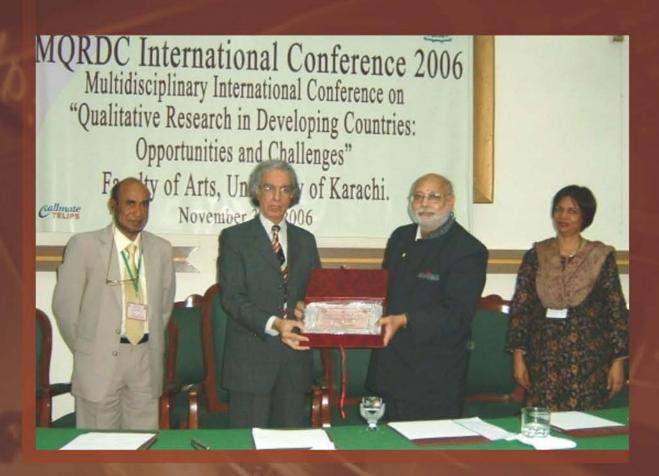


A Monthly Magazine of Higher Education Commission



December 2006



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Front Cover: Prof. Dr. Pirzada Qasim Raza Siddiqui, Vice Chancellor, University of Karachi presents a shield to Dr. Ahmad Ali Khan, Professor Emeritus and a resource person of the MQRDC International Conference held at University of Karachi. Prof. Dr. Muhammad Shamsuddin, Dean Faculty of Arts and Prof. Dr. Fauzia Shamim, Convener of the Conference are also seen in the picture.

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Trauma-An Engineering Analysis: With Medical Case Studies Investigation





#### **Ethics Dilemmas in Qualitative Research**

Research is mostly undertaken to generate knowledge and contribute to scholarship, policy, practice and generally to the well being of the people who participate in it. Hence, in a deliberation on ethical issues in research a polarisation of research into qualitative and quantitative is not particularly required because ethical issues mostly cut across the qualitative-quantitative divide. Having said that, certain qualitative research approaches such as action research, biography, phenomenology and ethnographic methods do pose complex challenges to an ethical conduct of research and therefore merit a closer scrutiny.

Dr. Anjum Halai is **Assistant Professor and** Head, Research and Policy Studies, Aga Khan University, Institute for **Educational Development**, Karachi. Having a doctorate from the University of Oxford, UK, Dr. Halai has a rich experience of teaching at graduate and postgraduate levels on research methods. At AKU-IED, she facilitates the execution and publication of high quality research projects.



Sound research is a moral and ethical endeavour and should be concerned with ensuring that the interests of those participating in a study are not harmed as a result of research being done. Typically universities and research institutions lay down principles and guidelines for conducting research in an ethically appropriate manner and require the researchers to obtain approval from ethics committees or equivalent.

A quick survey of the websites of some major research bodies and universities (e.g. Aga Khan University, American Anthropological Association, American Educational Research Association, British Educational Research Association) shows that there are four or five key ethical principles that are common across the board. These include:

- a) Informed and voluntary consent;
- b) Confidentiality of information and anonymity of research participants;
- c) No harm to participants, beneficence and reciprocity.

Typically associated with these principles and guidelines are detailed procedures which the researchers are expected to follow and provide evidence to the review committee. These principles and procedures of an ethical engagement with a research study are laid out with the best of intentions to protect participants from malpractices and breach of ethics. However, the approach is taken from mainly a clinical medical research perspective with concomitant view of epistemology and ontology. Hence, it is assumed that there is a well stated hypothesis which is to be tested, the relationship between the researcher and researched is clearly divided and bounded, and it is possible to outline the potential risks and benefits in some detail prior to the study.

On the contrary in research undertaken from qualitative, naturalistic position, ethnographic methods are employed which require participant observation, open ended or semi structured interview, thick descriptions and often a long-term engagement in the field. The researchers are the primary instruments of research and develop relationship with research participants so that "emic" insights may be gleaned in the social phenomenon being studied. Mostly, there are broad and guiding research questions and not testable hypothesis. Research from this perspective encourages, evolving understanding and flexibility to go into new or different directions within the broad





framework. These epistemological and ontological orientations make it very challenging to follow the procedures and guidelines for ethics as outlined above, I contend that the ethical principles and procedures drawing from mainly clinical and medical research model need to be problematised when seen in the context of qualitative research. And, that adherence to ethical principles in research is closely linked with assuring the quality and rigour of the study, in terms of its credibility and dependability.

To elaborate upon and illustrate my points I will draw on the example of participatory action research which is relevant as it is often employed in development and social sectors in the developing world context. Moreover, participatory action research illustrates very well the ethical dilemmas that arise for research which is undertaken from a qualitative, interpretative perspective but is expected to follow ethical procedures and guidelines which are in conflict.

Key features of participatory action research as gleaned from methods textbooks and from the works of key proponents such as Kemmis and Mctaggart include the following:

- Emancipatory and participatory in nature
- Transformational in purpose
- Links theory and practice
- Cyclical and evolutionary in process
- Often involving interventions aimed at improving the social reality

Informed & Voluntary Consent: Researchers are expected to obtain informed consent from all those who are directly involved in research or in the vicinity of research. This principle adheres to a larger issue of respect to the participants so that they are not coerced into participation and have access to relevant information prior to the consent. Usually consent is obtained through written consent forms, and necessary elements of consent are identified by the review committees. These usually include prior information on key elements of research such as purpose, procedures, time period, risks, benefits, and a clause stipulating that participation is voluntary and the participants have the right to withdraw from the study.

The evolutionary nature of participatory action research challenges the principle of informed consent because it is not possible for the researcher to provide information about the direction of research prior to the inquiry being conducted. Similarly, when the participants in action are also researchers the boundaries between researchers and researched are blurred thereby raising questions such as, who gives consent to whom?

Consent which is informed and voluntary is an ideal! Given the questions raised above, and the inherent politics in a participatory research, participatory action research could strive to work towards the ideal, through several approaches. One approach is to recognise that consent is not a one off event to be undertaken before the start of a project, rather it is a process and needs to be negotiated through out the course of the project. Consent could be sought through formal procedures such as consent forms and through informal conversations. Moreover, formal consent should be taken at the initial stage of the research when the participants are somewhat aware of the nature of their involvement.

Second approach, is to recognise that there are degrees of participation and therefore the consent to participate should take into account the extent to which different participants would be involved and the nature of involvement. This is to recognise that there may not be overt coercion to participate, there might be subtle pressure from peers or authorities to give consent. Hence, consent should be taken not only from the administrative head of the institution or the district but also be sought from the individual participants. More over at strategic points in this long-term project, consent should be renewed and/or renegotiated.



#### Article

Confidentiality of Information Shared and Anonymity of Participants: This principle is also concerned with offering respect and protection to research participants through assurance of confidentiality of information shared and anonymity by not revealing the identity of the individuals and institutions involved. Typically anonymity is provided through the use of pseudonyms.

In a setting where the purpose of research is to establish a community of learners and the process involves a number of people working together in close collaboration, confidentiality and anonymity are difficult to achieve and counter to the purpose of research. Hence, an important ingredient would be to build a relationship of trust and mutual respect within the research participants so that information can be shared without risk of harm to those concerned. However, to maintain anonymity of participants in larger forums more traditional approaches such as pseudonyms could be employed.

No Harm to Participants, Beneficence and Reciprocity: According to this principle researchers are expected to provide the participants with an outline of the risks and benefits involved to the participants in the study. The principle of reciprocity requires that the researchers consider actively ways through which participants could be compensated for their time and effort. Typically information about risks and benefits are expected to be provided in summary in the consent form and/or in a brief write up attached with the consent form.

By its critically reflective and emancipatory nature participatory action research is meant to bring the benefits of empowerment to the participants. It is empowering in spirit because it can develop contextually relevant and rich understandings and insights not otherwise possible, and this knowledge is emancipatory in that it offers guidance to the possibilities of social change.

Moreover, collaboration and empowerment are processes that take place when inherent and traditional power differentials are challenged and shifts in power take place. This could potentially lead to discomfiture, tension and conflict. However, these benefits and potential risks are difficult to identify in advance and communicate to the people involved.

An additional risk in such a long term field based research project is of setting up potentially false expectations such as possibility of resource materials, opportunity to participate in university programmes. Honesty and clarity of communication are important elements in enabling the participants to see the long-term goal through empowerment of the community in decisions making.

Finally, ownership of the research problem and process is important for the rigour and credibility of the study because participatory action research purports to generate knowledge which is rooted in the reality of the social setting, and builds on the intuitive knowledge and perceptions of the people involved. Deep insightful knowledge from the field is difficult to generate without full ownership.

To conclude, from the discussion above it is clear that ethical issues are an integral part of a (qualitative) research design and considerations for ethics should run throughout the course of the research process, including identification of research problem and engagement in the inquiry and dissemination of results. As illustrated by the example above, following the ethical principles according to the philosophical foundations of the study is closely connected with assuring the quality of study, its rigour, its dependability and credibility. This contention raises methodological and procedural challenges for the prevailing practice where consideration of ethics and ethics approval is usually seen as a formality to be undertaken before the research project has begun, and mostly the same set of procedures and guidelines are applied to the study, whatever be its orientation.

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This article has been abridged from her plenary address at Multidisciplinary International Conference on "Qualitative Research in Developing Countries: Opportunities and Challenges" held at University of Karachi from November 3-4, 2006.





# Vice Chancellors' Committee Meets 2nd Time Round



Vice chancellors and rectors of public and private sector universities of Pakistan assembled in Islamabad to attend the Second Meeting of Vice Chancellors' Committee organized by the Higher Education Commission from November 24-25, 2006.

The purpose of this annual event is to develop a close coordination of all the institutions of higher education sector with HEC.

On the first day, the heads of public sector universities were at attendance in the meeting, presided over by Prof. Dr. Atta-ur-Rahman, Chairman HEC.

Inaugurating the meeting, he said that the last four years have witnessed a renaissance in the higher education sector, while history will bear witness to a new era heralded in by the HEC.

The Chairman expressed his gratitude to the vicechancellors and rectors involved in this historic change that has created countless opportunities for the youth of the country that are the real asset. He expressed pleasure that universities were coming alive after staying dormant for over 50 years. "As a result of the efforts undertaken by HEC a 3.5 per cent annual growth has been witnessed in research published in the internationally abstracted journals", he informed.

Dr. Atta-ur-Rahman said that there was need to make the university a hub of creativity and live up to its pivotal role in the progress of the country.

"For this purpose the HEC, the vice chancellors and rectors need to work together in a concerted manner especially in implementing the quality criteria for PhD. At present 7,000 students are enrolled for PhD studies across the country but it is important to ensure quality of the product as quality must come before quantity. HEC will not recognize PhD degrees if the Commission's quality criteria are not observed", he added.

Discussing the series of HEC reforms undertaken in the last four years he said that the four-year undergraduate programme was in the process of implementation that would raise graduate degree to the international level.

"Quality Assurance Cells already working in many



universities are helping ensure quality but universities also need to look deeply and improve their quality assurance system and have a built-in system of external review as well", he stressed.

He mentioned establishment of 50 international linkages with the British universities that would help improve quality in the universities. He encouraged the establishment of more such linkages with partners abroad for improvement.

Dr. Atta-ur-Rahman stated that synchronizing the academic calender among the universities for purpose of affecting uniformity was necessary. This would resolve the issue of conflicting calenders leading many students lose out on a whole academic year in waiting to secure admission in the university of their choice.

Followed by the Chairman's address, Prof. Dr. Sohail H. Naqvi, Executive Director HEC gave a presentation of the major programmes initiated by the Commission in the universities while stressing on the lead role of vice chancellors and rectors in the successful implementation of these programmes.

He said it was HEC's aim to increase students' enrollment in universities from the present 3.6 per cent to 8.0 per cent and asked universities to set for themselves quantifiable targets for the next 15 years.

Talking about the Faculty Development Programme, he informed the gathering that so far 2140 scholars were engaged in the Indigenous PhD Programme, 171 in Post-Doctoral Studies while 1531 faculty members had received In-service Training.

Dr. Naqvi asked the vice chancellors to streamline faculty selection procedure, encourage faculty to engage in PhD studies, maximize training opportunities and engage foreign faculty to enhance their academic standards.

Talking about the maintenance of quality assurance, he stressed the need for conversion to semester

system and embrace semester culture. He reiterated the need to introduce the Tenure Track System to attract high-quality faculty, introduce a two tier quality assurance system of self evaluation and quality enhancement cells.

The Meeting discussed standardization of academic sessions throughout the country with special emphasis on Total Quality Management in academic field and research programmes, which stresses style, total staff and faculty commitment to the satisfaction of students.

Ranking of public sector universities, governance and management of universities and institutes, Tenure Track System, provision of development and recurring funds to newly established universities and development issues also came under discussion.

On the second day, the vice chancellors and rectors of private sector universities assembled. Chairman HEC chaired the meeting. He assured that assistance to private sector universities and institutes would be available provided they fulfill the conditions laid down by the federal cabinet.

The conditions include registration as a non-profit organization, 70 per cent permanent faculty and a proper campus. The institution should be established according to laid down procedures regarding admissions, accounting procedures for government grants etc.

The Chairman said that there existed a need for HEC and private universities to work together towards the common goal of enhancing the standard of education.

He identified the key areas of access, quality and relevance of education that are being imparted to students in the country. He said that 'access' was an area foremost where the private universities could play a critical role.

"Quality of education had suffered greatly in the past 50 years and HEC has put in place elaborate





programmes to rectify the neglect of decades", he said.

He stressed the need to understand the fundamental difference between a college and university. He further emphasized that it was the duty of universities to function as creators of knowledge, being the major task of a university. He said that university ratings depend largely on their ability to create new knowledge, the citations of its professors in research journals and the quality of its faculty.

Mentioning the significant changes that have taken place in the last four years of HEC's existence, he gave a detailed presentation of various programmes ranging from infrastructure development to the use of technology to leapfrog on the international scene.

He invited the participants to take advantage of HEC programmes and encouraged them to develop international linkages and employment of foreign faculty so as to boost their academic programmes

Followed by Chairman's presentation, Prof. Dr. Sohail H. Naqvi outlined the programmes undertaken by HEC and underlined the need to

establish standards. He gave details of the faculty development programme and asked the vice chancellors and rectors to encourage their faculty to obtain high degrees and employ qualified young faculty.

The Executive Director mentioned the scope for maximizing training opportunities. He also stressed the need to standardize their PhD programmes and follow the quality criteria set by HEC.

As a follow-up to the presentations made by HEC representatives, the heads of the universities surveyed in detail possibilities of collaboration with HEC and requested that they be provided grants to further strengthen their programmes.

They also expressed their appreciation of the changes put into motion by HEC and termed them "revolutionary".

Other topics that came under discussion were governance and management of universities, credit hour requirements for completion of a four-year Bachelor's degree programme and public private partnership in higher education.



# **Engineering University with Italian Collaboration**



Prof. Dr. Atta-ur-Rahman, Chairman HEC and Mr. Gianni Vernatti, Italian Deputy Foreign Minister seal the MoU with a handshake

The Higher Education Commission and the Government of Italy have signed a Memorandum of Understanding to collaborate in the establishment of a University of Engineering Science and Technology in Pakistan.

The document was signed by Mr. Gianni Vernatti, Italian Deputy Foreign Minister and Prof. Dr. Atta-ur-Rahman, Chairman HEC.

Speaking at a press conference following the MoU signing, Dr. Atta-ur-Rahman said, "This represents an important step in Pakistan's transition from an agricultural economy to a knowledge economy".

He told the gathering that 4500 students for the nine engineering universities will be sent abroad for PhD studies. They will eventually form the faculty of those universities which will be established with the help of Rs. 250-300 billion in the next 10 years.

The Chairman praised Italy for its strong technical base which will help Pakistan in establishing the University.

The University will be headed by the vice chancellor from Italy while top professors and deans will also be from the same collaborating country. They will oversee the development of the University for 10-12 years and will ensure quality criteria, guarantee quality of examination system and equivalence of the degree keeping to the highest standards prevailing in their own country. Also under the Faculty Development Programme, 100 students per year will be placed in Italian universities for PhD studies.

