

# Newsletter

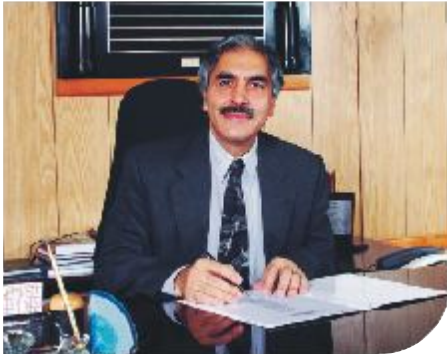
NWFP UNIVERSITY OF ENGINEERING & TECHNOLOGY  
PESHAWAR



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## Vice Chancellor's Message



Pakistan continues to be buffeted by adverse geo-political winds, that have not shown signs of abating. A weak economy, coupled with strident lawlessness, further exacerbates the already bleak situation. Mercifully, there appears some hope in the higher education sector. Universities went through very uncertain times in the last few months, where even running day to

day affairs was difficult for some. Now, a faint silver lining is starting to appear in the dark clouds.

The anti-HEC sentiment that was at an all-time high a year back, seems to be petering out. There is realization that budgetary cuts imposed on HEC—read universities—need correction, and amounts originally approved must be honoured. Universities will once again get onto a fast-track of development.

Dr. Samar Mubarakmand, Member Science and Technology, and Dr. Ashraf Moten, Chief Science and Technology, of Planning Commission of Pakistan, visited us last month, and said, inter alia, that there is a rethink in the higher echelons, that the UESTP project needs major changes. It may be more prudent to upgrade some existing universities, rather than build-from-scratch new ones with a much higher cost. We totally agree!

And finally, we are given hope that funding for our Jallozai campus will be fully restored. This is very heartening, for which I would like to thank the Governor, the Planning Commission, and HEC. I am grateful to the entire “family” of UET who have helped in earning this trust.

God bless you all!

Engr. Syed Imtiaz Hussain Gilani

## Satellite Campuses



Mardan Campus



Bannu Campus



Abbottabad Campus

## INSIDE

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- UET and IMSciences set-up TIC
- UET wins Best Design Award in the National Design Build and Fly Contest
- Ph.D Defense held
- In Focus: Dr. Hamid Ullah

## DR. SAMAR MUBARAKMAND VISITS UET

The Planning Commission has decided in principle not to slash budget allocations in PSDP of NWFP and Baluchistan universities. In the backdrop of recent budgetary cuts in public sector universities, the Commission has decided to facilitate these universities in every aspect. This was stated by Dr. Samar Mubarakmand, an eminent nuclear scientist of Pakistan, and currently member of the Planning Commission, during his visit to UET, Peshawar Campus.

Addressing a senior level audience that included the vice chancellor and project directors, he said he wanted to find further areas where the Planning Commission and UET can identify projects that meet the goals of national development. This visit was ample proof of importance that the government gives to higher education.

The meeting reviewed UET's development projects, with a Rs. 9.65 billion portfolio, that included the establishment of new Campus at Jalozai, state-of-the-art research centers, including National Institute of Mechatronics, Earthquake Engineering Center, National Institute of Urban Infrastructure Planning, and strengthening and rehabilitation of university infrastructure.

Advisor Finance and Planning, M. Sarwar Khan, presented the status of all projects. He said the projects were more than 80% complete, which reflected the strong commitment of the university. He said before initiating these projects, UET had only 1700 students, but following the HEC's objective, to increase access, we have now 3500 students, and after the completion of these projects, this strength would reach 8000 students.

Referring to Pakistani scholars pursuing Ph.D in foreign countries, he said 128 UET scholars are studying in top universities of USA, Europe, Canada, Italy and Thailand, but they were facing acute shortage of funds, and it was difficult for them to continue with their studies. Delay in release of funds, fluctuation of foreign exchange, and cost escalation of civil works, were other critical issues.

Dr. Samar Mubarakmand promised that the Planning Commission will release funds for the HRD component, so that scholars complete their studies in time. Appreciating the sensitivity of the issue, Dr. Mubarakmand made a special appeal to the Deputy Chairman, Planning Commission, to release funds for HRD to universities.

