamza Ishtiaq and Nauman Tafzil from MCS participated and Hamza Ishtiaq stood first in English declamation where as Kyber Medical College was awarded with declamation trophy.

Inter-school table tennis matches

NUST Inter-school women's table tennis championship was held on Sep 23 at School of Mechanical and Manufacturing Engineering (SMME) NUST, Islamabad campus. The participating schools were SMME, NCVI, SEECs, IESE and SADA. NUST Sports Branch organized the event and supported the students.

After staying unbeatable in the pool matches for women's single, NCVI and SEECs qualified for the finals. After an exciting match, NCVI clinched the top position. Women's doubles was held the same day. SEECs outshone all other teams in the final round, making them the proud winners of the game.

Meanwhile men's inter school table tennis match was also held the same day. Teams from SCME, SEECs, SCCE, NCVI, NBS, SMME and IESE participated. The winners of the pool matches played the semi-finals on Sep 23 at SMME. Students from NCVI and NBS clinched top spots to play in the finals. NCVI played exceptionally well and stood winners in the Men's Single table tennis championship. Men's doubles was held on Sep 25. After an exciting match between NBS and NCVI, NCVI emerged as the overall champions yet again.



Independence Day Climbing Festival

NUST Adventure Club (NAC) members participated in Independence Day Climbing Festival for Girls held on August 13 at F-9 Park, Islamabad.

Though held in the month of Ramadan Climbers from Rawalpindi and Islamabad enthusiastically participated in the one-day competition. They showed no sign of fatigue and battled their way through all rounds in the contest.

Two NAC Members were among the winners with Rabia Sakhi and Esha Iqbal both from NUST Business School grabbing 2nd and 3rd positions in the Girls Senior category.



NUST alumnus included in international 'Who's Who'

Dr. Javed Ahmed, who completed his PhD at Military College of Signals (MCS) has been included in international biographical directories "Who's Who in America 2011" and recently "Who's Who in Asia 2012" in recognition of his excellent achievements at NUST, UCF (University of Central Florida), and NDC (NESCOM) during and after his PhD studies.

Dr. Javed Ahmed has conducted a commendable research work in Robust and Real-time Active Camera Tracking System, a vision Based System for a UGV (Unmanned Ground Vehicle) to Handle a Road intersection, Human Action Recognition, Image Matching, Image Stitching, and Multi-spectral Image Fusion

During the period from July 2006 to February 2007, he carried out a joint-research at UCF (USA) under the funding of UCF, NDC, and NUST resulting in his two excellent papers published in AAAI-07 (Canada) and CVPR-08 (USA). These conferences are considered premier in the fields of artificial intelligence and computer vision in the world, respectively. In total, he has got to his credit 12 research papers of very good quality published in various international journals and conferences.



Students win gold for best research project on IT & Telecom

A group comprising four students from NUST, including Ather Ali, Ali Raza Anjum, and Areeb Riaz with team-leader Absar-ul-Hasan Shah from College of E&ME, was awarded Gold Medal for best research project on IT & Telecom by the Pakistan Telecommunication Authority (PTA) at its headquarters on July 8. Chairman PTA, Dr. Mohammed Yaseen presented gold medals to the winners of the competition.

The Gold medals were awarded on

the basis of a competition among accredited national universities held by PTA for the best research projects on IT & Telecom. Total 10 research projects were received from different universities which were later on scrutinised and evaluated by a PTA committee through a transparent procedure of marking. On the basis of highest obtained marks two research projects of Mr. Faran Mahmood (Team Lead) from Institute of Space Technology Islamabad (IST ISB) and

Mr. Absar-ul-Hasan Shah (Team Lead) from National University of Science and Technology Rawalpindi (NUST) were selected for the award of Rs.50,000/- each and gold medals.

Last year the same group was awarded NUST Gold Medal for Best Final Year project, and a Gold Medal (Highest Award) at COMMPEC competition hosted by the computer Engineering Dept, CEME, for overall Best Project, beating 135 teams for universities all over Pakistan.



Dr. Arshad Ali receives Leadership Award

Teletimes International Magazine conferred upon Dr Arshad Ali, Principal SEECs-NUST, Leadership Award for Academic Services to ICT in a ceremony held at Islamabad Club on July 22.

Such awards are bestowed upon telecom and technology organisations as well as industry leaders, who make substantial difference to the SMENA region ICT and Technology industry and utilise their energies and resources to promised value for the end-users.

In his remarks Dr Arshad Ali said, "I am extremely thankful to NUST and its administration for providing me the platform to realise my potential for the benefit of our students, IT industry and our country."

The award ceremony was followed by a dinner and musical performance by renowned artists.



NUST academic wins HEC Best Young Scholar Award

Dr. Syed Ali Khayam from NUST School of Electrical Engineering and Computer Science (SEECs) has been granted the Best Young Scholar Award for the year 2011 in the "Engineering and Technology" category.