Politecnico di Torino, one of the most prestigious technicalscientific institutions in Italy for engineering and architecture will lead the consortium of universities which will provide technical support and expertise for setting up a world-class university.

Other universities in the consortium include those in

Milano, Bologna, Naples and Bari. At the Master's level the disciplines to be offered include Electrical Engineering, Information and Communications Technology, Industrial Engineering and Design, Civil Engineering, Applied Mathematics, Plastic, Textile and Mechanical Engineering as well as VSLI Design. At the Bachelor's level, Information and Communications Technology, Industrial Civil and Electronic Engineering will be offered.

The University will impart high-quality education to students at a standard identical to accredited international standards thus catering for the industrial, technological, product development and research needs of Pakistan in the future.

Instruction will include the latest developments in engineering curriculum, teaching methodology and laboratory standards as well as promoting R&D activities in the engineering sector in line with advances at the international level.





# **Ground-breaking Ceremony of UEST Lahore**

President General Pervez Musharraf laid the foundation stone of the University of Engineering, Science and Technology, Lahore being set up with the assistance of the University of Technology, Graz, Austria at Defence Housing Authority on November 18, 2006.

The University is one among the nine universities to be set up by the HEC for science, engineering and technical education at a cost of about Rs. 250 billion over the next 10 years in various industrial cities.

Each university is a collaborative venture between Pakistan and a consortium of top universities located in a technologically advanced country.

The aim is to establish a world-class engineering and science university in Pakistan. All these universities will provide an educational standard equivalent to international standards in disciplines of frontier technology.

A consortium of the best universities in Austria led by University of Technology, Graz will collaborate with HEC in this endeavour. The vice chancellor, heads of department, professors and faculty of the University will be from Austria. In addition, quality assurance and the examination system will also be Austrian.

The University will have technology parks and business incubators for strong linkages with industry. They will also facilitate development of world class industries enabling leading international companies to invest in Pakistan.

Admission in the University will be strictly merit based and without a quota system. Fee structure will be as low as possible and no one will be refused because of his/her inability to pay the fee. A sum of one billion rupees has been allocated for scholarships and grants.

Over a period of five years, 500 students will be funded to pursue their MSc studies in Austria while the best of them will be invited to study for their doctorates. This highly trained human resource is anticipated to replace the Austrian faculty and administration of the University.

The University is expected to be partly operational in 2007. The technological activities at the University

level are expected to stimulate local suppliers and improve infrastructure and local standards as well as create employment opportunities for the people of the vicinity.

Other countries establishing similar universities in other cities of Pakistan include France, Sweden, Germany, Italy, China, South Korea etc.

Speaking at the occasion, President General Pervez Musharraf said that Pakistan needs to develop a knowledge-based economy by promoting quality science and technology education. "Only natural resources are not enough to make progress. We have to develop our human resource base to make the country economically stronger".

He said that education sector had been ignored in the past but his Government had evolved a comprehensive strategy to develop the education system at all tiers. "The budget of HEC has been increased from a meager Rs. 500-600 Million a few years ago to Rs. 22 Billion. We have set the economy right and now there are much more resources available for education", he said.

He said work on the establishment of a University in Karachi, with the assistance of France had begun while the ground breaking of another University being set up in Sialkot with the help of Sweden is to be held soon.

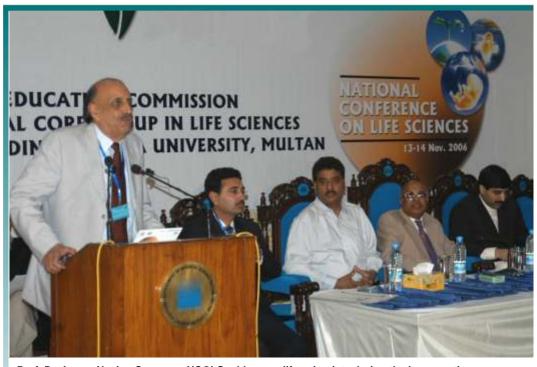
Speaking on the occasion, Dr. Elizabeth Gehrer, Austrian Minister for education, technology and culture said that her country and Pakistan had traditionally good relations, and their ties in science and technology had strengthened considerably over the last ten years.

She said a Pakistan-Austria Joint Doctoral Education Programme had been launched, under which every year hundreds of Pakistani students are getting the chance for PhD studies in Austria.

She further appreciated the steps taken by the Pakistan Government for the promotion of education. "The establishment of nine universities is going to be a big step forward," she said.



# **Developing New Frontiers in Life Sciences**



Prof. Dr. Anwar Nasim, Convener NCGLS addresses life scientists during the inauguration ceremony

A two-day national conference of life scientists was organized by National Core Group in Life Sciences (NCGLS) at Bahauddin Zakariya University, Multan from November, 13-14 2006. About 150 senior and young scientists from different universities of country were invited to participate in the conference.

The conference focused on the ways to improve the quality of teaching and discussed future research strategies and emerging trends and frontiers in Life Sciences. The real issues in quality of teaching and research were addressed in the conference.

Prof. Dr. Anwar Nasim, Convener NCGLS, inaugurated the conference. In his address, he emphasized the importance of research in key areas of Biotechnology.

During the first day, there were five lectures on advance topics of Life Sciences by eminent professors and life scientists including Dr. Shazad Mufti, Adviser COMSATS, Islamabad; Dr. Raheel Qamar, Professor and Chairman, Department of Biosciences COMSATS; Dr. A. R. Shakoori, Distinguished National Professor at School of Biological Sciences, University of the Punjab, Lahore; Dr. Shahida Hasnain, Dean, Faculty of Life Sciences, University of the Punjab, Lahore and Dr. M. Ashraf, Distinguished National Professor, Dean, Faculty

of Sciences, University of Agriculture, Faisalabad.

All the speakers emphasized the importance of research culture and suggested ways for development of new frontiers in Life Sciences such as Biotech industry, Molecular Systemic, Genetic Engineering, Biopharmaceutical projects for Diagnostics and Drug Development and Vaccine Production.

On the second day, the participants were divided into five groups on the basis of

various disciplines of Life Sciences. Each group was chaired by five senior professors and was given the task to identify the real issues, prioritize the key research areas and plan future strategies for strengthening of Life Sciences in Pakistan. In the end, each group presented its views which were combined and named as Multan declaration.

In the closing session, Mr. Hamid Yar Hiraj, Minister of State for Commerce was the chief guest. He appreciated the role of NCGLS and Higher Education Commission for the promotion of research and education in the country and distributed souvenirs and certificates among the speakers and participants.

The ceremony ended with remarks of Prof. Dr. Anwar Nasim who declared the Conference a great success and appreciated efforts of Dr. Muhammad Ali, Associate Professor, BZU Multan and Dr. Saadat Aliya, Project Director, Life Sciences, HEC for hosting the Conference in an organized and methodical way.

He said that this kind of event was essential for the strengthening of life sciences so as to create coordination and collaboration among researchers and scholars of the country.



# **Industrial Biotechnology Connecting Business with Academia**



Prof. Dr. Anwar Nasim, Adviser Science COMSTECH (R) chats with the foreign delegates

A Workshop on 'Industrial Biotechnology: Connecting Business, Academia' was organized by the Thematic Workshop's Secretariat of the COMSTECH from November 6-16, 2006.

The idea of thematic workshops in Molecular Biology/Biotechnology was initiated by Prof. Dr. Anwar Nasim, Adviser Science COMSTECH, Chairman National Commission on Biotechnology and Convener National Core Group in Life Sciences.

The proposal focused on arranging specific thematic workshops on the pattern of symposia organized by

Cold Spring Harbor Labs, New York, USA. (http://www.cshl.edu/) and ICGEB http://www.icgeb.trieste.it/. The objective of these workshops is to promote exchange of information among the Muslim countries.

Prof. Dr. Anwar Nasim, in his welcoming address explained the objectives of COMSTECH in relation to this specific programme to the participants.

The participants of the Workshop included researchers, policy makers and industrialists. Among 21 participants, 10 were from the host country while others were from Malaysia, Bangladesh, Azerbaijan, Iran, Jordan, Sudan, Nigeria and Syria.

The Workshop included a series of lectures on current biotechnological problems like Hepatitis B vaccine production by the resource persons from Pakistan and foreign experts from abroad. In addition, there were presentations from the course participants and field trips to Qarshi industries, Hattar, NIBGE, Faisalabad and Shakargang Sugar Mills.

The event was an excellent example of scientific and cultural exchange programmes. Ms. Nyla Jabeen, Research Officer represented the National Core Group in Life Sciences of the Higher Education Commission.



Participants of the Workshop on 'Industrial Biotechnology: Connecting Business, Academia'



### **Training in Plant Biodiversity**



Participants of the 1st Workshop on 'Training of Trainers in Plant Biodiversity'

National Core Group in Life Sciences, HEC organized the first Workshop on "Training of Trainers in Plant Biodiversity" in collaboration with Centre of Plant Biodiversity, University of Peshawar from November 23-25, 2006. This Workshop was one of the extension programmes of the Centre planned for college teachers and researchers in the NWFP.

Dr. Saadat Aliya, Project Director, Life Sciences spoke to the audience and described the role, objectives and achievements of National Core Group in Life Sciences for strengthening of life sciences in the country.

Twenty-six resource persons from public sector universities, research organizations, NWFP Wildlife Department, IUCN, WWF, Qarshi Industry and Shelter Now International, USA participated in the workshop and shared their experiences with 114 trainers in Plant Biodiversity. Prof. Dr. Iftikhar Ahmad from Canada and Mr. Dustin Sunset from USA also delivered lectures during the Workshop.

There were eight technical sessions. The inaugural session was chaired by Lt. Gen.(R) Mumtaz Gul, Ex-Vice Chancellor, University of Peshawar, while the concluding session was chaired by Dr. A. R. Beg, a retired Bio-diversity expert. Both the guests had contributed for the Botanical Garden Project and National Plant Bio-diversity respectively.

The participants of the Workshop recommended that the Centre should become the national focal point for plant bio-diversity in Pakistan. As it has the mandate to focus on the human resource development in the exploration, documentation, preservation and ex-situ conservation of Plant Bio-diversity of the region, where 4500 vascular plant species are growing out of 6000 species reported from the entire country. This is also the first Centre of Plant Bio-diversity that provides opportunities to the youth at MPhil / PhD level in diverse disciplines of the subject.

The resource persons appreciated the National Core Group in Life Sciences for supporting such workshops and botanical gardens, research and developmental projects in Pakistan. They also appreciated the contribution of Mr. Akram Khan Duranni, Chief Minister NWFP for provision of 100 acres of land for University of Peshawar Botanical Garden at Azakhel.

As Bio-diversity is concern of every citizen, the resource scholars therefore approved the formation of a society named as 'Pakistan Bio-diversity Conservation Society'. Its membership will be open to every person contributing actively to the Bio-diversity of the country.

The Workshop ended by making a number of recommendations, emphasizing on the need of legislating policies on the ruthless cutting of tress and plant reserves of economic importance.



# **NSTC Seminars at Quetta**



Mr. Fida Hussain, Director Learning Innovation, Higher Education Commission and Mr. Al Hasanat Rasul, APM, STEM Careers Project address the faculty members and students of the Government Colleges of Quetta

Under STEM Careers Project, a series of seminars and presentations were organized in Quetta for spreading awareness of National Science Talent Contest. Mr. Fida Hussain, Director Learning Innovation, HEC and Mr. Hasanat Rasul, Acting Project Director of the Project conducted the seminars.

In contrast to other provinces, the number of applications for National Science Talent Contest from Balochistan is not encouraging. This is mainly due to the absence of alumni in this area, lack of interest of the teachers/principals in the programme as they are oblivious about National Science Talent Contest and its importance, and exposure of students to internet. All this increased the need to arrange these seminars in the province.

One seminar was arranged in Garrison College Quetta in collaboration with Army Education Core. Students and teachers belonging to colleges, which are located in cantonment vicinity, were at attendance. Another seminar was arranged for government colleges at Government Degree College for Women, Quarry Road, Quetta. In both the seminars, the importance of the project for career building and education was highlighted.

The teachers were asked to teach the students conceptually rather than by rote so that they may be motivated to study basic sciences and do research comprehensively.

The youth of Quetta was encouraged to come forward in activities like National Science Talent Contest so that they can compete talented youth of other areas.

Stem Careers Project is a joint venture of Higher Education Commission and Pakistan Atomic Energy Commission for grooming students in science, technology, engineering and mathematics. The Contest is organized on annual basis and is getting increasing response every year. Detailed information on the Contest is available at the website (www.nstc.edu.pk).



Prof. Haroon Ahmad has been appointed as Adviser to the Higher Education Commission, Government of Pakistan. He took charge of his office on October 1, 2006.





# **Electronic Library Information Navigator**

A three-day Workshop on Electronic Library Information Navigator was arranged at Higher Education Commission Secretariat from November 27-29, 2006.

A team of facilitators from International Network for the Availability of Scientific Publications and Lund Libraries, Sweden visited Islamabad to conduct the Workshop titled "Digital library promotion and user support best practice and an introduction to Electronic Library Information Navigator".

The training was headed by Mr. Martin Belcher, Senior Programme Manager, INASP and Mr. Aron Lindhagen, Librarian, Lund University Libraries. The purpose of this event was to impart training on ELIN and examine best practices for promoting and extending usage of digital library resources.

Since the preliminary workshop arranged in June, 2005, access to this specific database had been extended to a further seven universities. This expansion had been made after assessing the

successful performance of the initial three universities that had been provided with access in the pilot phase.



Electronic Library Information Navigator is now available at 10 major universities across Pakistan, selected on the basis of their overall exemplary usage of the Digital Library resources.

Invitees included two representatives from each participating institution, consisting of library and networking professionals. The format for this Workshop consisted of a mixture of case study presentations from each institution and group activities that allowed for sharing of e-resource library service development plans and identified common elements and features of successful strategies and best practices required for the successful implementation of Electronic Library Information Navigator at various universities.

#### **Use of Bioinformatics in Genomics Research**

A two-week Workshop on "The use of Bioinformatics in Genomics Research" was jointly organized by Higher Education Commission and COMSTECH. A total of 19 participants, nine from OIC member countries including Egypt, Iraq, Tunisia, Turkey, Azerbaijan, Jordan, Sudan, Oman and 10 from universities and organizations in Pakistan, were at attendance.

The Programme focused on arranging specific thematic symposia organized by Cold Spring Harbor Labs, New York. This particular thematic Workshop was organized to find solutions and develop strategies to solve specific problems of economic importance with relevance to ongoing programmes in biotechnology in OIC countries.

The resource persons included Dr. Daniel P. Judge from Cambridge, Sonia Catley and Bruno Gaeta from Australia, Dr. Raheel



Participants of the Workshop

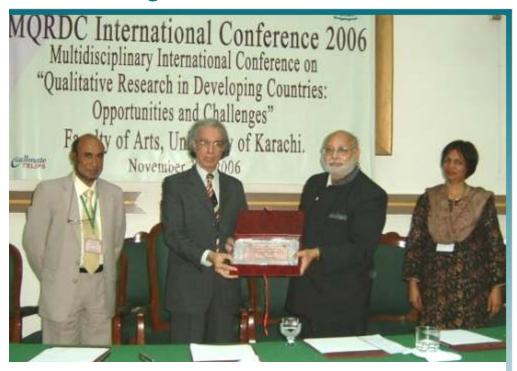
Qamar and Dr. Shahid Chohan from Biosciences Department, COMSATS Institute of Information Technology, Islamabad.

The Workshop focused on techniques of bioinformatics, with a daily practical session to complement the lecture session. The participants prepared presentations of their area of work at the end of the Workshop.





# **MQRDC International Conference 2006**



Prof. Dr. Pirzada Qasim Raza Siddiqui, Vice-Chancellor, University of Karachi presents a shield to Dr. Ahmad Ali Khan, Professor Emeritus and a resource person of the Conference.