Establishment of Jalozai Campus, was also reviewed in detail. Sarwar Khan informed that the project approved by ECNEC in

2007, at the cost of Rs. 6. 56 billion was aimed to develop the Jalozai Campus, by establishing eight engineering departments relevant to national needs, but due to the prevailing situation, progress in this area had been slow. Dr. Mubarakmand assured that the Planning Commission will leave no stone unturned to facilitate the University in establishing this campus.

Dr. Mubarakmand said that he strongly believed in strengthening the existing universities and make them "world class". The idea of setting up nine world-class engineering universities by Prof. Dr. Atta-ur-Rehman, ex-Chairman HEC, at the cost of Rs. 370 billion could not be implemented due to economic crisis, and weaknesses in project planning. Instead, the Planning Commission has shared alternate proposal costing much less with the Prime Minister, to strengthen the existing universities, and bring them to international standards in research and development.



Dr. Samar addressing the audience

He appreciated the UET linkage program with foreign universities, and urged UET to invite partner universities to collaborate with departments of UET, and declare these as their external campuses. "Invite them to your campus, have them identify the gaps in existing set ups, and then develop PC-1 for the Planning Commission. We assure you that Planning Commission will facilitate you", he added. He said that European and UK universities have deep interest in getting good students from developing countries. It should be our priority to exploit this opportunity.



Glimpses of Dr. Samar Mubarakmand's visit

## FUNDING CUTS THREATEN NWFP UNIVERSITIES SURVIVAL

A meeting of the Vice Chancellors of public sector universities of NWFP was held to discuss the issue of severe budgetary crisis universities are facing, and difficulty in running universities' affairs. It was decided to approach the government to resolve the serious issue of cuts in the Higher Education budget by the federal government, and to place the issue before the Governor/Chancellor of NWFP universities, Owais Ahmed Ghani, and request him to ask the Deputy Chairman Planning Commission for a meeting with vice chancellors in Peshawar.

In his opening remarks, Imtiaz Hussain Gilani said that universities have been interacting with HEC, but the situation is becoming untenable for higher education institutions, and universities in the province. In the backdrop of recent slash in higher education budget, there is a short fall of more than 1 billion rupees in the recurrent budget, and more than 2 billion rupees in the development budget. This shortfall of funds has occurred in the approved federal government budget for the session 2007-08, he added.

The vice chancellors expressed serious concerns for the PSDP allocations for the year 2009-10 by the Planning Commission. All universities have submitted their demands for 2009-10 budget allocations. But in the current state of affairs when universities are not provided with approved grant of year 2007-08, what will happen to the new allocations? It is therefore very important to draw the attention of the Planning Commission so that our future is safeguarded. It was also decided to raise the issue in the NWFP Provincial Assembly floor for public attention, through the office of the Speaker.

Representatives and vice chancellors of University of Peshawar, Frontier Women University Peshawar, Agricultural University Peshawar, Gomal University, DI Khan, Kohat University of S&T, Bannu University of S&T, Hazara University, Malakand University, Khyber Medical University, Islamia College University, and IM Sciences, Peshawar attended the meeting.

## UET AND IMSCIENCES SET UP TECHNOLOGY INCUBATION CENTER

UET and IMSciences entered into an agreement to establish a Technology Incubation Center (TIC), to help young entrepreneurs set up their start-ups. The center will provide a business-conducive environment, with all necessary office and networking facilities under one roof. This joint venture would be the first of its kind in NWFP, and will be established at the UET's Continuing Engineering Education Center.

The agreement was signed by vice chancellor, Engr. Syed Imtiaz Hussain Gilani, and Dr. Nasser Ali Khan, Director IMSciences, in the presence of project directors and administrative staff. The vice chancellor said the TIC model is operational in all developed countries, bringing real benefits in many ways. Our main focus by setting up the TIC at UET would be to help young entrepreneurs to excel in the fields of technology transfer, software development



Engr. Syed Imtiaz Hussain Gilani and Dr. Nasar Ali Khan signing the MoU

and other marketable businesses. Software development technologies, he said, can also be used by interested entrepreneurs to create or improve existing programs which provide solutions to the industry, universities, and public, with a wider choice of robust and reliable software programs.