The HEC Best Young Scholar Award is a yearly award granted to a maximum of 4 PhD Pakistani faculty members under

40 years of age, or PhD students of any age. Only one award is granted every year in the category of "Engineering and Technology". This year Dr. Syed Ali Khayam from NUST School of EECS has been granted the Best Young Scholar Award in the "Engineering and Technology" category. Dr. Khayam is the founding director of the Wireless and Secure Networks (WiSNet) Research Lab at NUST-SEECs. In addition to his research publications, Dr. Khayam has also developed technologies for high-tech technology companies (including many public Silicon Valley companies like Mavell Technologies, Cavium Networks and WiChorus/Tellabs) which are now deployed worldwide in the companies' products. He has received research awards from many academic and industrial research organizations, including Pakistan National ICT R&D Fund, Marvell Technologies, Cavium Networks, WiChorus/Tellabs, Nokia-Siemens Networks, Nokia Research, Vertical Systems, and Korean Research Foundation. He currently has 4 patents pending at USPTO.

Furthermore, he has over 70 publications to his name in some of the most prestigious publication venues in his areas of interest.

NUST faculty grabs Best Research Paper Award

Faculty member at Military College of Signals (MCS) NUST, Dr. Asif Masood was awarded "Best Research Paper Award" by HEC. The award, including a certificate and cash prize is shared equally among all authors of the paper but Dr. Asif Masood was the sole author of the selected paper. The honorary award was given to him in Outstanding Research Award Ceremony on Sep 22, 2011. Dr. Asif had his research paper titled "Optimized polygonal approximation by dominant point deletion".



"Shoot for the moon. Even if you miss, you'll land among the stars." - Brian Littrell



Research Papers Published

Muhammad Irfan of National Institute of Transportation (NIT/SCEE/NUST) and Dr. Muhammad Bilal Khurshid of Military College of Engineering (MCE/NUST), has co-authored the following research papers in International journals of repute:

- i. Research paper, titled **“Optimal Performance Threshold Determination for Highway Asset Interventions: Analytical Framework and Application”**. It has been published in Journal of Transportation Engineering - American Society of Civil Engineers (ASCE). Vol. 137, No. 2 (2011), USA.
- ii. Research paper, titled **“Planning Stage Estimation of Highway Project Duration on the Basis of Anticipated Project Cost, Project Type, and Contract Type”**. It has been published in International Journal of Project Management. Volume 29, Issue 19 (2011), Elsevier Ltd and IPMA, UK.

A research paper named **“Neural Networks based Airfoil Generation for a Given Cp using Bezier – PARSEC Parameterization”** has been published in one of the top ten impact factor journals in Aerospace Engineering subject category. Aymen Saleem, a co-author of the paper, has also been judged to have presented Best Aerospace Engineering project at CAE. He was supervised by Athar Kharal. It is an achievement for NUST that a student who has yet to complete his BE studies got his paper published in a prestigious research journal.

Akhtar Khurshid, from CEME recently had his chapter published by INTECH Publishers Croatia, Europe. He authored a chapter in a scientific book **“Advances in Mechatronics”** with the name **“Robotic Grasping and Fine Manipulation Using Soft Fingertip”**. It has an open access online and can be found on the net. Mr. Abdul Ghafoor and M. Afzaal Malik jointly worked on this chapter with Akhtar Khurshid.

Engr Syed Zulqarnain Ahmad Gilani, faculty member at MCS has published a book with LAP-Lambert publishers. The book titled **“Automated Glacier Segmentation by Fast Adaptive Medoid Shift Algorithm”** was published on 31 Aug. The Faculty member did his BE and MS from NUST and is a recipient of President's Gold Medal in his Masters. His research interests include Computer Vision and Remote Sensing.

Research Papers Presented

Research paper, titled **“Establishing Efficient Project-Level Strategies for Pavement Maintenance and Rehabilitation Considering Multiple Objectives using Data Envelopment Analysis”** written by Muhammad Irfan (NIT/SCEE/NUST) and Dr. Muhammad Bilal Khurshid (MCE/NUST) was presented in 2011 Mid-Continent Transportation Research Symposium (August 2011), in Iowa State University, Ames, Iowa, USA.

“Environmental pollution have attributed notably in research, targeted at proving that the media do influence the public agenda”. This was stated by Prof. Dr. Masrur Alam Khan, Head, faculty member, NBS at the Sixth International Conference on Interdisciplinary Social Sciences at the University of New Orleans, USA. He was sharing the findings of his recent empirical research of ‘A Longitudinal Study of Agenda-setting on Environmental Pollution’ during his presentation.

A Research Paper Titled **“Using Tempered Glass as a Replacement of Asphalt Concrete Wearing Course”** was presented in the 9th EAST Conference at Jeju Korea By Col Dr. Intikhab Ahmed on June 22-23. He is a faculty member at MCE.

Akhtar Khurshid from college of E&ME presented his paper in the International Conference on Manufacturing Science and Engineering (ICMSE) on April 9-11. His paper was appreciated and selected for International journal of **“Advances in Mechatronics”** for publication in May. His research article named **“Robotic Grasping and Fine Manipulation Using Soft Fingertip”** is a step towards developing a prosthetic hand which mimics the human hand. Mr. Abdul Ghafoor and M. Afzal Malik jointly worked on this chapter with him.

“What we become depends on what we read after all professors have finished with us. The greatest University of all is the collection of books.” Thomas Carlyle.



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