Prof. Dr. Muhammad Shamsuddin, Dean Faculty of Arts and Prof. Dr. Fauzia Shamim, Convener of the Conference are also seen in the picture

"With the passage of time, our approach towards qualitative research should be changed using the latest techniques and methodologies". This was stated by Prof. Dr. Pirzada Qasim Raza Siddiqui, Vice Chancellor, University of Karachi while inaugurating Multidisciplinary International Conference on "Qualitative Research in Developing Countries: Opportunities and Challenges" held under the auspices of Faculty of Arts, University of Karachi from November 3-4, 2006.

Prof. Siddiqui thanked the local and foreign scholars, researchers and other guests for sharing their knowledge and experience that are likely to stimulate researchers and academicians' views in various fields of social sciences.

"In order to meet the challenges of the 21st century, scholars and researchers of the developing countries must work hand in hand with other nations of the world", Dr. Pirzada stressed.

He said that this Conference had come as a breath of fresh air. "This Conference is significant for two

reasons; first, it has provided a platform for researchers from a range of disciplines, working in the qualitative paradigm, to discuss and debate common issues. Second. the conference, by focusing on developing countries, is an effort to address the challenges faced by the researchers working in qualitative paradigm, but more important, to highlight the opportunities for gaining in-depth understanding of issues which we cannot get through the use of quantitative methods alone".

He appreciated the thought-provoking presentation by Dr. Adrian

Holiday, the keynote speaker from Christchurch University, UK and urged upon researchers to face realities and meet the challenges of the modern times.

Dr. Pirzada invited the researchers of the developing countries to address various issues concerning qualitative research.

He acknowledged the collaboration of the Higher Education Commission and applauded Dr. Shamsuddin, Dean of the Faculty of Arts for holding such an event and expressed hope that these efforts would continue in the future on a regular basis so that the outcome of qualitative research was put to human advantage in the developing countries.

Speaking on the occasion, Prof. Dr. Akhlaq Ahmed, Pro Vice Chancellor, University of Karachi related the need of qualitative research essential for the sake of improvement in human society in multifarious spheres of research.

"The field of social sciences did not receive due



attention earlier and as such it affected the teaching and research in these disciplines. I am sure that this Conference is a step towards bringing quality in education as well as research", he added.

He said that the University of Karachi recognised the value of qualitative research and hence training programmes had been introduced in the academic, research and even non-teaching departments. "We have also established a qualitative research cell in 2005 in collaboration with the Higher Education Commission".

Earlier, in his welcome address, Dr. Shamsuddin referred to objective of the Conference as achieving excellence in research methodologies by sharing valuable knowledge and experiences.

"This Conference aims at providing a platform to researchers working within the qualitative paradigm, to share their experiences and discuss opportunities and challenges in using this research paradigm in the socio-cultural and research context of Pakistan and other developing countries", he said.

"More specifically, the purpose is to encourage intellectual debate and dissemination of specialist knowledge on issues pertaining to qualitative research in Pakistan and other developing countries", he added.

Dr. Adrian Holiday, in his keynote address, explored the validity of qualitative research by looking at three principles of submission, emergence and personal knowledge, and how they operate in examples of data.

He assigned much importance to the word 'describing' facts and termed qualitative research as a scientific, process wherein variables are controlled and researchers are to be a part of this process.

Prof. Dr. Fauzia Shamim, Coordinator of the Conference also spoke at the occasion. She said that this Conference would bridge the gap between researchers and indicate major misconceptions of qualitative research.

She said that the new methods of research were of great importance for appropriate development of human efforts in various fields of sciences.

The inaugural session was attended by a large number of scholars, researchers, teachers and students from various academic and research institutions of the country.

During two days of the Conference, there were four plenary sessions and parallel presentations in which researchers from all over the country and abroad presented their papers.

On the second day, a special lecture was delivered by Mr. Yin Cheong Cheng from China on "The application of qualitative research in policy development: Implications from educational reforms in Asia Pacific region".

In the end, there was a panel discussion titled "Applying Qualitative Research: A Multidisciplinary Perspective". The panelists included Dr. Adrian Holliday, Dr. David Taylor, Aga Khan University, Karachi, Dr. Irma Gavino, Associate Professor, Aga Khan University, Karachi, Dr. Mansoor Kundi, Dean, Social Sciences, University of Balochistan, Quetta, Dr. Muhammad Wasim, Professor of Political Science, LUMS, Lord Shaukat Nawaz Khan, Chief Executive Asia Link Network, UK and Dr. Wazim Khan, Director, IER, Peshawar. The discussion was moderated by Dr. Moonis Ahmar, University of Karachi.

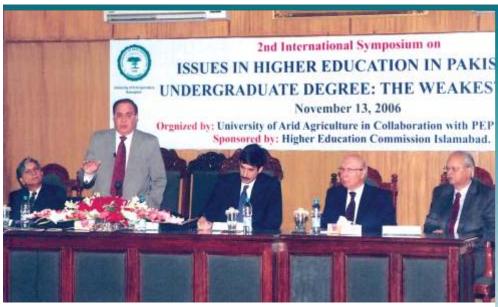


Two Engineering programmes of COMSATS Institute of Information Technology (CIIT), Islamabad Campus have been duly accredited by Pakistan Engineering Council (PEC). These include BSc Electrical (Telecommunication) Engineering (Intake Fall-2002) and BSc

Computer Engineering (w.e.f the Intake Year-1999). Furthermore, the BSc Computer Engineering Programme (Intake Year-2001) of Institute's Wah campus has also been accredited.



# Higher Education in Pakistan Weakest link: The Undergraduate Degree



Prof. Dr. Atta-ur-Rahman, Chairman HEC, speaks to the audience

A one-day international symposium on "Issues of Higher Education in Pakistan Undergraduate Degree: The Weakest link" was organized by University of Arid Agriculture, Rawalpindi in collaboration with Promotion of Education in Pakistan (PEP) Foundation and Higher Education Commission (HEC) recently.

Prof. Dr. Atta-ur-Rahman, Chairman HEC was the chief guest. Speaking at the occasion, he said that Pakistan's present education policy was leading towards right direction under the dynamic leadership of President Pervez Musharraf and Prime Minister Shaukat Aziz.

"Within next 10 years, the country will see the fruits of education system being introduced by the HEC", he said.

Stressing the need for balanced approach, he underlined the importance of focusing on higher education to produce good teachers and researchers who would ultimately lead the education sector towards new horizons.

He emphasized on utilizing modern technology for education to take maximum benefit out of it. "We have established digital library programme through which our students have access to 20,000 international journals and 4,000 electronic text-books. Besides, video conferencing network has also been set up to facilitate the students to have direct interaction with reputed researcher and professors of the world".

Earlier, in his welcome address, Dr. Khalid Mehmood, Vice Chancellor University of Arid Agriculture, Rawalpindi appreciated organizers for successfully holding this symposium. He believed that this symposium would be helpful in development and execution of new strategies in education sector.

Speaking at the occasion, Dr. Khalid Iqbal, President PEP Foundation stressed the need for good administration, quality teachers and conducive environment to upgrade the

academic work in universities. He also gave suggestions for reforms in college education and said that private colleges must also be brought into formal monitoring network.

The Symposium was spread over two technical sessions. The first session was chaired by Prof. Dr. Sohail Naqvi, Executive Director HEC. The main speakers of the session included Mr. Sartaj Aziz, VC, Beacon House University, Dr. Najma Najam, VC, Fatima Jinnah Women University, Prof. Masood Hameed Khan, VC, DOW University of Health Sciences, Dr. Marcia A. Grant, Planning Head, Aga Khan University, Dr. Israr U.H. Sheikh, Rector, Foundation University, Prof. Dr. Mukhtar Ahmad, Member Operations and Planning, HEC and Dr. Fariha Zafar.

The second session was chaired by Dr. Khalid Iqbal. The speakers included Dr. Arif Ali Zaidi, Aga Khan University, Dr. Mansoor-uz-Zafar, IBT Karachi, Dr. Raufi-Azam and Irfan Younis from UAAR, Dr. Zafar Moin Nasir, Institute of Development Economics, Islamabad and Dr. Syed Tahir Ali Hijazi, Dean, Muhammad Ali Jinnah University, Islamabad.

The executive session was jointly chaired by Dr. Khalid Mehmood Khan, Dr. Khalid Iqbal and Dr. Mukhtar Ahmad and was devoted to general discussion and making of recommendations.



#### **British Premier Visits IIUI**



British Prime Minister Tony Blair chats with a female student of IIUI. Dr. Manzoor Ahmad, Rector IIUI, Senator Mushahid Hussain Syed and Dr. Anwar Hussain Siddiqui, President IIUI are also present

British Prime Minister Tony Blair, during his official visit to Pakistan, visited the International Islamic University Islamabad (IIUI) on November 19, 2006.

The British Premier visited the historic Faisal Mosque where he was received by Dr. Manzoor Ahmad, Rector IIUI and Dr. Anwar H. Siddiqui, President of the University. The Prime Minister was visibly impressed with the beauty of the Mosque, its unique architecture, and its breathtaking location near Margalla hills.

Thereafter, the Prime Minister attended a closed door free and informal discussion on "Contemporary Issues in Islam", with a select group of scholars and intellectuals at the auditorium of the University.

An intense, free and frank dialogue was held between the participants on current issues pertaining to the Muslim world, relations between the western and Muslim civilizations, the role UK and Europe can play in resolving the Palestinian and other

disputes confronting the Muslims and the role of youth. Relations between Pakistan and UK Universities were also highlighted.

Mr. Tony Blair also chatted with the students of the University. A good number of male and female Pakistani and foreign students of the University welcomed the visiting dignitary on his arrival and introduced themselves one by one. Mr. Blair took keen interest in the teaching faculties of the Islamic University the students were representing.

He exchanged words of goodwill with the students and was impressed to know that the University offers a wide range of modern sciences like computer science, management and applied sciences, business administration, economics, mathematics, social sciences, education, law and literature of various languages.

Earlier, the Prime Minister was informed about the enhanced interaction of the International Islamic University Islamabad with a number of leading British universities and the increasing linkages between Pakistani and British universities.

Senator Mushahid Hussain Syed, Dr. Maliha Lodhi, Pakistani High Commissioner in the UK, Mr. Mark Loyal Grant, UK High Commissioner in Pakistan and a number of scholars and IIUI teachers were also present on the occasion.

# **Muslim Community Leaders Meet at IIUI**

Dr. Anwar Hussain Siddiqui, President, International Islamic University Islamabad (IIUI) has urged Muslim community leaders to focus on easing the troubled situation for Muslims in non-Muslim societies instead of concentrating on conversion of non-Muslims to Islam.

He was addressing the inaugural ceremony of 23<sup>rd</sup> International Human Resource Development Training Programme organized by the Dawah Academy, IIUI.

Twenty-six community leaders from 16 Muslim minority countries participated in the programme. Prof. Abdul Jabbar Shakir, Head, *Dawah* Academy, Dr. Imtiaz Zafar, Head, International Training Programmes and a number of University teachers, researchers and officers were also present on the occasion.

"Dawah does not necessarily mean conversion of non-Muslims to Islam. It is the time to take Dawah in its





Dr. Anwar Hussain Siddiqui, Prof. Abdul Jabbar Shakir and Dr. Imtiaz Zafar address the audience

broader sense and to take it as educating Muslims how to live in a multi-faith environment. Inspiring others through the best of Islamic manners, tolerance, positive aptitude and respect for the laws of the country where you are living should become on top of the priorities of Muslim social workers and community leaders", Dr. Siddiqui said.

On the issue of *Hijab*, Dr. Siddiqui said that Islam has defined *Satar* (proper dressing). Veil, *hijab* and many other kinds of dresses are permissible. It is, therefore, inappropriate to dress in a way that may annoy others.

"Muslim minorities should try to become integral parts of societies in which they are living. They need to adopt positive and balanced attitude for influencing non-Muslims through their action instead of merely preaching values of Islam", he added.

On this occasion, Dr. Siddiqui directed the authorities of *Dawah* Academy to invite legitimate representatives of other faiths for interaction of Muslim with non-Muslim scholars. "Conflicts among adherents of various religions is motivated by political interests and not by religion itself", concluded Dr. Siddiqui.

Prof. Abdul Jabbar Shakir elaborated the theme and philosophy of the international human resource development training programme.

Dr. Imtiaz Zafar gave details of the programme. These included three lectures a day, interactive workshops, group discussions, situation reports by the participants about their country and trips to places of scenic beauty of historical importance.

# **Malaysian Banking Experts Visit IIUI**

A two-member delegation of the International Centre for Education in Islamic Finance, Malaysia, visited the International Islamic University Islamabad to discuss sharing of resources and expertise between the two organizations for Islamization of banking and finance sectors.

The delegation comprised Mr. Agil Naat, Chief Executive International Centre for Education in Islamic Finance and Mr. Mazidah Malik, Head, Marketing and Communications.

Dr. Asad Zaman, Director General, International Institute of Islamic Economics received the delegation. Prof. Dr. Munawwar Iqbal, Dean, School of Islamic Banking and Finance briefed the delegation about the study programmes and its academic activities.

Mr. Khaliquzzaman, Head, Department of Islamic Banking and Finance and Dr. Nasim Shah Sherazi, Director Research IIIE were also present.

Briefing the delegation about the Institute, Dr. Iqbal said that it is one of the pioneering institutions in Islamic economics, banking and finance that has won the Islamic Development Bank best performance award for the year 2000. He said that the Institute has the advantage of having a combination of scholars of *figah*, law, economics, banking and finance.

Dr. Iqbal further said that the Institute provides academic, training and research facilities and produces more than a hundred graduates per year who are employed in leading financial institutions of the country



and the world over. He informed the delegation that the Institute regularly arranges professional training and orientation programmes for senior officials of the national banking sectors and the ministry of finance.

On the occasion, Mr. Agil Naat appreciated the work and standard of IIIE and took keen interest in its learning, especially distance learning facilities. He said that objectives of the two institutions supplement each other, therefore there should be enhanced cooperation and coordination between the two.

He informed that Islamic banking is growing in double digits and that graduates of Islamic University with a firm understanding of *Shariah* are direly needed by the banking sectors. He warned that it will be a failure of Islamic economics and finance if the experiences of Islamization of banking suffered owing to lack of bankers having *Shariah* knowledge.

Mr. Naat said that banks are not conditioned to particular disciplines of studies. Therefore simple graduates and the graduates of *Shariah* must join the

banking sector.

Both sides agreed to join hands for promotion of Islamic banking and launching new products compatible with modern banking and *Shariah*.

Further interaction between the academic institution of Islamic economics and banking industry was stressed and it was agreed to draft a Memorandum of Understanding between International Islamic Institute of Economics, Islamabad and International Centre for Education in Islamic Finance, Malaysia for coordinated programmes to produce graduates with knowledge of *Shariah* and modern banking.

Meanwhile Dr. Mahmood Ahmad Ghazi, Meritorious Professor at the Faculty of *Shariah* and Law, former President IIUI attended 2<sup>nd</sup> International Shariah Scholars Dialogue held in Kuala Lumpur, Malaysia. He was invited by the Negara Bank of Malaysia where scholars of *Shariah* at world level gathered to discuss dimensions of Islamic banking and finance.

# Azerbaijan University and NUML Sign Agreement

An agreement of partnership was signed between Nakhchivan State University (NSU) of the Republic of Azerbaijan and National University of Modern Languages (NUML), Islamabad recently. Prof. Isa Habibbeyli Akber Oglu, Rector, NSU and Brig (R) Dr. Aziz Ahmad Khan, Rector, NUML signed the agreement.

Under the agreement the two universities will share joint scientific and academic research works. Other salient features of the agreement include compilation and publication of books and articles in both countries, participation of the representatives of the two universities in scientific and cultural conferences, seminars, arranging cultural gatherings such as concerts, art galleries, films, plays etc involving teachers and students, and use of latest means of communication and knowledge sharing.

Creation of a Pakistan Chair at NSU and Azerbaijan Chair at NUML on the names of prominent personalities is also one of the clauses of the agreement. The duration of the agreement is five years and is renewable for the same period for any number of times with the mutual consent of both the universities.