Dr. Nasser said there is a great deal of interest amongst the youth who, after completing their management studies, look forward to setting up their own businesses. We have two pilot projects at the moment, including setting up of an advertising agency and a professional women development network. He urged to develop a website so that interested individuals get immediate information on how TIC can assist in establishing start ups.

## MEMBERS OF EPCL VISITED DEPARTMENT OF AGRICULTURAL ENGINEERING

A two-member delegation, led by Mr. Abid Bukhari, MDO, Engro Polymer & Chemical Ltd. (EPCL), and Engr. Muhammad Waqar, irrigation engineer, Engro Polymer & Chemical Ltd. visited the Department of Agricultural Engineering on March 20, 2009. They held a meeting with the Chairman, Prof. Dr. Zahid Mahmood. It was decided to hold a joint training program on "High Efficiency Irrigation Systems Design, Installation and Audit", for the staff of Engro Polymer & Chemical Ltd.

## HEC RECOGNIZES THE JEAS

The Journal of Engineering and Applied Sciences, a biannual research journal, published by NWFP UET, has been recognized by Higher Education Commission (HEC) in "X" category. Dr. Rizwan Gul, Editor JEAS has personally acknowledged the active support of editorial staff, particularly Prof. Dr. Khan Gul Jadoon, Prof. Dr. Irfanullah, Dr. M.Waqar Ali Asad and Mr. Muhammad Jamil for their valuable contributions.

## COMPUTER GAMING COMPETITION

IEEE CREATE organized a computer gaming competition to raise funds for various student activities. The event proved to be a major success as it provided a recreational opportunity for students, and attracted participation from all departments.

## WORLD BANK'S SOUTH ASIA REGIONAL DIALOGUE

A video conferencing session, was held under the auspices of World Bank's South Asia Regional Dialogue on promoting development of lagging regions in South Asia (North-West Region). The focus was particularly on existing impediments to development, and scope of economic cooperation between the two countries.

Twenty two participants from Afghanistan and Pakistan, including senior government officials, specialists, representatives from banks, university professors and researchers attended the session. The session was opened by Ejaz Ghani (Economic Advisor, South Asia Region, World Bank). This was followed by presentations by Mohammad Zubair Khan, Former minister from Pakistan and Mohmoud Saikal, Former deputy foreign minister from Afghanistan. The session was moderated by Juan Blazquez Ancin (GDLN), and other participants from Washington, DC were Christian Eigen-Zucchi and Raghvendra N. Dubey.

Ejaz Ghani, in his presentation, emphasized that regional cooperation could resolve some of the problems. It could also compensate for the current global economic down turn.

Participants discussed various issues that included major impediments in forging regional cooperation for the development of the North West lagging regions of South Asia and what can countries of the region do to effectively tackle the impediments, to create suitable environment for development and role multilateral agencies can play to encourage regional cooperation to foster economic development?

While concluding the session, participants emphasized to develop a public-private partnership model for the development of energy sector in the region. They also stressed to link-up the region for joint cooperation in energy trading, joint human resource development, programs in higher education and ensuring SAARC visa facility.

Dr. M. Inayatullah Babar, Chairman, Department of CS & IT, and Prof. Dr. Azzam-ul-Asar, Dean, Faculty of Engineering, represented the University.

## DR. MUHAMMAD JAVED SUCCESSFULLY DEFENDED HIS PH.D

Engr. Mohammad Javed, Ph.D Student, Department of Civil Engineering, successfully passed his Ph.D defense examination held on January, 2009. His thesis "Seismic Risk Assessment of Unreinforced Brick Masonry Buildings System of Northern Pakistan" was defended in a Video conference, connecting Dr. Magenes, Associate Professor of Structural Engineering, Department of Structure and Mechanics, University of Pavia, Italy, who was the external examiner and co-supervisor of this thesis. The thesis focused on seismic assessment and vulnerability of existing unreinforced brick masonry buildings of Northern areas of Pakistan, supervised by Prof. Dr. Akhtar Naeem, Chairman Department of Civil Engineering, and co supervised by Prof. Magenes.