Prof. Isa Habibbeyli and Dr. Aziz Ahmad Khan sign the Partnership Agreement

Speaking at the occasion, Prof. Isa Habibbeyli said that Azerbaijan and Pakistan are very close to each other and the accord signed will enhance the existing fraternal ties between the two countries.

Acknowledging the sentiments of goodwill, Dr. Aziz said that there are many commonalities between culture and traditions of the people of Pakistan and Azerbaijan. He said that from geographical point of view Pakistan was an extension of Central Asia.

Later, the Rector of the Azerbaijan University visited various departments of NUML, Central Library and the newly established laboratory of Chinese Confucius Institute.





# **Punjab University Upgrades Teaching Posts**

The University of the Punjab, Lahore has adopted new criterion for up-gradation of teaching posts conveyed by the Higher Education Commission (HEC) to the universities. Lt. Gen. (R) Arshad Mahmood, Vice-Chancellor, University of the Punjab in exercise of powers under section 15 (3) of Punjab University Act 1973 and in anticipation of approval by the syndicate, approved the HEC new criterion for up gradation of teaching posts with effect from November 1, 2006.

The policy was announced by Prime Minister Shaukat Aziz on the World Teachers Day for the public universities' faculty.

Being the oldest and largest university of Pakistan, Punjab University has the highest number of faculty members. It is the first public sector university that has adopted this new criterion.

The financial impact for up-gradation of posts will be borne by the University from its own budget. With the adoption of the new criteria the post of Lecturer has been upgraded to BPS-18, Assistant Professor to BPS-19, Associate Professor to BPS-20 and Professor to BPS-21.

While expressing his views on the adoption of new criteria, the Vice Chancellor said that teachers play a pivotal role in the society and prepare the future generation to face socio-economic and educational

challenges. The total financial impact of the posts up gradation would be around Rs. 20 to 30 Million per annum. According to the new eligibility criterion for recruitment of university teachers, the qualification pre-requisite for the post of Lecturer will be master's degree with first division and no third division in academic career. However, the University may forward the case of a candidate for selection to HEC, if nobody meets the criterion till June 30, 2008.

For the post of Assistant Professor, the candidate should have PhD or masters with six years experience. After June 30, 2008, the agreed upon criterion would require that only PhD degree holders should be appointed as Assistant Professors.

For Associate Professor, a candidate will be required to have eight research journals of international repute, at least two in the last five years. The condition of research papers will be raised to 10 articles including four published in the last five years, after the deadline in 2008.

Similarly, for the post of Professor, a candidate must have 12 research papers, including at least three papers published in the last five years. After 2008 deadline, the Professors would be required to produce 15 research papers including five in the last five years all published in international journals.

# **BoG Meeting of the Minhaj University**

A meeting of Board of Governors of the Minhaj University, Lahore was held under the Chairmanship of Prof. Dr. Muhammad Tahir-ul-Qadri, Chairman, Board of Governors. Among others, Sheikh Riaz Ahmad, Chief Justice (Retd.), Prof. Dr. Muhammad Nazir Romani, Vice Chancellor, Mr. Farooq Amjad Mir, Member National Assembly, Malik Muhammad Aslam Advocate, Prof. Humayun Ihsan, Principal, Pakistan Law College and others attended the meeting.

Dr. Qadri welcomed the members at the inaugural session and expressed the hope that the cooperation of the members will enable the University to flourish and develop its academic programmes diligently. He hoped that it would uphold the academic standards in future.

The Board of Governors nominated members to complete the Constitution of the Academic Council, Board of Faculties, Selection Board, Board of Advanced

Studies and Research, Finance and Planning Committee, etc. The Board also approved Statutes and Regulations pertaining to various graduate and postgraduate courses and delegated various duties, powers and functions to the Vice Chancellor, Deans, Registrar, Treasurer and Controller of Examinations.

It also approved the rules of procedure for holding the meetings of the Board of Governors, Academic Council, Selection Board, Board of Advanced Studies and Research, etc.

The Board approved the format of the degrees to be awarded to the successful candidates. It also approved regulations relating to MPhil and PhD. Decisions relating to the model Ordinance set by the Higher Education Commission and HEC Minimum Quality Criteria for MPhil and PhD level studies were also discussed.



### **Soomro Praises Aga Khan Varsity Services**

Mr. Mohammed Mian Soomro, Chairman Senate has praised the Aga Khan University for its contribution towards qualitative health sciences education, teaching education, research and in the delivery of health care.

While speaking as chief guest at the 49<sup>th</sup> Convocation of the Aga Khan University in Karachi, he said, "This familiar landmark is no longer the exclusive preserve of Karachi or of Pakistan as other countries are also benefiting from AKU, a national university with international outreach".

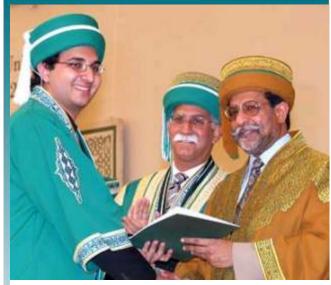
Besides him, Prince Karim Aga Khan, Chancellor AKU, and Mr. Firoz Rasul, President Aga Khan University, also addressed the convocation at which 273 students were conferred degrees and diplomas.

These included six in Master of Science in Nursing, 63 in Bachelor of Science in Nursing, 75 in Diploma of General Nursing, seven in Master of Epidemiology and Biostatistics, eight in Master of Health Policy and Management and 81 in MBBS besides 33 Master in Education.

Mr. Soomro emphasized that human resource development needs to be continuously focused upon with fast advancements taking place in all the relevant fields and to bring in talent of very high standards to compete with global challenges.



MBBS Graduate receives degree from Prince Karim Aga Khan



Dr. Omar Aftab Choudhri receives Best Graduate Award and Gold Medal, Class of 2006, MBBS from Chairman Senate

He called for fast communication, clear thoughts, dedication, hard work and commitment at AKU for improving the quality of life. He told the students that the road ahead would be full of challenges for them.

The Chairman Senate said that when Aga Khan envisaged the setting up of this institution, everybody had the expectation of having an institution with highest standard of learning and these expectations were fully met which reflects from global recognition that Aga Khan University has.

Earlier in his address, Prince Karim Aga Khan emphasized the need for developing an effective knowledge society and said that quest for a better life, among Muslims and non-Muslims alike, must lead inevitably to such society that is developing in the present time.

He said the great and central question facing the Ummah today is how it will relate to the Knowledge Society of tomorrow.

"One answer which can be shared across whole of the Ummah is that we must become full and even leading participants in the Knowledge Society of 21st Century", Aga Khan said adding that will mean embracing the values of collaboration and coordination, openness and partnership, choice and diversity.



# Invest in Youth to Build Nation: Dr. Atta-ur-Rahman



Prof. Dr. Atta-ur-Rahman, Chairman HEC speaks to Amcolians Alumni Association at Army Medical College

'Education in the 1960s was of better standard than education in recent times,' said Prof. Dr. Atta-ur-Rahman, Chairman Higher Education Commission in his guest lecture to the Amcolians Alumni Association at Army Medical College Rawalpindi recently.

He said the HEC was working for the revival of higher education system after its collapse and neglect of many decades. "Though the facilities available to teachers and researchers four decades ago were negligible whereas the standard and commitment was stronger which dwindled due to neglect leaving quality and infrastructure wanting", he said.

He was speaking at the inaugural lecture of Amcolians Alumni Association's lecture series, instituted to create an environment conducive to high level research and development in the field of medicine. He inaugurated the Association's first 'Workshop on Research Methodologies.'

Dr. Atta-ur-Rahman enlightened the audience with the initiatives taken by HEC in the areas of Access, Quality and Relevance to National Priorities. He said that the country's universities now boasted of the best facilities for teaching as well as research and now the onus rested on them to show results.

Universities, he said, should act as agents of change in society and knowledge creation. He said that the knowledge divide has become bigger but the same divide could become an equalizer if more was invested in the youth of the country through investment in

science and technology. "Science works in miraculous ways and there is much to be achieved through commitment of purpose in the fields of biotechnology, information technology, material sciences, pharmaceuticals etc", he stressed.

Since knowledge has become the main driving force of world economies and hence the basis for socio-economic development, Pakistan too is opting for an approach where importance to basic necessities of health, water, sanitation are on the forefront with enhanced commitment to higher education sector, he added.

The Chairman emphasized the central role of higher education in technology development in national priorities that are capable of transforming ideas into products. He outlined the massive scholarship programme for training of PhDs within Pakistan as well as abroad, local scholarship programme for undergraduates worth Rs. 1 billion, post-doctoral training abroad, linkages with universities abroad and the use of technology to leapfrog. This includes the Pakistan Education Research Network, Digital Library, Pakistan Video Conferencing Project etc.

At the conclusion of the inauguration, Maj. Gen. Mushtaq Baig, Principal Army Medical College and Patron of the Alumni Association and Lt. Gen. Syed Afzal Ahmad, Surgeon General (IS) were presented certificates of the Association while Dr. Atta-ur-Rahman was presented a commemorative medallion.



### Dr. Tahira Wins AHK Book Award 2006



Begum Akhtar Hameed Khan and Mr. Shoaib Sultan Khan, Chairman NRSP present the AHK Best Book Award 2006 to Dr. Tahira Khan

Dr. Tahira S. Khan is the winner of Akhtar Hameed Khan (AHK) Memorial Best Book Award 2006 on her book "Beyond the Honour" written on honour killing in Pakistan.

The award was presented to her by Begum Akhtar Hameed Khan at a ceremony organized by Akhtar Hameed Khan Resource Centre and the Council of Social Sciences Pakistan in association with the Rural Support Programme Network at National Library, Islamabad recently. Ms Khan is an Associate Professor of Gender Studies at the University of Denver, USA.

Belonging to a landed aristocratic family of Punjab, Dr. Khan has witnessed women suffer and beaten by their near and dear ones

in the name of honour. She is well aware of the marked boundaries, which, if crossed by women, could invite severe punishment and even death.

In her research-oriented book, she has discussed different dimensions of honour killings and the very norms that made men treat women as their property and subordinates.

At the function, Dr. Tahira said that this award was the best recognition she had ever received at home. "This award means a lot to me," she said.

The selection committee comprised renowned social worker Dr. Rubina Saigol, Action Aid, Dr. Saba Gul Khattak of Sustainable Development Policy Institute and Dr. Inayatullah of Council of Social Sciences. The committee had unanimously selected Dr. Tahira's book for the award.

On the occasion, Akhtar Saleem Khan Memorial Lecture was delivered by Mr. Shoaib Sultan Khan, Chairman National Rural Support Programme. A moving documentary was also shown to the audience on the life and achievements of Dr. Akhtar Hameed Khan.



The South Asia Publications has conferred Star Man of the Year Award 2005 on Prof. Dr. Said Khan Khalil, Vice Chancellor, NWFP Agricultural University, Peshawar. An impressive award ceremony called Jashne-Kamal-e-Karkardegi was held at Karachi. The ceremony was presided over by Lt. Gen. (R) Javed Ashraf Qazi, Federal Minister for Education.

South Asia Publication has the unique distinction of introducing Star Awards to highlight the achievements of outstanding male and female personalities of Pakistan.

In a meeting of the Star Awards Selection Committee on March 27, 2006 at Karachi, Prof. Dr. Said Khan Khalil was selected for the coveted Star Man of the Year Award 2005. The Selection Committee was chaired by Justice (R) Agha Saifuddin Khan and other distinguished members.



# **GCU Delegation Visits Hong Kong Universities**



The GCU, Lahore delegation comprising Dr. A. U. Khan, Dean of Sciences and Ms. Iram Sohail, Director Academic Planning along with Professor Yiu Kwan Fan, Vice President and Mr. Peter Li, Director International Office at the Hong Kong Baptist University

A two-member delegation of Government College University, Lahore visited leading universities in Hong Kong from October 25-31, 2006.

The delegation comprising Dr. Amin ul Haq Khan, Dean, Faculty of Sciences and Ms. Iram Sohail, Director Academics and External Links met the Presidents, Pro-Vice Chancellors, Directors of Academic Links and Chairpersons of different departments of the universities including Chinese University, Baptist University and City University.

They also gave presentations on administrative and academic infrastructure of Government College University and had detailed discussions where collaborations between students, faculty and research could take place. The establishment of Hong Kong and Pakistan Chair was also discussed during the meetings.

The universities in Hong Kong are state funded high-tech, well equipped and comprehensive research institutions with bilingual teaching as medium of instruction, general education (including lectures by distinguished speakers) and a college system as their distinctive features.

During their stay, the delegation also met with Mr. Tariq Shafi Chak, the Consul General at the Consulate of Islamic Republic of Pakistan in Hong Kong and discussed the issues of mutual collaborations with the leading universities in Hong Kong.

Overall, the visit to the Universities in Hong Kong was quite productive and anticipated to lead into future collaborations in Physical Sciences, Social Sciences and Languages. Later Prof. Dr. Khalid Aftab, Vice Chancellor, Government College University was given an overview of the visit by the delegation members.

#### First Online Lecture at AIOU

The Department of Computer Sciences, Allama Iqbal Open University successfully tested its first direct online lecture from USA. The lecture was delivered by Mr. Naveed Baqir, University of North Carolina Greensboro, USA to MS(CS) students.

Mr. Naveed Baqir, an expatriate Pakistani research scholar, taught one course 'Research Study' at AIOU in Autumn 2006 semester. This course was jointly conducted by Dr. Nazir Ahmad Sangi and Mr. Naveed Baqir.

This is another milestone that AIOU has achieved to improve the quality of education by engaging foreign faculty in postgraduate courses.

Mr. Baqir used ITSN network and PERN connectivity provided by Higher Education Commission to deliver a

live lecture every week from University of North Carolina-Greensboro, USA.

MS (CS) research students worked on local research problems associated with e-learning including transfer of Audio/Video and multimedia over low bandwidth public networks.

This has opened a gateway for other departments to use tele and video conference facilities and arrange guest lecturers using faculty from technically advanced countries.

This will also provide a mechanism to conduct viva examination with foreign experts. It will overcome a problem of travel and time related costs.



### **Establishment of New Departments at UET Lahore**

According to *Varsity News*, UET Lahore (Vol. 33), the following new departments/centres/schools shall be established in various campuses of University of Engineering and Technology, Lahore.

#### MAIN CAMPUS

Faculty of Mechanical Engineering
Department of Industrial & Manufacturing Engineering
Department of Mechatronics & Control Engineering
Department of Engineering Management
Manufacturing Technologies Development Centre
Automotive Engineering Centre

Faculty of Civil Engineering Department of Transportation Engineering & Management

Department of Architectural Engineering and Design

Faculty of Chemical, Mineral and Metallurgical Engineering

Department of Polymer & Process Engineering Department of Geological Engineering

Faculty of Architecture and Planning

School of Architecture & Design With the addition of School of Architecture and Design under this Faculty, the Department of Architecture shall stand deleted from the first statutes.

Faculty of Electrical Engineering
Department of Computer Science & Engineering

Faculty of Natural Sciences, Humanities and Islamic Studies
Laser & Optronics Centre

Research Centre

Innovation and Technology Incubation Centre

#### KALA SHAH KAKU CAMPUS

Faculty of Electrical Engineering

Department of Electrical, Electronics and
Telecommunication Engineering
Faculty of Mechanical Engineering
Department of Mechanical, Mechatronic &
Manufacturing Engineering
Faculty of Chemical, Mineral and Metallurgical
Engineering
Department of Chemical, Polymer and Materials
Engineering
Faculty of Civil Engineering
Department of Civil and Environmental Engineering
Faculty of Natural Sciences, Humanities and
Islamic Studies
Department of Management Sciences
Department of Natural Science & Humanities

#### **FAISALABAD CAMPUS**

Faculty of Electrical Engineering
Department of Electrical Electronics and
Telecommunication Engineering
Faculty of Mechanical Engineering
Department of Mechanical Mechatronic &
Manufacturing Engineering
Department of Textile Engineering
Faculty of Chemical, Mineral and Metallurgical
Engineering
Department of Chemical Polymer & Process Engineering
Faculty of Civil Engineering
Department of Civil and Environmental Engineering
Faculty of Natural Sciences, Humanities and
Islamic Studies
Department of Natural Sciences & Humanities



Prof. Dr. Muhammad Riaz Mirza, Chairman, Mechanical Engineering Department, University of Engineering and Technology, Lahore has been appointed as member of Global Advisory Board of Korean Advanced Institute of Science and Technology (KAIST), South Korea. Dr. Riaz has been appointed for a period of two years commencing September 2006.





# Earthquake Vulnerability and Multi-Hazard Risk Assessment

With a geographical location in world's mightiest mountain ranges of Karakoram-Hindukush and Himalayas, Pakistan and its neighbouring countries are highly vulnerable to disasters including earthquakes, avalanches, floods, muddebris flow and land sliding. While continuing to attempt mitigating these hazards, the best strategy to minimize the damage is to develop a high level of preparedness through sound management practices.

Any effort towards achieving this goal is heavily dependent upon the availability of geo-spatial information at different scale as topographic, geologic and soil, vegetation cover, road network, location and type of buildings, aerial photography, satellite imagery and GPS. Modern developments in geo-spatial sciences provide highly efficient tools for database development where georeferenced data are available for display in all kinds of illustrations especially maps.

In this connection, National Centre of Excellence in Geology, University of Peshawar and International Centre for Integrated Mountain Development, Kathmandu, Nepal in collaboration with International Institute for Geo- Information Sciences & Earth Observation (ITC), Netherlands, United Nations University (UNU), Tokyo, Japan and Asian Disaster Preparedness Centre (ADPC), Bangkok, Thailand held a training cum workshop, on "Earthquake vulnerability and multi-hazard risk assessment" from November 13-24,2006, at NCEG, Peshawar.

The objective of the Training/Workshop was to build the capacity of national institutions in utilizing geo-spatial tools (GIS/RS/GPS) for multihazard risk assessment and mapping and to raise the awareness of potential applications of such tools for disaster preparedness and mitigation. More specifically, the Workshop focused on transferring knowledge and skills to the agencies working on disaster management in Pakistan. The training was aimed to strengthening the national institutions in promoting research and education on earthquake disaster management.

The training course was attended by 36 lectures, geologists, engineers, database analysts, meteorologists, planning officers, GIS Specialists,



Participants of the workshop during one of their field visits

programme coordinators, technicians, civil defence officers, directors, forest officers from various organizations.

Dr. Mark Van der Meije from ITC-The Netherlands, Mr. Pardeep Mool from ICIMOD- Nepal, Dr. Asif Khan from NCEG- University of Peshawar, Mr. Muhibuddin Bin Usamah from ADPC, Dr. Shafiguer Rehman from Department of Environmental Sciences- University of Peshawar, Syed Mohammad Ali from NWFP University of Engineering and Technology, Peshawar and Ms Samina Sardar from Focus Humanitarian Pakistan delivered lectures on; introduction to recent disasters and issues related to rehabilitation and reconstruction efforts in disaster affected areas, geo-spatial tools for vulnerability and multi-hazard, risk and damage assessment and analysis using geo-spatial tools, vulnerability assessments and reduction measures, elements at risk mapping of social and infrastructure for different types of hazards, disaster, communication and community, capacity assessment and National Disaster Preparedness Plan.

Field visits to Mardan and Balakot were organized for participants to give them an opportunity to visits the areas effected by natural disasters, floods and earthquakes.

The closing ceremony of the Workshop was held on November 24, 2006 at the GIS-RS Laboratory of National Centre of Excellence in Geology-University of Peshawar. The ceremony was attended by the resource persons, training organizers and participants. Dr. Asif Khan, Director NCEG, University of Peshawar, distributed the certificates among the participants.





# Shehla Represents HEC at an International Conference

Ms Shehla Rizwan, Project
Manager, Strategic Planning
Division, HEC visited Adelaide,
Australia and attended an
international conference titled
"Change in Climate? Prospects
for Gender Equity in
Universities" organized by the
Australian Technology Network
(ATN) Women's Executive
Development Programme
(WEXDEV form April, 1113,2006. The following is a
report she presented to HEC on
her tour.

ATN is a consortium of Australia's five leading technology universities. The conference provided three days of intensive presentations and workshops on successful



Ms Shehla Rizwan gives presentation on 'Gender Biased Perception at Workplaces'

mechanisms for ensuring gender equity in universities. The participants also got an opportunity to visit South Australian University, Adelaide University, and upon receiving an invitation from Deputy-Vice Chancellor, University of Technology, Sydney, I also visited that University.

The five-day tour was very hectic but it provided me an opportunity to interact and share my thoughts with the scholars and researchers who came from across the world and to portray Pakistan as a progressive country in the eyes of the participants.

Among the two research papers submitted, namely, "Gender Biased Perception at Workplaces" and "A Study of Generational Changes in Pakistani Women Working in Higher Education Management", I presented one at the

Ms Shehla Rizwan with Ms Jane Lomax-Smith, South Australian Minister for Education & Tourism

Conference although both of the research papers were accepted by the organizers and have also been published in the International Journal published by WEXDEV. However, I gave a 30-minute oral presentation including question-answer session on the first topic. In order to make my presentation more powerful and innovative, I showed a documentary on Pakistan and Pakistani Women.

The Conference was rigorous and academic with refereed papers. Keynote and invited speakers included senior men and women and researchers from countries such as Australia, Canada, UK, Europe and USA, which have been in the forefront of advancing gender equity, as well as senior executives (mostly vice chancellors and deans) and researchers from developing countries such as China, India, Pakistan and Africa. They participated and enlightened through their presentations on the current issues faced by women working in higher education in their countries.



# Report

Among the 90 abstracts selected for the Conference, only 26 presenters were nominated for oral presentations, the rest of the participants either were presenting their research papers through posters or strategic discussions.

Upon presenting my research paper, I got an encouraging feedback as all the participants appreciated the change which has taken place in a developing country such as ours. I also quoted statements especially of Prof. Dr. Sohail H. Naqvi, Executive Director, HEC in support of the whole research as he had elaborated the importance of working women in the higher education management of Pakistan. This turned out to be real eye-opener for the participants who had a wrong perception about Pakistani men. As most of the participant, especially coming from Europe had a misconception of Islam, where women have no opportunity to work with men.

The participants took keen interest in the policies and asked questions regarding the role and importance of Higher Education Management with reference to "Strategic Vision & Quality Assurance" and the support which HEC is providing in spreading higher education in the country. Upon their request, the website of HEC was opened and the major roles and functions of the Commission were explained. All those participants coming from developing countries were encouraged to see the change in Pakistan and became hopeful and optimistic for their own countries.

Dr. Jane Lomax-Smith, Australian Minister for Education and Conference organizers appreciated various initiatives of the HEC and suggested that the Commission should also organize an international conference of the similar nature and invite researchers from across the world in order to project their successes and share their policies, especially with other Muslim developing countries, thus supporting them in up lifting their countries as well.

# Wasima Attends International Symposium

Dr. Wasima Shehzad, Deputy Director, Public Relations, National University of Sciences and Technology (NUST), Rawalpindi gave an ESP paper presentation and conducted an ELT workshop, as an Invited Featured Speaker at the 15<sup>th</sup> International Symposium on English Language held at Taipei Taiwan. The Symposium was organized by English Teachers Association, Republic of China (ETA-ROC) affiliated with TESOL (USA), Japan Association for Language Teaching (JALT), Far East English Language Teachers Association (FEELTA) and Philippines Association of Language Teachers (PALT). Following is a report of the Symposium she attended.



Dr. Wasima Shehzad with Prof. Jerome C. Su Chair, Bookman Books/B. K. Norton, Ltd

The title of her presentation was 'Computer Scientists' Approach to Establishing a Research Territory'. This paper has also been published by Crane Publishing Co. Ltd & ETA-ROC, and is based on her research in the area of scientific rhetoric.

Some of the issues deliberated at the Conference were on entrance examinations, standardized curricula, teacher training, English for Academic Purpose (EAP), English for General Purpose (EGP) and English for Specific Purpose (ESP) that help to define the English language teaching (ELT) situation in Asia. What can the teacher learn from conducting classroom-based research? How is e-learning affecting traditional classroom interaction? Are there specific Asian methodologies? What methods are successful with what kinds of students? Many Asian classrooms are already wired to the Internet and teachers use multimedia teaching materials. Are we using these tools effectively?



# Report

As the Conference theme was 'Border Crossings', the research papers aimed to address issues of concern not only to the practitioners of Asian English Language atTeaching but throughout the world.

Discussing the beginning of the 'introduction of a research paper', she explained that the introduction not only introduces the topic area but also qualifies the range of the argument.

The results of her research based on Shehzad Computer Science Corpus (SCS Corpus) indicated that computer scientists use a wide range of methods for establishing a research territory such as being part of the cult, claims of recency,



Dr. Wasima Shehzad (1st from left) at the reception dinner at Taipei

the project undertaken being problematic and/or challenging. They also use definitions, descriptions and narratives for occupying research space. The linguistic indicators used for the purpose were also identified and discussed during the presentation.

The theme of her ELT Workshop, 'Odoriferous or Ambrosial' was extremely innovative and generated great interest amongst the participants.

Dr. Shehzad's book 'Teaching Communication Skills A to Z' was also showcased and autographed at the Book Fair at Taipei. Prof. Jerome C. Su Chair, Bookman Books/B. K. Norton, Ltd, who is also President of Taiwan Association of Translation and Interpretation, played akey role in the organization of the Book Fair.

It is worth mentioning here that Dr. Wasima Shehzad is the first Corpus Linguist of Pakistan and has got research training from the University of Michigan USA, under Fulbright Fellowship Programme.



The students of Fatima Jinnah Women University (FJWU), Rawalpindi staged a peaceful walk on the university campus recently to celebrate the passing of women protection bill by the National Assembly.

Speaking at the occasion, Prof. Dr. Najma Najam, Vice Chancellor FJWU said it was the first step towards the real empowerment of Pakistani women. She said it was not only a historic achievement for women, but also for the president, prime minister and all legislators and activists who had worked ceaselessly to achieve this objective.

"It would go along way in mitigating the sufferings of the oppressed women", she said adding that the bill heralded a new beginning for the women.

The walk was attended by the faculty and a large number of students form bachelors and masters programmes. The students were carrying colourful placards inscribed with slogans like "Well Done Mr. President", "Say No to Abuse", "Victory for Pakistani Women and "Yes to Equality Not to Hegemony".





# **NUML Organizes Declamation Contests in English, Japanese**



Students of English speech contest with Dr. Riaz Hasan, Col. (R) Javed and Mufti Jamiluddin Ahmad, Visiting Professor at NUML

"We are not here to play, to dream, to drift. We have hard work to do and loads to lift. Shun not the struggle is God's gift" was the topic of a student in the English declamation contest held in NUML recently.

A total of 11 students participated in the bi-annual English speech contest held in the Department of English. Some other interesting topics of speeches were: "The main obligation of a Muslim is to preach Islam", "Science is a curse more than a blessing", "What is the most important thing to succeed in life effort, talent or fate?" and "Honour killing in Pakistan". The topics of the extempore speeches were chosen by the students themselves.

Speaking at the occasion, Dr. Riaz Hassan, Dean, Quality Enhancement, Research and Publication, appreciated the highest level of speeches made by the participating students.

Earlier, Col. (R) Jawaid Ahmad, Head of the Department, emphasized the importance of acquiring knowledge without which a nation stands nowhere. "Progress of a nation entirely depends on acquisition of knowledge", he said. In the end, Dr. Riaz Hassan gave away prizes and certificates to the speakers. Sana Zaheer of the BAML (2nd Semester) topped the list while Syed Waqas Ali and Raza Abbas secured second and third positions respectively. Consolation prize went to Nosheen Ghulam.

In the Japanese contest, six students participated. Mr. Seiji Kojima, Ambassador of Japan was the guest of honour at the occasion. The event was also attended by a large number of diplomatic staff of the Japanese Embassy.

Javed Khan spoke on "Quaid-e-Azam", while the topic of the speech by Mateeh-ur-Rahman was "Lahore the heart of Pakistan". The topics of other speakers Shahid Nadeem, Atta

Ullah Sajjad and Waheed Ahmad were "Tourist attractions of Pakistan", "My City Gujranwala" and "Seasons of Pakistan" respectively. Zahid Mahmood left it to the discretion of the audience to decide the topic of his humorous speech.

In his welcome address, Rector NUML said that the Japanese Department was one of the pioneer departments of the university. Similarly, Japan was the country to have established the

first language laboratory in NUML.

"Japan and Pakistan are good friends and will remain so in future as well. The reciprocal friendship between the two countries is based on cardinal principles of justice, equality and brotherhood", the Rector remarked.



Japanese Ambassador gives away prize to the best speaker in Japanese speech contest.

Speaking at the occasion, Mr. Seiji Kojima eulogized the proficiency of the student speakers in the language they were learning at the university. He profusely complimented the teaching staff for their hard work and dedication which was reflective in the performance of the students at the declamation contest.

Zahid Mahmood of Diploma Course was declared the best speaker while Shahid Nadeem and Mateeh-ur-Raman were adjudged second and third respectively.



# Student Corner

# **Performing Arts festival at PUCAD**

More than 200 students from 11 public universities of Punjab participated in the three-day performing arts festival organized by Punjab University College of Arts and Design.

Government College University, Lahore, University of Engineering and Technology Lahore and Fatima Jinnah Women University, Rawalpindi swept the awards at the festival.

The troupe from FJWU was declared the best team and took the award for best lights, with GCU Faisalabad and UET Taxila coming in second and third respectively, while GC University Lahore claimed three awards, including best actress, best actor in a comic role and best direction.

Speaking at the award ceremony, Lt. Gen. (R) Khalid Maqbool, Governor Punjab said that the success of this festival is a victory for the forces of



liberalism and indicated that the people were on board with the president's ideology of 'enlightened moderation'.

He said that creative activities such as dramatics should be encouraged and pledged to support all such efforts by students. He also commended the University administration for holding its first-ever performing arts festival.

#### **Debate Contest for Allama Iqbal Shield**

University of Arid Agriculture, Rawalpindi (UAAR) organized a speech contest to select candidates for Allama Iqbal shield.

A large number of students and faculty members were present on the occasion. Mrs. Yasmeen Meherun Nisa, District Manager Technical Education and Vocational Training Authority, (TEVTA) Rawalpindi was chief guest while Dr. Afser Mian, Dean Faculty of Sciences was the guest of honour.

In English debate, Mamoona Sana (BSc-Hons), Muhammad Umair Khan (MBA), Shaheer Elahi (MSc) obtained first, second and third positions respectively while in Urdu Debate Umer Sheikh (BSc Hons) got first, Huma Leghari (MSc Hons) second and Saffan Ullah Khan (MPhil) third positions.

Syed Mubarik Ali Shah, Treasure UAAR, Syed Ejaz Hussain Shah, Prof. Govt. Commerce



Participants and winners along with judges of the Contest

College Rawalpindi and Advocate Syed Wajid Gilani were judges of the Contest. In the end, Mrs. Yasmeen Meherun Nisa distributed prizes among the winners.





# The Islamic Methodology of Teaching

This paper presents the Islamic Methodology of Teaching. Therefore, the following aspects are considered:-

- How can we define a method?
- What do we mean by objectives and how are they related with course contents and methods?
- What is meant by Islamic methodology of teaching?
- Problems and difficulties involved in the Islamic approach to teaching and how to handle them?

It will not be out of place, first to consider what do we mean by a method?

A famous educationist has defined a method in these words. "A method determines what and how much it is taught (selection), the order in which it is taught (gradation), how ...... are conveyed (presentation), and what is done to make the use of ......

the unconscious (repetition)."

Dr. Muhammad Shafi, who did his MEd from University of the Punjab, Lahore and PhD in Teaching of English as a Foreign Language from the University of Wales (UK), joined the English Department of the AIOU as HEC Professor in June 2005.