Engr. Javed established that Unreinforced Brick Masonry (URBM) Buildings, wherever allowed, must be constructed with

at least 9-inch thick walls. Similarly, 4.5 inch URBM partition walls must not be allowed on first floor and above. URBM buildings, up to two stories height, with 9 inches thick walls, constructed with codified procedure, can be used only in localities placed in Zone 2-b and below (Islamabad, Mardan, Peshawar, Swabi, Kohat, Bannu, D.I Khan, Northern Punjab etc), as recommended by Pakistan Building Code 2008.

Existing unreinforced brick masonry buildings, which do not fulfill above mentioned criteria must be properly rehabilitated against possible future earthquakes. Similarly, URBM buildings (in Zone 2-b and below) with a height greater than two stories, or constructed in Zone-3 and above (Abbottabad, Mansehra, Balakot, Bagh, Muzafarabad, Rawalakot, Mingora, Dir, Chitral, Gilgit and Dasu etc) must be constructed either with walls having greater thickness or using confined or reinforced masonry.

The vice chancellor said that the Civil Engineering Department has produced three Ph.Ds in Earthquake Engineering since 2005, which will make it a center for the South Asian Region, and shows the dynamic performance of its faculty. Prof. Megenes expressed his satisfaction on the research quality at Earthquake Engineering Center NWFP UET. "We honour and cherish the partnership between UET and ROSE for academic research in earthquake engineering", he remarked.



Dr. Muhammad Javed during defense examination

## ARCHITECTURE PROGRAM AT ABBOTTABAD CAMPUS ACCREDITED

The joint efforts of the University and the Department of Architecture (Abbottabad Campus) have finally resulted in getting the architecture program of NWFP UET accredited with the Pakistan Council of Architects and Town Planners (PCATP). As the first department, that commenced in 2004 to impart Architectural education in NWFP, it is keeping pace with quality standards set by the Higher Education Commission and PCATP.

The B. Arch. Degree course is set in a manner that students take inspiration from heritage, innovative technology, and merge with emerging trends in Architecture globally, and in Pakistan, to become socially responsible leaders.

## FACULTY RESEARCH PUBLICATIONS

- A paper titled "Performance of STLF Model from the PSO, Time Series and Regression Perspectives", authored by Mr. Riaz-ul-Hassnain, Dr. Azzam-ul-Asar and Ms. Farah Mahmood, was

accepted in the IEEE International Joint Conference on Neural Network (IJCNN) 2009, Atlanta USA. The publication is part of the on going research on "Short Term Load Forecasting using Neural Network Techniques".

- Dr. Waqar Shah presented a paper titled "Cell Phone Jammers" at INMIC 2008, (IEEE International Multi-topic Conference) in December 2008. The paper was co-authored by Engr. Gulzar Ahmad.
- "Breaking the Synaptic Dogma: Evolving a Neuro-inspired Developmental Network", Gul Muhammad Khan, Julian F. Miller, and David M. Halliday, Lecture Notes in Computer Science, Springer Berlin / Heidelberg, ISSN:0302-9743 (Print) 1611-3349 (Online), 5361/2008, Simulated Evolution and Learning, 10.1007/978-3-540-89694-4, 2008, 978-3-540-89693-7, 10.1007/978-3-540-89694-4\_2, 11-20, 2008.
- Engr. Syed Naveed-ul-Hassan presented a paper "Role of Technology Up-gradation and Innovations in Increasing Productivity", in a national conference "Towards Socio-Economic stability in Pakistan", organized by Sarhad University, Peshawar, on February 16-17, 2009.
- Paper titled "Long Term Strategy for Quality in Higher Education in Using Balance Score Card Method" by Engr. Syed Naveed-ul-Hassan and Engr. Sultan Ali has been accepted in 2nd International Conference on Assessing Quality in Higher Education (ICAQHE 2008).

## FACULTY DEVELOPMENT



Prof. Syed Mohammad Ali with Prof. Andre Filiatrualt (right) and Prof. George C. Lee (left)

- Assistant Prof. Syed Mohammad Ali, Civil Engineering Department, attended a seven-month training course (August 2008 to Feb 2009) at the State University of New York at Buffalo, USA, in earthquake engineering. This training was held under the project "Strengthening of Earthquake Engineering Center." The main focus of training was design and execution of experimental testing, and operation of

large shake-tables. Engr. Ali said that the training focused on vibration testing of large structures, including specialized tests for seismic qualification of equipment such as high voltage switches and fuses installed on grid stations which, if not taken care of can create another havoc, besides earthquakes. He also got hands-on experience of vibration testing, and seismic qualifications of telecommunication and hospital equipment, in addition to studies related to testing of bridges and buildings.

Engr. Ali also audited three courses; Seismic Design of Bridges, Base Isolation and Experimental Mechanics. During his stay, he wrote a paper related to his Ph.D research in bridges. Prof. Andrei M. Reinhorn, Professor earthquake engineering, who remained editor of a prestigious journal

"Earthquake Spectra" (impact factor 1.09) edited his paper for "Resilience in Bridges", and very graciously became co-author in this research publication.

In the backdrop of already signed MoU between EEC and Multi Disciplinary Center of Earthquake Engineering Research (MCEER), Prof. Andre Filiatrualt and Prof. George C. Lee (the former Director), agreed to deliver video conferencing sessions for post graduate students.

- Engr. Syed Salman, lecturer Department of Mining Engineering, has been selected for the award of the Erasmus Mundus Scholarship for MS in mineral environment.
- Engr. Hayat Khan, lecturer, Chemical Engineering Department, has returned after completing his M.Sc from Hang Yang University, South Korea.

## STUDENT ACTIVITIES

- Fahad Khan, Student Chair ASME UET, Peshawar, received Students District Operating Board (SDOB) award by the president ASME, Mr. Tom Barlow, and he also secured a position in ASME Big Picture challenge. He represented District G (Asia-Pacific region which includes India, Pakistan, Singapore, Taiwan, and Hong Kong) at ASME Leadership Training Conference LTC09, that was held in Los Angeles, California, on March 5-8, 2009.



Fahad Khan (2nd from left) with President ASME Tom Barlow and K&C Senior Program Manager, Marian Heller

- The Department of Mining Engineering arranged a ceremony on 3rd March, 2009, to distribute merit certificates among position holders for Fall-2006 and Spring-2007 semesters. Prof. Dr. Azzam-ul-Asar, Dean Faculty of Engineering was the chief guest. He gave away certificates among position holders and advised students to work hard and keep up their positions in successive examinations.

## CRC INITIATES INDUSTRIAL COLLABORATION PROGRAM

Engr. Sulaiman, Lecturer, Mechanical Engineering Department, has been appointed as new advisor of Career Resource Center (CRC). He is managing the Industrial Collaboration Program under CRC, and communicating with industry to accelerate student internship program in leading industries of Pakistan.



Engr. Sulaiman is also the resource person of Mechanical Engineering Department for the NWFP UET Newsletter.

## SEMINARS & WORKSHOPS

### CALL FOR INCREASE IN BUDGETARY ALLOCATION FOR EDUCATION

A demand for increase in budgetary allocation for education was put forward during a two day symposium on education sector reforms, organized by the Elementary and Secondary Education Department NWFP, at Governor House Peshawar on 18th February 2009. It was convened to identify problems associated with NWFP education system, and make recommendations for its improvement.

While inaugurating the symposium, Governor Owais Ahmed Ghani said that this is an age of "knowledge", and only those nations prosper that excel in the fields of education and information.

He said that education system of the country in general, and NWFP in particular, had many problems, that needed to be rectified. He opined that class based education system was a major problem of the country. This system could not be replaced without a strong political will. The elite class, he said, was not more than four percent of the population, but it maintained a complete monopoly over every sector and promoted injustices in the society.