A senior Professor of international repute, Dr. Muhammad Shafi has over 30 years of research and teaching experience and an outstanding career in different universities of UK, Malta and Saudi Arabia. In Pakistan, he had been



teaching English for specific purposes in GIKI, NUST, Hamdard University and IIU, Islamabad. He has presented papers in international conferences and has also attended a number of seminars and conferences of English Language Teaching, Educational Psychology, Muslim Education and Educational Technology.

Dr. Shafi has also published several articles and books on literary and TEFL topics. Besides, he has also been life member and Chairman of Education Committee of the Pakistan Education forum, Islamabad since 1999.

Another educationist defined method as "A procedure planned in such a way as to achieve a certain aim and good results".

A method then is a total sum of techniques and procedures which, the teacher and the learner have to use. keeping in mind where they are going and what ultimate objective they have to achieve. To the writer the definition of method is not the great concern; rather it is its application in the classroom situation to achieve desired objectives. One cannot expect a single method to be so universally acceptable as to be useful and effective for all learners, under different conditions and circumstances.

It seems useful to consider, what do we mean by an objective?

Some scholars have defined objectives as "A statement describing an instructional outcome, rather than instructional process or procedures. It describes results rather than means of achieving those results".

The important point to note here is the outcome of the teaching/learning activity to which the objectives are related. It is experienced by a large number of educationists, when clearly defined goals are lacking, it is impossible to evaluate a course or programme efficiently and there is no sound basis for selecting appropriate materials, contents or instructional methods.

The relationship between objectives, course contents and methods is that the later two depend on the first.

The majority of educationists agree that the instructor must first decide upon the goals he intends to reach at the



# Research Research

end of his course or programme. For example, for the student who is learning a foreign language, the objective will be the acquisition of oral fluency rather than reading and writing skills, and for others the development of all four language skills.

The second step to be taken after objectives have been formulated is to plan the course content. If a learner, for instance, aims at acquiring an oral fluency (if he is learning a language) rather any other skill, the content of the language course will focus on oral practice at the expense of reading and writing skills.

The next step is to choose the most relevant method or methods with which to teach the content, in the light of these objectives, or more precisely the students expected terminal behaviour.

The decision as to the selection of a method depends upon the teacher's insight, training, learner's interest, needs and motivation, objectives to be achieved and the conditions and circumstances under which the teaching/learning process takes place. The Islamic Methodology of teaching should have the following steps.

- 1. Islamic objectives (derived from Holy Quran & Sunnah)
- 2. Contents (based on the needs of Islamic society)
- 3. Methods used (depend on the subject to be taught)
- 4. Teacher (Trained in Islamic Methodology)
- 5. Student (to be produced as balanced personality)

All these steps are interlinked with each other.

The success of the above mentioned methodology depends very much on the character and quality of the teacher's understanding and perception of the issues involved in Islamic Methodology of teaching, the degree of commitment to its course, and above all his devotion to the Islamic way of life.

Any teacher who is involved in an Islamic Methodology of teaching shall have *Taqwa*, if he is lacking it he shall miss the spiritual aspect of student's life and in this way he shall not be successful in producing a balanced personality.

The product of the Islamic unified system should be a sober personality who is in harmony with his nature and his creator. Such character traits are not easy to be inculcated if the sprits in the teaching learning process are not close to Allah. Without *Taqwa* and Islamic Traits in the teaching staff the Islamic Methodology of teaching becomes an ordinary intellectual exercise that may or may not produce the Islamic Qualities/values.

Let us now consider the following important issue. The problems and difficulties involved in the Islamic methodology of teaching and possible solution are:

- 1. Lack of qualified staff and how to handle it A ready-made teacher with the qualities already mentioned is not always readily available. Hence an institution that is involved in applying Islamic methodology of teaching has to conduct its own training, by having its own in-house religious induction programmes, initiating young teacher/lecturer into an Islamic environment, encouraging them to participate in daily congregation prayers, for example at the same time appropriate precautions should be taken that the process of teaching done by new staff does not degenerate into a more intellectual transfer of knowledge with any change in attitude, spirit and character.
- 2. Infusing Islamic spirituality in the teacher and the taught and how to do this
  At this point it may be pertinent to define the spirituality. There are of course many definitions of spirituality.

  People with secular attitude may regard spirituality as an exercise of a high mental or intellectual order leading towards love for nature; this, then shows, a unity of companionship with nature and the universe.

The Islamic spirituality is process of purification of the self to the worship of one absolute God. The construction of this spirituality can be through activities of science, recognizing that the physical universe



#### Research Research

where science operates is in fact the manifestation of Allah's being and attributes. At this stage the teacher and students should be made aware of the value of understanding Holy Quran. The truths of Quranic revelations will itself infuse the sense of spirituality in both the teacher and the taught.

- 3. Development of desired characteristics in institutes of higher education Institutes of higher education designed to apply the Islamic Methodology in teaching must develop a number of desirable characteristics.
- a) The institutes must provide a positive Islamic environment.
- b) The institutes must be academically theological.
- c) The religious element should be an integral part of the professional training for Islamic Methodology of teaching.
- d) Higher institutes should arrange courses for staff and students in the campus concerning *Aqidah*, Islamic Ethics and Islamic issues on civilization, reading of Holy Quran and Hadith. This will help teachers to derive Islamic objectives for teaching form Holy Quran and *Sunnah*. The Student will get an insight in the teaching/learning Methodology based on Islamic ideology and its Principles.

| ————By Dr. Muhammad Shaf    |
|-----------------------------|
| muhammadshafi2000@yahoo.com |

### **Research on Honeybees**

Responding to the national needs to execute some agricultural technological interventions of applied nature like 'Beekeeping' (apiculture) for sustainable livelihoods, creative self-employment and increased crop productivity, University of the Punjab has embarked upon research and development activities on honeybees.

Honeybee Research Project was initiated with allocation of Rs. 4,53,000/- in the University budget for the year 2004-05.

Beekeeping is increasingly seen as a positive component of many rural development projects because of low financial input, pollination of wild and cultivated plant and income generation.

The European bee *Apis mellifera* farm comprising 200 hives has been established at the campus. Studies are being made on breeding of this occidental bee for enhanced productivity of the colonies. Honeybee Research Project is well-equipped with necessary laboratory equipment and field appliances for honeybee colony management, queen breeding, control of pests and diseases, pollen harvesting, wax processing, removing honey crop and honey extraction, its filtering and preparation for market.



Training material including demo apiaries, literature, video films on various aspects of beekeeping, queen breeding, honeybee behaviour, informatory charts and slides have been prepared for dissemination of technical know-how for increased knowledge and understanding of apiculture.

Honeybee farming and management skill training have been organized at the University campus to teach bee technology to students and persons preparing to ever beekeeping more cost effective, and independent of external inputs. Such training have helped the landless people and those with small land holdings to start small business and improve their livelihoods.



# ENATIONAL ENEWS

#### **Ten Universities Win IBM SUR Awards**

IBM recently announced that 10 universities spanning multiple geographies have been chosen as winners of the latest IBM Shared University Research (SUR) awards. For the first time, each of the universities will be using the Cell Broadband Engine™ (Cell/B.E.) technology to enable students and faculty to drive innovation, collaborate and foster skill development in the creation of digital media, software platform performance and medical imaging solutions.

As research helps drive innovation and growth, new skills are required to staff the emerging disciplines and technologies, leading to tremendous opportunities to drive Cell/B.E. technology into multiple areas.

"Because of its ability to handle compute-intensive applications, we are seeing tremendous demand to incorporate Cell/B.E. microprocessor technology in a host of products, solutions and opportunities outside of gaming," said Lilian Wu, Programme Executive, IBM University Relations and Innovation.

"All of these universities have very unique ideas on how they think Cell/B.E. technology can be applied to help solve different problems, as well as using the technology to encourage skill development among its students and faculty. IBM is proud to collaborate with these universities to make these innovation ideas possible."

The winners include Georgia Institute of Technology for use in gaming, high-performance computing and digital content; University of California at San Diego's Experimental Game Lab for real-time broadband gaming; University of Illinois for molecular dynamics and cosmology simulations; University of Minnesota MSP for numerical algorithms in fluid dynamics; University of Virginia for 3D renderings; and the University of Washington at Seattle's bioengineering department for ultrasound machine architectures.

Other winners are Barcelona Supercomputing Centre at the Technical University (Catalonia, Spain) for life sciences, earth sciences and engineering applications; Tsinghua University (Beijing) for real-time video synthesis; United Arab Emirates University for seismic imaging and oil-reservoir simulations; and University of Dublin Trinity College (Ireland) for animation of human motion.

IBM's highly selective SUR programme awards computing equipment, software, and services globally to higher education institutions in order to facilitate research projects of mutual interest, including: the architecture of business and processes, real-time data analysis, privacy and security, supply chain management, information based medicine, deep computing, event-driven computing, and storage solutions. The SUR awards also support the advancement of university projects by connecting top researchers in academia with IBM researchers, along with representatives from product development and solution provider communities. IBM supports more than 50 SUR awards per year worldwide.

\_\_\_\_\_ Courtesy: IBM

## **Science of Superheroes**

The science of superheroes is usually determined by cartoon artists and writers, but no one seems to have thought about engineering superheroes for the future with their super powers based on science. An exciting project of University of Strathclyde, Scotland, funded by National Endowment of Science, Technology and the Arts (NESTA) and run by the Bioengineering Unit aims to do just that.

John Gaylor of the Bioengineering Unit thinks "this is a great interaction between pupils and higher education, making future budding scientists more aware of what biomedical engineering is and the potential it has."

Pupils and teachers will team up with Bioengineering

students to explore the possibilities of biomedical technology. The aim is to develop a resource that educates pupils about current biomedical technologies while allowing them to explore future possibilities and create their own superheroes. A storyboard artist will develop comic strips with the pupils to bring their superheroes to life.

Project Manager Dr. Elsa Ekevall said, "The number of students enrolling in science courses across Scotland has dropped over the years, so we wanted to come up with a way of teaching that would capture pupils' imagination. This will give them insight into bioengineering and open new doors for them."

\_\_\_\_\_ Courtesy: PRISM





## **National Research Grant for Universities**

Under Research Grant Project of Higher Education Commission, creative researchers of the country working in various fields of science and technology as well as social sciences are awarded research grants to enable them to conduct R&D in priority areas of science and technology, relevant to national needs.

Fourteen approved projects are being included in this issue. The other project proposals will continue to be published in the forthcoming issue of the magazine.

| Principal<br>Investigator      | Subject   | University   | Amount<br>Rs. | Period       |
|--------------------------------|---|--|---------------|--------------|
| Dr. Muhammad Jalal<br>Arif     | Systematic, biological, ecological studies and management of cotton mealy bug   | University of Agriculture,<br>Faisalabad                               | 1,254,494     | 3<br>Years   |
| Dr. Muhammad Iqbal<br>Lone     | Evaluation of soil moisture depletion pattern, soil microbial activity and biomass under different types of terracing in Pothowar   | University of Arid Agriculture,<br>Rawalpindi                          | 1,288,000     | 2<br>Years   |
| Dr. Muhammad Riaz<br>Khan      | Investigation of 50 Hz pulsed D.C. generated plasma for processing of metals  | University of Peshawar,<br>Peshawar                                    | 2,035,650     | 3<br>Years   |
| Dr. Aneela Zameer<br>Durrani   | Epidemiology and economic losses of theileriosis in bovine  | University of Veterinary & Animal Sciences, Lahore.                    | 1,791,720     | 2<br>Years   |
| Dr. Dilshad Ahmed              | The effects of environmental pesticides residues on the health of farmers in Tobacco growing areas of NWFP, Pakistan  | National University of Science<br>and Technology, Rawalpindi           | 1,356,314     | 2<br>Years   |
| Dr. Qaisar Ali                 | Effective use of fly ash in the construction industry   | NWFP University of Engineering and Technology, Peshawar                | 1,297,325     | 3<br>Years   |
| Dr. Saeed Iqbal Zafar          | Development of Biosorption-Biodegradation<br>System for the Removal of Dyes from Textile<br>and Printing Industry Effluents by<br>Saprophytic Fungi, White Rot<br>Basidiomycetes and Plant Residues       | University of the Punjab,<br>Lahore                                    | 4,339,743     | 3<br>Years   |
| Dr. Faheem Uddin               | Combined crease recovery and flame retardant finishing of cotton using polycaboxylic acids and phosphorous contaning reagents   | University of Karachi, Karachi   | 747,660       | 3<br>Years   |
| Dr. Nurul Kabir                | Setting up a high-resolution microscopy<br>system for testing different natural<br>compounds in the treatment of different<br>diseases such as Parkinsons, Alzheimers,<br>Immunological disease or cancer | University of Karachi, Karachi   | 5,977,200     | 2<br>Years   |
| Dr. Muhammad<br>Ahmed Choudhry | Develop real time control algorithms for trajectory planning and vision based localization for non-holonomic mobile robot   | University of Engineering & Technology, Taxila                         | 3,432,245     | 1<br>Year    |
| Dr. Muhammad Ashraf            | Assessment of Plant Genetic Resources through Molecular Methods   | Quaid-i-Azam University,<br>Islamabad                                  | 4,530,255     | 3<br>Years   |
| Dr. Muhammad Aslam             | Correlation between antioxidant status, arterial stiffness and blood pressure in adult man  | National University of Science<br>and Technology, Rawalpindi           | 1,828,849     | 18<br>Months |
| Dr. Naeem Rashid               | Cloning and characterization of a thermostable DNA polymerase.  | University of the Punjab,<br>Lahore                                    | 3,046,470     | 3<br>Years   |
| Dr. Muhammad Munir<br>Babar    | Water Saving through Microirrigation Methods  | Mehran University of<br>Engineering and Technology,<br>Jamshoro, Sindh | 5,052,648     | 28<br>Months |





## **List of HEC Approved PhD Supervisors**

Following is the list of HEC Approved PhD Supervisors in Basic and Applied Sciences, who have been approved in the months of September, October and November, 2006.