Speaking on the occasion, Minister for Elementary and Secondary Education, Sardar Hussain Babak said that the economic situation was a major hurdle in provision of quality education. There was a need to critically analyse the ground realities, and improve working of government educational institutions, specially at school level.

Minister for Higher Education, Qazi Mohammad Asad, said that the government wanted to introduce much needed reforms in the education system, to enable youth not only to earn livelihoods for themselves, but also to become better contributors to the society.

Vice Chancellor NWPF UET, Imtiaz Hussain Gilani stressed the need of bringing effective administrative reforms, changes in curriculum and making the teaching community a focal point at school level to make all efforts result oriented.

For this purpose, he said, there was a need to allocate a reasonable percentage of the GDP to education annually, ensuring accountability of service providers, improvement of medium of institutions and maintenance of discipline in educational institutions. He particularly mentioned government run schools and said, "...we have to change the educational environment and make quality educational facilities accessible to every child".

Chief Secretary Sahibzada Riaz Noor said that basic aim to hold the symposium was to have brain storming deliberations, and chalk out concrete recommendations for bringing improvement in the education system.

Keeping in view, the prevailing situation as well as the ever increasing population, he said, "we have to take courageous steps to provide sufficient and better educational facilities to our children."

The recommendations were presented by Minister Qazi Asad. He also suggested to formulate a committee to coordinate efforts in future.

### OCCUPATIONAL HEALTH & SAFETY IN INDUSTRIES AND PROCESS DESIGN

A one-day seminar organized by Chemical Engineering Department on "Occupational Health & Safety in Industries and Process Design" was held at CEEC. The workshop aimed to transfer knowledge and essential skills to professionals and students regarding safety, operations and process design that generated much interest.

Prof. Dr. Khan Gul Jadoon, Chairman, Department of Chemical Engineering, deliberated on Occupational Health & Safety in Industries. He said about 250 million accidents are reported worldwide annually, while millions of cases of occupational diseases are registered every year. Occupational injuries and disease consume 4% of the World GDP, which are mainly caused by avoidable occupational hazards. Dr. Jadoon emphasized to adopt safety management techniques in order to prevent human and economic losses. He stressed upon techniques in managing occupational safety and health measures including legislation, strict implementation, scientific investigation of accidents, and identification and prevention of hazards.

Yet another wonderful opportunity was provided to the students of mechanical and chemical engineering to learn about latest developments in "Process design" from UET alumnus, and graduate of chemical engineering department, Engr. Fazl-e-Nadeem Khan. Engr Nadeem did his M.Sc from University College of London in 2005, and is currently employed at KBR, UK, as Process Design

Engineer. He presented an overview of process engineering by focusing on obstacles that come across in real design processing, and necessary skills required to cope effectively. His talk revolved around a notion "knowledge of the basic fundamentals is the foundation for successful professional practice". He explained how to conduct feasibility studies, conceptual design, front-end engineering design, detailed engineering design, construction, commissioning and operation. He said professionals should have a strong grasp on these aspects to work in complex settings.



Group photo of seminar participants

## CONSTRUCTION PROJECT MANAGEMENT

In collaboration with FATA Development Authority, UET inaugurated a five-day workshop on Construction Project Management for capacity building of in-service engineers of FATA, at CEEC, Peshawar.

The vice chancellor highlighted the significance of continuing engineering education for professionals, and said that while universities are producing graduates, it is equally important that these graduates enhance their skills while working in the field. He said UET is closely working with FATA Development Authority, in training engineers in various fields.

Dr. Zeeshan Aziz, a civil engineer and resource-person, said that the growth rate of construction industry in Pakistan is 10% of GDP, which shows its importance. The growth in this industry is slow due to poor planning and estimation, therefore targets and goals are not met, which results in a blame-game. Project management, he said, is an emerging field, which acquaints professionals with modern practices and technology, to improve efficiency by proper planning.

He urged the participants to adopt digital designing processes, and building information modeling, such as 3D and n-D modeling. After getting training they will understand the benefits of these models which help an integrated design, and also to look into the what-if analysis at a very early stage of projects.



Dr. Zeeshan Aziz delivering lecture to audience

## IEEE ORIENTATION

IEEE CREATE (IEEE NWFP UET student branch) organized an IEEE orientation seminar for second semester students to orient them about the activities of IEEE, and how can they participate and be a part of this prestigious international society. The seminar included presentation on IEEE, highlighting the mission and vision of IEEE along with the activities planned by the student branch for the year ahead. Prof. Dr. Azzam-ul-Asar, Dean Faculty of Engineering NWFP UET, Peshawar was the chief guest. IEEE Peshawar subsection's website was also launched during the ceremony.

## PROBABILISTIC SEISMIC HAZARD ANALYSIS (PSHA)

On the invitation of Pakistan Nuclear Regulatory Authority, Director of Nuclear Safety Islamabad, Professor Dr. Shehzad Rehman and Associate Professor Dr. Irshad Ahmad from the Department of Civil Engineering attended a two-day workshop on "Probabilistic Seismic Hazard Analysis (PSHA)". Dr. Irshad Ahmad delivered a lecture on "Need for Information for Reliable PSHA Mapping in Pakistan".

## URDU DEBATE COMPETITION

True patriotic feelings were reflected in the views expressed by UET Mardan students, who participated in the Urdu debate competition, on "HUM ZINDA QOM HEIN", organized by L.D.S Mardan campus.

The students shared unique insights and expressed optimism for the future of Pakistan. They were realistic about the problems that our society faces, but they had fresh ideas and an eagerness to work hard to bring about positive change in their country.

Engr. Ahmed Khan, Chief Advisor was the chief guest. First three winners, Muhammad Asif, Awais Jadoon and M. Shahzeb khan were awarded with certificates and cash prizes.

## PLANNING CYCLE 1 REPORTS

A five-day workshop on Planning Cycle 1 (PC1) reports preparation, jointly conducted by UET and USAID, started on March 11, 2009 at CEEC. The Dean Faculty of Engineering, Prof. Dr. Azzam-ul-Asar, was the chief guest on the occasion.

Dr. Zeeshan Aziz, while briefing FATA Secretariat personnel said that PC-1's are important documents that should have all necessary information, from planning to monitoring stages. This importance becomes more relevant in the construction industry, which is the backbone of national development. He urged the participants to learn, advanced, and best practices in the field, so that they could adopt them while implementing their projects. Building information models, which are also called 4-D model have been critical for planning effective PC-I reports.

## UET PESHAWAR GRABS BEST DESIGN AND PERFORMANCE AWARDS IN DBFC-2009

NWFP UET Peshawar won the Best Design Award in the Engine Powered category and Best Performance Award in the Electrical Powered Category of Radio Controlled airplanes in the 4th National Design, Build, and Fly Contest held at Ghulam Ishaq Khan Institute on 4-5th April, 2009.

The Best Design Award went to team "Frontier Wings-II" which comprised of Miss. Rabiya Abbasi (Team Leader and Pilot) and the student Chair of UET Robotics Club, Mr. Malik Muhammad Usman Awan.

It was for the first time in the history of DBFC that a female pilot exhibited the extraordinary skills of RC flying, thus bringing honor to NWFP UET in general, and UET Robotics Club in particular.

Best Performance Award was won by the UET Team consisting of Mr. Masroor Khan, Mr. Umar Hayat, Mr. Usman Khan, Mr. Faisal Imtiaz, and Mr. Saad Hameed.

Engr. Umar Ibrahim, Faculty Advisor UET Robotics Club, expressed his gratitude and best wishes for the team in their future endeavors.



UET team with the Judge

## IN FOCUS: DR. HAMID ULLAH

Dr. Hamid Ullah completed his Ph.D in 2007 from the Asian Institute of Technology, Bangkok. His PhD thesis was "Feature Based Sequence Planning and Assembly System Design Using Petri Net", under the link program between NWFP UET and AIT Bangkok.