| Name                        | Designation            | Department                                     | University/Organization   | Subject                               |
|-----------------------------|------------------------|--|---|---------------------------------------|
| Dr. Muhammad Siddique       | Professor              | Veterinary<br>Microbiology                     | University of Agriculture,<br>Faisalabad  | Pathobiology                          |
| Dr. Zafar Iqbal Khan        | Lecturer               | Botany   | Govt. Ghazali College, Jhang  | Botany                                |
| Dr. Abdul Rauf              | Associate<br>Professor | Plant Pathology                                | University of Arid Agriculture,<br>Rawalpindi                                   | Plant Pathology                       |
| Dr. Muhammad Faisal         | Lecturer               | Microbiology &<br>Molecular Genetics           | University of the Punjab,<br>Lahore   | Botany                                |
| Dr. Hajra Khatoon           | Professor              | Microbiology                                   | University of Karachi   | Microbiology                          |
| Dr. Mohammad Zuber          | Dean                   |  | National Textile University   | Polymer Science                       |
| Dr. Rehana Saeed            | Assistant<br>Professor | Chemistry                                      | University of Karachi   | Physical<br>Chemistry                 |
| Dr. Muhammad Latif<br>Mirza | Professor              | Chemistry                                      | Islamia University,<br>Bahawalpur   | Chemistry                             |
| Dr. Munir Ahmad Sheikh      | Professor              | Chemistry                                      | University of Agriculture,<br>Faisalabad  | Biochemistry                          |
| Dr. Haq Nawaz Bhatti        | Assistant<br>Professor | Chemistry                                      | University of Agriculture,<br>Faisalabad  | Chemistry                             |
| Dr. Naheed Riaz             | Scientific<br>Officer  |  | PCSIR Laboratories, Karachi   | Organic<br>Chemistry                  |
| Dr. Abdul Rauf Raza         | Assistant<br>Professor | Chemistry                                      | University of Sargodha  | Organic<br>Chemistry                  |
| Dr. Farooq Ahmad            | Associate<br>Professor | NUST Institute of<br>Information<br>Technology | National University of Science<br>and Technology, Rawalpindi                    | Computer<br>Science                   |
| Dr. Muhammad Ikram          | Professor              | Environmental<br>Science                       | Federal Urdu University of<br>Arts, Science and Technology,<br>Islamabad        | Chemistry                             |
| Dr. Sharifullah Khan        | Assistant<br>Professor | NUST Institute of<br>Information<br>Technology | National University of Sciences<br>and Technology, Rawalpindi                   | Computer<br>Science                   |
| Dr. Javaid Khurshid         | Senior<br>Sciencist    | Computer and<br>Information Science            | Pakistan Institute of<br>Engineering and Applied<br>Sciences (PIEAS), Islamabad | Computer<br>Application<br>Technology |
| Dr. Kalim Uddin Qureshi     | Adjunct<br>Professor   | Computer Science                               | COMSATS Institute of<br>Information Technology,<br>Abbotabad                    | Computer<br>Science                   |
| Dr. Mona Lisa               | Assistant<br>Professor | Earth Science                                  | Quaid-i-Azam University,<br>Islamabad   | Geology                               |
| Dr. Ashraf Ali              | Professor              | Material and<br>Metallurgical<br>Engineering   | NED University of<br>Engineering & Technology,<br>Karachi                       | Metallurgy and<br>Material Science    |
| Dr. Babar Kaleem Minhas     | Assistant<br>Professor | Telecom & Computer<br>Engineering              | National University of<br>Computer and Emerging<br>Science, Karachi             | Electrical<br>Engineering             |





| Name                                     | Designation            | Department             | University/Organization  | Subject           |
|--|------------------------|------------------------|--|-------------------|
| Dr. Siraj-ul-Haq                         | Assistant<br>Professor | Engineering            | Ghulam Ishaq Khan Institute<br>of Engineering Science and<br>Technology, Swabi | Engineering       |
| Dr. Mohammad Shahid                      | Associate              | Telecom & Computer     | National University of   | Electrical        |
| Sheikh                                   | Professor              | Engineering            | Computer and Emerging  | Engineering       |
|  |                        |                        | Science, Karachi   |                   |
| Dr. Muhammad Sagheer                     | Assistant              | NUST Institute of      | National University of Sciences  | Mathematics       |
|  | Professor              | Information            | and Technology, Rawalpindi   |                   |
|  |                        | Technology             |  |                   |
| Dr. Muhammad Arif Rafiq                  | Assistant              | Mathematics            | COMSATS Institute of   | Mathematics       |
| Di. Wunammad Am Kanq                     | Professor              | iviationaties          | Information Technology,  | Mathematics       |
|  | Tiolessoi              |                        | Islamabad  |                   |
| Dr. Abdul Rashid                         | Associate              | Mathematics            | COMSATS Institute of   | Mathematics       |
| Di. Modul Rusina                         | Professor              | Wathematics            | Information Technology,  | Wathematics       |
|  | Troicssor              |                        | Lahore   |                   |
| Dr. Haider Ali                           | Professor              | Pharmacy               | University of Lahore, Lahore   | Pharmaceutical    |
| Di. Huidei / III                         | 110103301              | 1 marmacy              | Chryotisty of Eurore, Eurore   | Science           |
| Dr. Mohammad Ashraf                      | Associate              | Pharmacy               | Islamia University,  | Biochemistery     |
| 21 1/10111111111111111111111111111111111 | Professor              |                        | Bahawalpur   | 210011011115001   |
| Dr. Javed Ahmad                          | Assistant              | Physics                | Bahauddin Zakaryia University,   | Applied Physics   |
| Di. Javed Allillad                       | Professor              | rnysics                | Multan   | Applied Fliysics  |
|  |                        |                        |  |                   |
| Dr. Syed Zulfiqar Ali                    | Associate              | Physics                | Govt. College of Science,  | Solid State       |
| Zaidi                                    | Professor              |                        | Multan   | Physics           |
| Dr. Imran Hassan                         | Lecturer               | Horticulture           | University of Arid Agriculture,  | Horticulture &    |
|  |                        |                        | Rawalpindi   | Pomology          |
| Dr. Muhammad Ather                       | Assistant              | Agronomy               | University of Agriculture,   | Agronomy          |
| Nadeem                                   | Professor              | rigionomy              | Faisalabad   | rigionomy         |
|  |                        | A .                    |  |                   |
| Dr. Abdul Razzaq                         | Assistant              | Agronomy               | University of Arid Agriculture,  | Crop              |
|  | Professor              |                        | Rawalpindi   | Biotechnology     |
| Dr. Sajid Rashid                         | Assistant              | Biosciences            | COMSATS Institute of   | Bioinformatics    |
|  | Professor              |                        | Information Technology,  | and Functional    |
|  |                        |                        | Islamabad  | Genomics          |
| Dr. Shakil Ahmed                         | Lecturer               | Mycology and Plant     | University of the Punjab,  | Botany            |
|  |                        | Pathalogy              | Lahore   |                   |
| Dr. Arif un Nisa Naqvi                   | Professor              | Biological Sciences    | KaraKuram International  | Biology           |
| 1 110m 1 1mq 11                          |                        |                        | University, Gilgit   | 01                |
| De Chales II '                           | Clasion v              | Chamint                |  | Diamaia 1         |
| Dr. Ghulam Hussain                       | Chairman/              | Chemistry              | University of Sargodha   | Physical          |
|  | Associate              |                        |  | Chemistry         |
| D. Al. J. I. D. CD                       | Professor              | Classic                | III.   | 0                 |
| Dr. Abdul Rauf Raza                      | Assistant              | Chemistry              | University of Sargodha   | Organic           |
|  | Professor              |                        |  | Chemistry         |
| Dr. Bushra Khan                          | Associate              | Chemistry              | Lahore College for Women   | Analytical        |
|  | Professor              |                        | University, Lahore   | Chemistry/        |
|  |                        |                        |  | Organic Chemistry |
| Dr. Robina Farooq                        | Associate              | Environmental          | COMSATS Institute of   | Environment       |
|  | Professor              | Sciences               | Information Technology,  | Engineering       |
|  |                        |                        | Abbotabad  |                   |
| Dr. Sajjad Mohsin                        | Associate              | Electrical Engineering | COMSATS Institute of   | Computer          |
|  | Professor              |                        | Information Technology,  | Science           |
|  |                        |                        | Abbotabad  |                   |





| Name                          | Designation            | Department                                     | University/Organization   | Subject                                   |
|-------------------------------|------------------------|--|---|---|
| Dr. Mohammad Sayab            | Assistant<br>Professor | National Centre of<br>Excellence in<br>Geology | University of Peshawar  | Geology                                   |
| Dr. Waqar Ahmed Khan          | Associate<br>Professor | Mathematics                                    | COMSATS Institute of<br>Information Technology,<br>Abbotabad                                      | Mechanical<br>Engineering                 |
| Dr. Zahid Mehmood Khan        | Assistant<br>Professor | Environmental<br>Sciences                      | COMSATS Institute of<br>Information Technology,<br>Abbotabad                                      | Civil &<br>Environmental<br>Engineering   |
| Dr. Saleem Farooq<br>Shaukat  | Associate<br>Professor | Electrical Engineering                         | COMSATS Institute of<br>Information Technology,<br>Abbotabad                                      | Optoelectronics                           |
| Dr. Abdul Qayyum              | Assistant<br>Professor | Physics  | Government College<br>University, Lahore  | Physics                                   |
| Dr. Imtiaz Ali Khan           | Associate<br>Professor | Entomology                                     | NWFP Agricultural<br>University of Peshawar   | Agricultural<br>Entomology                |
| Dr. Ahmad Khan Baloch         | Professor              | Food Science &<br>Technology                   | Gomal University, D. I. Khan  | Food Technology                           |
| Dr. Tariq Mehmood             | Associate<br>Professor | Agronomy                                       | University of Arid Agriculture,<br>Rawalpindi   | Agronomy/ Crop<br>Physiology              |
| Dr. Sher Muhammad             | Assistant<br>Professor | Soil Science & SWC                             | University of Arid Agriculture,<br>Rawalpindi   | Soil Science                              |
| Dr. Fayyaz-ul-Hassan          | Associate<br>Professor | Agronomy                                       | University of Arid Agriculture,<br>Rawalpindi   | Agronomy                                  |
| Dr. Arshad Javaid             | Lecturer               | Mycology and Plant<br>Pathalogy                | University of the Punjab,<br>Lahore   | Botany                                    |
| Dr. Jamil Ahmad               | Assistant<br>Professor | Biotechnology and<br>Informatics               | Balochistan University of<br>Information Technoloy and<br>Management Sciences<br>(BUITMS), Quetta | Molecular<br>Biology                      |
| Dr. Fazli Rabbi Awan          | Senior<br>Scientist    | Health Biotechnology<br>Division               | National Institute for<br>Biotechnology and Genetic<br>Engineering (NIBGE),<br>Faisalabad         | Biochemistry                              |
| Dr. Naeem Iqbal               | Assistant<br>Professor | Botany   | Government College<br>University, Faisalabad  | Botany                                    |
| Dr. Azizuddin                 | Assistant<br>Professor | Chemistry                                      | Jinnah Government College,<br>Nazimabad, Karachi  | Organic<br>Chemistry                      |
| Dr. Muhammad Sadiq<br>Subhani | Eminent<br>Scholar     | Chemistry                                      | Federal Urdu University of<br>Arts, Science and Technology,<br>Islamabad                          | Radiation &<br>Photochemistry             |
| Dr. Naveed Arshad             | Assistant<br>Professor | Computer Science                               | Lahore University of<br>Management Sciences<br>(LUMS), Lahore                                     | Computer<br>Science                       |
| Dr. Tauha Hussain Ali         | Lecturer               | Civil Engineering                              | Mehran University of Engineering and Technology, Jamshoro   | Construction Safety and Health Management |
| Dr. Aqdas Naveed              | Assistant<br>Professor | Electronic<br>Engineering                      | Muhammad Ali Jinnah<br>University, Islamabad Campus   | Electronic<br>Engineering                 |





| Name                            | Designation            | Department  | University/Organization   | Subject                                     |
|---------------------------------|------------------------|---|---|---|
| Dr. Tanweer Ahmad<br>Cheema     | Assistant<br>Professor | Electronic<br>Engineering                                 | Muhammad Ali Jinnah<br>University, Islamabad Campus   | Electronic<br>Engineering                   |
| Dr. Sajjad Maqbool              | Associate<br>Professor | Transportation Engineering & Management                   | University of Engineering and<br>Technology (UET), Lahore   | Geotechnical<br>Engineering                 |
| Dr. Muhammad Shahbaz            | Associate<br>Professor | Computer Science & Engineering                            | University of Engineering and<br>Technology (UET), Lahore   | Data Mining &<br>Artificial<br>Intelligence |
| Dr. Irfan Aslam                 | Assistant<br>Professor | Institute of Environmental Science and Engineering (IESE) | National University of Sciences and Technology, Rawalpindi  | Environmental<br>Engineering                |
| Dr. Maqsood Ahmad Khan          | Associate<br>Professor | Environmental<br>Management& Policy                       | Balochistan University of<br>Information Technoloy and<br>Management Sciences<br>(BUITMS), Quetta | Irrigation/Water<br>Resource<br>Engineering |
| Dr. Nizamuddin Channa           | Lecturer               | Institute of Business<br>Administration                   | University of Sindh, Jamshoro   | Computer<br>Science                         |
| Dr. Fazli Ghani                 | Assistant<br>Professor | Prosthodontics<br>(Dentistry)                             | Khyber College of Dentistry,<br>University Campus, Peshawar                                       | Prosthodontics                              |
| Dr. Ahsana Dar                  | Professor              | International Center<br>for Chemical<br>Sciences (ICCS)   | HEJ Research Institute<br>of Chemistry, University of<br>Karachi                                  | Pharmacology                                |
| Dr. Asloob Ahmad<br>Mudassar    | Principal<br>Scientist | Physics   | Pakistan Institute of<br>Engineering and Applied<br>Sciences (PIEAS), Islamabad                   | Applied Optics                              |
| Dr. Hafeez-ur-Rehman<br>Hoorani | Professor              | Physics   | National Centre for Physics,<br>Quaid-i-Azam University,<br>Islamabad                             | Physics                                     |

## **DDWP Approved Projects**

Projects presented and approved in the 38th meeting of Departmental Development Working Party Meeting (DDWP) are:

University of Karachi

Project: Completion of Ancillary Facilities at Dr. A.Q. Khan

Institute of Biotechnology and Genetic Engineering

Capital Cost: Rs. 37.736 Million

COMSATS Institute of Information Technology, Lahore Project: Establishment of Telecom and IT Laboratories

Capital Cost: Rs. 36.540 Million

Balochistan University of Engineering and Technology, Khuzdar

Project: Faculty Development Programme

Capital Cost: Rs. 36.572 Million

NWFP University of Engineering and Technology, Peshawar Project: Provision of Academic/Research Facilities for

Gemstones

Development Cell at Department of Mining Engineering

Capital Cost: Rs. 32.929 Million

Government College University, Faisalabad Project: Hostel Facilities for 200 Girl Students

Capital Cost: Rs. 38.233 Million

Sardar Bahadur Khan Women University, Quetta Project: Establishment of Student Services Centre

Capital Cost: Rs. 37.880 Million

**Higher Education Commission** 

Project: Establishment of Quality Enhancement Cells

at Public Sector Universities Capital Cost: Rs. 38.905 Million

Pakistan Institute of Engineering and Applied Sciences, Islamabad

Project: Development of Computational Engineering

Laboratory

Capital Cost: Rs. 38.650 Million





## Placement of PhD Scholars Returning from Abroad

Following is the list of scholars placed under the Placement Programme of HEC during the year 2006.

| S# | Name of Scholars        | Discipline                              | Host University                                 |
|----|-------------------------|---|---|
| 1  | Dr. Muhammad Akmal      | Soil Sciences                           | University of Arid Agriculture, Rawalpindi      |
| 2  | Dr. Muhammad Atif       | Physics                                 | PIEAS, Islamabad                                |
| 3  | Dr. Mushahid Anwar      | Urban Ecology                           | COMSATS, Abbottabad                             |
| 4  | Dr. Abdul Samad Mumtaz  | Bio Sciences                            | Quaid-e-Azam University, Islamabad              |
| 5  | Dr. Sanaullah           | Arabic Language                         | International Islamic University, Islamabad     |
| 6  | Dr. Umair Manzoor       | Material Sc. Eng                        | COMSATS, Islamabad                              |
| 7  | Dr. Raham Sher          | Plant Bio-Tech                          | IBGE, NWFP Agricultural University,<br>Peshawar |
| 8  | Dr. Mujib-ur-Rehman     | Rural Development /<br>Food Marketing   | IDS, NWFP Agricultural University,<br>Peshawar  |
| 9  | Dr. Muhammad Shafi      | Organic Chemistry                       | NWFP Agricultural University, Peshawar          |
| 10 | Dr. Zahid Mahmood Khan  | Civil Engineering                       | COMSATS Abbottabad                              |
| 11 | Dr. Syed Qandil Abbas   | International Relations                 | International Islamic University, Islamabad     |
| 12 | Dr. Amber Ferdoos       | Sociology                               | Quaid-e-Azam University, Islamabad              |
| 13 | Dr. Muhammad Aslam Awan | Material Chemistry                      | Government College University, Lahore           |
| 14 | Dr. Nadeem Akram        | Photonics                               | COMSATS, Islamabad                              |
| 15 | Dr. Arshad Hussain      | Chemical Engineering                    | Chemical Engineering Dept, UET Lahore           |
| 16 | Dr. Asad Jan            | Plant Bio-Tech                          | IBGE, NWFP Agricultural University,<br>Peshawar |
| 17 | Dr. Imran Ali Hashmi    | Synthetic Organic<br>Chemistry          | Chemistry Dept, Karachi University              |
| 18 | Dr. Mona Ayesha Khalid  | Development &<br>Educational Psychology | Education University, Lahore                    |





## **Explosion-Resistant Buildings**

#### Design, Analysis, and Case Studies

This book highlights all aspects of the analysis and design of buildings subject to impact, explosion and fire. It is a definitive reference book and contains 10 chapters from a wide international perspective. Three-dimensional finite element and discrete element techniques are included. They are applied to buildings such as the World Trade Center (Twin Towers) and the Federal Building in Oklahoma on the basis of the designers drawings, data and other information. Many small case studies are also included. The book has a comprehensive bibliography and a large appendix providing background analysis and computer subroutines of recently developed programmes.