Dr. Hamid did his bachelor in Mechanical Engineering with distinction in 1996, and the same year he joined the Department as Lecturer. In 2001, he did his M.Sc from NWFP UET Peshawar. His M.Sc research title was "Mathematical Modeling of Kinetic Friction at Tool-work piece Interface during High-speed Machining". His Ph.D research contributions include: A feature conversion mathematical model is developed which shows how design features (in design domain) are converted into assembly features (in assembly domain); Significance of the assembly features classification is demonstrated and important information and advantages are identified which the assembly features offer to facilitate the process of assembly sequence planning. A new generic Petri net model based on assembly plan is developed for the design and performance analysis of assembly system.

He has presented his research work in various international conferences including CAD 06 Pukhet, APIEMS Bangkok, DAAAM Austria, and ICET Peshawar. He produced a number of publications in international journals including international journal of industrial and system engineering, assembly automation, ASME journal of tribology, and journal of manufacturing technology management. Dr. Hamid has remained the warden, proctor, BOASAR adviser, member syndicate, member appellate committee, and coordinator, Bannu Campus. Currently he is actively involved in teaching and research.

## WELCOME BACK

NWFP UET has sent its young faculty on various scholarships for Ph.D and MS. abroad under various projects. The Human Resource Development is one of the most important programs that funds many faculty members to go to countries around the world, mostly to UK and USA. A series of stories exploring the unique experiences of our faculty will be published in the Newsletter when they return. This time we sat with Dr. Noor to know about his experience abroad.

**Dr. Noor Badshah** recently joined us as Assist. Professor at the Department of Basic Sciences after completing Ph.D in computational and numerical analysis (Fast Iterative Methods for Vocational Models in Image Segmentation) from University of Liverpool, UK. He spoke about his research area and its significance.



"I went to UK in 2005 under the first batch, and it gives me immense pleasure that I completed my Ph.D

studies in time in December 2008", Dr. Noor explained that his research focused on image segmentation, an important branch of computer vision, that aims at extracting meaningful objects lying in images either by dividing images into contiguous semantic regions, or by extracting one or more specific objects in images such as left kidney in a CT image.

"The image segmentation task is, in general, very difficult to achieve, since natural images are diverse and complex, and the way we perceive them varies according to individuals. I have proposed new algorithms for solving variational image segmentation models, based on looking for piecewise smooth homogeneous regions and active contours." Regarding its applications in other fields, Dr. Noor said, a new model for selective image segmentation under geometrical conditions was also proposed to detect special features in an image, which is a necessary task in almost all medical applications.

He reflected back that his experiences allowed him to meet new people, and mix with other cultures and have a broader perspective of life, and the academia, at other universities.

## Dr. Afzal Khan

Dr. Afzal Khan has joined the Department of Mechanical Engineering after completion of his doctoral degree at the George Washington University, Washington DC. USA. Dr. Afzal Khan carried his research within the Precision Systems Laboratory in the Mechanical and Aerospace Engineering Department at GWU, and his study concentrated on the "Characterization and Application of Shape Memory Alloy Wires for Micro and Meso Positioning Systems". He designed, fabricated and tested various positioning systems using flexural bearings, actuated by Nitinol wires, and demonstrated the feasibility of using SMA wires as actuators.

## NEWS BRIEFS

- Shehzad Ali Khan and Atta-ur-Rehman, students of 4th semester, Civil Engineering Department, got 3rd prize in Qirat and Naat competition, organized by Bannu Medical College on 14th March, 2009.
- Mr. Muhammad Anas Khan, student of 6th semester, Electrical Engineering Department won the final of chess tournament in the "Inter-niversity Sports Gala", on 17th January, 2009.
- Shake table tests were performed at the Earthquake Engineering Center, Department of Civil Engineering. These tests included Stone Masonry Model (Typical Rubble & Rubble Stone Masonry with horizontal bands), Dhajji Model, Quasi static test of two full scale Dhajji wall panels (lateral load test of 3 full scale Dhajji wall panels) and Diagonal Compression test.

## With Compliments

Directorate of Media and Publications  
NWFP University of Engineering & Technology Peshawar

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