M.Y.H. Bangash
T.Bangash
ExplosionResistant
Buildings

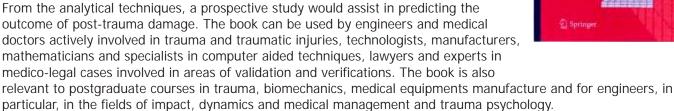
Contents: Explosion and Buildings-A Review of Affected Buildings and General Criteria, Data and Management-Blast and Explosive Loadings on Buildings-Fire and Buildings

With and Without Explosion/Impact-Structural Response to Blast Loadings-Methods of Analysis-Blast Response Resistance-Design of Structural Elements-Contact or Gap Elements for Blast-Fire Structural Interaction-Aircraft and Missile Impact-Data and Analysis-Aircraft Hot Fuel-Structure Interaction during Impact Condition-Flying Debris-Elastic Scattering Approach-Building Global Analysis for Damage Scenario.

## Trauma-An Engineering Analysis

#### With Medical Case Studies Investigation

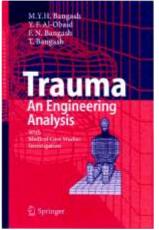
The purpose of this book is to bring together experts from the medicals and engineering fields in which trauma acts as a fulcrum of understanding the engineering approach to medical cases. The emphasis of this book is on the retrospective study of medical scenarios as seen from the engineering perspective. An in-depth study is required to ensure the accuracy of both medical and engineering data. Where static, dynamic, temperature and impact loads and velocities/accelerations are unknown; they are evaluated using the material properties and fracture geometry of case studies.







- Prof. Dr. M. Y. H. Bangash
   Fellow Pakistani Pakistani Academy of Sciences
   Emenities Professor of Aerospace & Nuclear
   Engineering Structures
- Prof. Dr. Y. F. Al-Obaid
   Professor of Engineering Materials
   Kuwait University, Kuwait
- Dr. F. N. Bangash
   Senior Medical Officer/House Surgeon
   University College Hospital,
   London University
- Dr. T. Bangash
   Structural Engineer
   MottMac Donald, Croydon, Surrey





## **HEC** Publications

### **Forthcoming Books**

A project on "Monograph and Textbook Writing" has been developed with the view to encourage authorship amongst university professors and researchers. The list of books recently written below will soon be available for sale at affordable price at HEC Publication Division, Islamabad.

Book title : Violence, Terrorism and Teachings of Islam

Author: Dr. Muhammad Imtiaz Zafar

Category : Monograph Level : Postgraduate

Discipline : Arts & Humanities (Islamic Studies)

ISBN : 969-417-105-9

Abstract: The incidents of global terrorism in the last decade of the past century earned the notoriety of being a faith of violence and terrorism for Islam. This is owing to the fact that most of the

perpetrators happen to be Muslims. Ironically not only Western scholars but the Muslims themselves portray that in Islam it is allowed to kill non-combatants and as an ayah in the Qur'an irhab (terrorism) so dictates. This study is an attempt to explore these pertinent questions from the divine sources. In this regard commentaries of the Qur'an from Ibn Abbas of first century to Sayyid Qutub of fourteenth century hijra and the sayings of Holy Prophet Muhammad (SAW) have been consulted to glean the meanings of ayah al-Irhâb and to analyze it in the context of contemporary understanding of terrorism. The study concludes that Islam never teaches or encourages violence, terrorism and hatred. The holistic understanding of Islam reflects peace, piety, righteousness, cooperation in virtue, respect for human dignity and justice.

Book title : Morphometric Studies on the Termite Genus Odontotermes

Author: Dr. Farkhanda Manzoor

Category : Monograph Level : Postgraduate Discipline : Biological Sciences

ISBN : 969-417-102-4

Abstract: This is the first thorough study of morphometric variation of 52 species of the genus Odontotermes from Bangladesh, Burma, China, India, Indonesia, Malaysia, Pakistan, Philippines,

Singapore and Sri Lanka. In all 52 species, measurements of 10 parameters were taken and statistically analyzed. The morphometric analysis presented in this book will provide a standard of comparison for specimens from different localities of the range of distribution of that species and other species of the genus Odontotermes. Besides, camera photographs of the specimens have been presented to show variations in morphological attributes of various species.

Book title : Contemporary Research on Allelopathy in Asia

Editor : Prof. Dr. Rukhsana Bajwa

Category : Monograph
Level : Postgraduate
Discipline : Biological Sciences
ISBN : 969-417-103-2

ALLELOPATH'

Abstract: Allelopathy, the chemical mechanism of plant interference is characterized by a reduction in plant emergence or growth, reducing their performance in the association. The term allelopathy was

coined by Molish in 1937 to refer to the reciprocal suffering in two organisms. The term has since appeared commonly in literature to plant/plant biochemical interactions that cause detrimental effects, and it has now been recognized as an important ecological factor in plant interactions. The importance of allelopathy in nature and in agro ecosystem has attracted researchers' attention with the main goal of using the phenomenon in biological control of weeds. Currently, active involvement of scientists from different disciplines has made allelopathy a multidisciplinary subject with changing trend from basic to applied research, enabling use of allelopathy in agriculture and forestry. In fact much information and published documents are now available on different aspects of Allelopathy. However, the information is scattered in many books, journals and annual reports. The book provides updated and consolidated information on the topic. The formatting of the book is an enhanced version of general bibliography books. The provision of complete reference data including abstracts, contact of the author/s, organizations, institutes are the special features that are likely to be more useful for working scientists, in general, and Asia, in particular, in the field of Allelopathy/Weed/Pest Management.



## **Publications**



Book title : Viruses, Bacteria, Fungi, Algae, Lichens

Author : Mr. Nisar Ahmed Category : Monograph Level : Graduate

Discipline : Biological Sciences ISBN : 969-417-101-6

Abstract: The book covers five main and important disciplines of Botany that are important to human beings in many ways. Viruses, bacteria and fungi as pathogens disturb our health by causing many diseases; some of which are treating to our lives. This is why they are seriously considered by biologists. Algae, on the other

hand, are the important component of marine ecosystem and act as primary producers for aquatic life. Still Lichens as dual plants (with algal and fungal components) present a good example of symbiotic relationships. The main objective of this book is to present these important disciplines in a comprehensive form for the students, teachers and readers and to provide them up-to-date knowledge for easy understanding. The book is divided into five main disciplines. Viruses, bacteria and lichens are discussed in single chapters whereas algae and fungi are broken into chapters at sub-division and class levels for better and easy approach.



Book title : Sindhi Nasar Je Kin Sinfen Jo Ibhayas

Author: Mrs. Parween Moosa

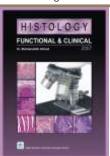
Category : Monograph Level : Postgraduate

Discipline : Arts & Humanities (Languages)

ISBN : 969-417-104-0

Abstract: This book is concerned with the history of Sindhi literature, a critical and deep analyses the genres of Sindhi Prose such as literary creative essays, research articles, novels travelogues, short stories and dramas in the simple and literary Language. All the above topics are thoroughly explained with examples,

clearly, objectively, and especially with simplicity. The details of different forms of prose presented by the author are quite new with an ideal way, resulting in effective, clear and powerful concepts. Besides essays, novels, travelogues, dramas and short stories the book also gives the knowledge about old and new trends in Sindhi literature. No doubt it can be counted as a good addition in the history of literary criticism in Sindhi prose. On the whole this book can be ranked among a few well researched academic books produced in Sindhi Language. The book not only encompasses syllabus for graduates and postgraduates and competitive exams, but also gives a clear picture of the subject matter at a conceptual level. It is also very beneficial for researchers on Sindhi prose.

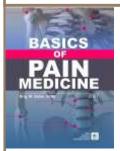


Book title : Histology Functional & Clinical Author : Dr. Mumtazuddin Ahmed

Category : Textbook
Level : Postgraduate
Discipline : Medical Sciences
ISBN : 969-417-106-7

Abstract: To communicate the histological concepts and facts in simpler language than is generally encountered, while maintaining the conventions of medical usage so as to render the subject matter in mind, the book has been laid out in a manner such that the illustrations have been juxtaposed with relevant passages of the text. This will enable the students to learn the structures being described readily and

conveniently. To aid further the student's recognition and understanding of microscopic structures, many of the micrographs are accompanied by hand drawings. This book also aims at making the study of histology more meaningful for the future clinicians by providing a perspective on histology as the basis for clinical medicine.



Book title : Basics of Pain Medicine Author : Prof. Dr. Muhammad Salim

Category : Textbook Level : Postgraduate Discipline : Medical Sciences ISBN : 969-8963-00-6

Abstract: The salient feature of this book is an in-depth description of the management protocols of common pain syndromes. Other special features of the book are useful information on drugs used for pain, as well as useful nerve blocks that are explained with illustrations. The section of this book on nerve blocks

will also be helpful to anesthesiologists in their routine anesthesia practice. It is earnestly hoped that the readers find this text a useful guide in their treatment of pain. Some of them may even like to build upon it further so as to raise a more promising edifice passing on the fruits to future generations. Moving forward and achieving excellence, no looking back and providing incessant 'RELIEF' is the message permeating through out this treatise.



## **Publications**



Book title EmployeesPerformance Evaluation -A Managerial Approach

Prof. Dr. Syed Tahir I jazi Author

Monograph Category Level Postgraduate Discipline Social Sciences 969-417-107-5 **ISBN** 

Abstract: Performance evaluation plays a key role in enhancing the status of an organization. Evaluation and feedback provides clear guidelines to managers and workers as how to proceed further with their system of work and to increase efficiency. Performance evaluation is more or less informal in

developing countries. When size of organization increases and management and workers personal interaction decreases, informal performance evaluation leads to drop in productivity. There are few textbooks available on the subject, especially one focusing on developing world, where performance evaluation is often regarded as an extra work with no significant return to the organization. Understanding the issue of performance evaluation as part of a system is essential for sustainable growth and development in less developed countries. There is a need to provide stepwise guidelines for the managers to enable them implement it. The book attempts to fill that gap with necessary tools and information on performance evaluation as part of system in management structure.



Book Title : Medicinal Plants of Margalla Hills National Park, Islamabad Authors

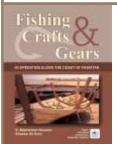
Dr. Muhammad Ibrar Shinwari, Dr. Maryum Ibrar Shinwari

& Dr. Mugarrab Shah

Textbook Category Level Postgraduate Discipline Biological Sciences 969-417-108-3 ISBN

Abstract: In Pakistan, botanical aspect of medicinal plants is quite virgin as compared to its neighboring countries like China and India. Medicinal plants are taught as a subject in some

universities of the country. However, other universities also wish to adopt the same in their curriculum. This book is an initiative towards this important aspect. It not only provides an overview of this emerging discipline but also shall be helpful for postgraduate students, researchers, phyto-chemists, environmentalists, park managers and planners to know how to focus an area for exploration of medicinal wealth. The book gives basic botanical information like clear descriptions of more than 150 medicinal plants along with their photographs, botanical names, local names, trade names, distribution, occurrence, local status, toxicity, useful uses and related conservation issues and their possible solution by applying modern scientific techniques. Moreover, a comprehensive review material have been provided with complete bibliography.



Book title Fishing Crafts & Gears In Operation Along the Coast of Pakistan

Prof. Dr. Makhdoom Hussain & Mr. Shabbir Ali Mir Author

Category Monograph Level Postgraduate

Discipline Marine Sciences 969-417-096-6 **ISBN** 

Abstract: Fish and Fisheries products have remained important component of the export and have significant contribution in foreign exchange earnings of the country. Attempts to acquire knowledge on aspects of this important resource are in progress. The baseline information that is essential in this

respect is the analysis of catch per unit effort. The primary portion of such analysis concerns the number of fishing craft in use, the capacity and mechanical power of fishing crafts, number of fishermen engaged in fishing and the gear types and their efficiency to catch various fish and prawn species in order to establish empirical relation between catch and efforts used. The book is focused on some elementary data on aspects essential for our fisheries. In writing this book the authors have made efforts to gather data from the numerous survey trips to coastal areas and fishing villages along the coast of Sindh and Balochistan with the aim to present a document on the relevant existing information. The book has a useful contribution of the comprehensive account of current know how about fishing nets and crafts operated by local fishermen. The readers, scientists and fisheries planners will find this as an only book with descriptions, drawings and pictures of the crafts, nets and gears in operation.

If you are interested to become a HEC Author, please visit http://www.hec.gov.pk/new/AcademicAffairs/Monograph Text Book Writing/introduction.htm for information and guidelines.





## 57<sup>th</sup> Meeting of Nobel Laureates and Students in Lindau (Germany)

#### July 01-06, 2007

A unique opportunity of interaction with 15-20 Nobel Prize Winners and about 500 fellow participants from over 40 countries in the field of

### Medicine/Physiology

Sponsored by: Higher Education Commission, Pakistan Atomic Energy Commission and Council in Lindau Only for Pakistani young scholars studying/working in Pakistan (Four groups have participated in the last four Meetings in Lindau)

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## Age Limit 35 years

The selected candidates will be provided return air travel and boarding/lodging in Germany for one-two weeks. Application forms and other details are available at:

www.hec.gov.pk/pakmnl

Dr. N. M. Butt
Representative in Pakistan,
Council for the Meetings of Nobel Laureates in Lindau,
and Visiting Professor PIEAS, P.O. Nilore, Islamabad

The applications should reach at the following address before February 10, 2007

Waqar A. Butt Project Coordinator PINSTECH, P.O. Nilore, Islamabad.

Phones: 051-2207722, 9290231 Fax: 051-9290275 E-mail: waqar@pinstech.org.pk , waqar\_butt13@yahoo.com



## Announcements

## Indus Athena Foundation Scholarship for Santa Fe Complexity Summer School 2007

Indus Athena Foundation is pleased to offer two scholarships for exceptionally talented graduate students and faculty members at the leading academic institutes of Pakistan. The scholarships are awarded to those individuals who are accepted at the Santa Fe Institute to attend the Complexity Summer School in 2007.

The Santa Fe Institute (www.santafe.edu) is devoted to creating a new kind of scientific research community, one emphasizing multidisciplinary collaboration in pursuit of understanding the common themes that arise in natural, artificial, and social systems. This unique scientific enterprise attempts to uncover the mechanisms that underlie the deep simplicity present in our complex world.

The flagship of Santa Fe Institute's educational programmes is the Annual Complexity Summer School which is an intensive four-week programme. The Complex Systems Summer School provides an intensive introduction to complex behaviour in mathematical, physical, living, and social systems for graduate students and postdoctoral fellows. It is open to students in all countries. Students are expected to attend for the full four weeks. No tuition is charged for the programme but enrollment is limited.

Indus Athena Foundation Scholarship for Complex Systems Summer School covers the travel expenses from Pakistan to Santa Fe, New Mexico, USA. The scholarship also covers the living expenses for four weeks at Santa Fe. Indus Athena Foundation will make travel and living arrangements to those who will be awarded the scholarship. Please go to the following link to apply for the Complex Systems Summer School 2007:

http://www.santafe.edu/education/indexCSSS.php

Application process began on November 15, 2006. Please note that enrollment is limited and only exceptionally talented individuals are admitted to this world-class programme.

#### Instructions for Applicants

Send me an email after you have applied to this programme. Please also send a follow-up email after you have been selected into the programme.

Focal Point Samia Hussain Programme Director Indus Athena Foundation E-mail: samia.hussain@indusathena.org

Higher Education Commission Islamabad, Pakistan





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