First Issue of News Letter for Mechanical Engineering Department:

The Chairman, Mechanical Engineering Department, MUET, Jamshoro, Professor N.R. Shaikh has recognized that, continual improvement of the department demands dissemination of information relating to the academic, research and extra-curriculum activities. He, therefore, constituted a committee under the supervision of Dr. Rizwan Ahmed Memon (Assistant Professor, Mechanical Engineering Department) to produce a newsletter for the department. The committee has completed its task successfully and first issue of the newsletter is being issued in December 2010.

Rehabilitation of Mechanical Engineering Department:

Rehabilitation of Mechanical Engineering Department started in the month of September 2009 is in progress in order to strengthen the department by establishing new laboratories and extending existing facilities. The department plans to construct sixteen new fully equipped laboratories by placing new state-of-the-art equipments.

Series of Seminar Lectures Organized by Mechanical Engineering Department

The American Society of Mechanical Engineers (ASME)'s student chapter of Department of Mechanical Engineering, MUET Jamshoro has organized a lecture on the topic of "Motion Control and Industrial Automation." On 3rd November 2009, Engineer Aamir Zaheer Of Mars Enterprise Karachi, an expert in Industrial Automation and Robotics delivered the lecture. The lecture was chaired by the Dean Faculty of Engineering, Prof. Dr. Riaz Ahmed Suhag, and attended by the faculty members and students. Prof. N.R. Shaikh appreciated the ASME team and co-faculty advisor Mr. Muhammad Atif Khan K.K in organizing the event successfully. The event provided an opportunity to both the faculty members and students in acquiring the latest knowledge of the field.
The ASME student chapter in collaboration with the Department of Mechanical Engineering MUET, Jamshoro under the guidance of co-faculty advisor, Mr. Muhammad Atif Khan KK has organized a seminar lecture on Finite Element Method (FEM) & Computational Fluid Dynamics (CFD). The seminar on FEM & CFD was held on 3 April 2010 in the main auditorium of MUET, Jamshoro. Engineer Amir Khan and Engineer Shamoon Jamshed of SUPARCO were invited as guest speakers.

Mr. Jawaid Daud Poto, (Lecturer Mechanical Engineering Department, MUET) Ph.D. scholar at University of Leeds, UK was invited as guest speaker on 'Sensors & Actuators' on September 19, 2009, by ASME MUET chapter. Event was chaired by co-faculty advisor ASME MUET chapter, Muhammad Atif Khan K.K. Students of Mechanical Engineering Department attended the lecture with great interest. Participants specially enjoyed the demonstration and question answer session at the end of lecture.

The Mechanical Engineering Department, MUET, Jamshoro tries not only to extend its expertise in solving the local issues by providing teaching and training to the young generation of this part of Pakistan, but also eyes on solving the national problems. With the energy crisis at its peak in Pakistan, and Sindh, the need of equipping the young generation with an awareness of the issue and necessary knowledge to address the problem was being felt for a long time by the department. It is therefore with the efforts of Prof. N.R. Shaikh, Chairman Mechanical Engineering Department that the department finally materialized the long awaited Masters Program in the field of Energy Systems. The program started in February 2010 and aimed at equipping the young generation with state-of-the-art techniques in the field of Energy.

Employment Opportunities for Students of Mechanical Engineering Department

Mechanical Engineering Department, MUET, Jamshoro takes all efforts to assure a prosperous future for the young mechanical engineers of the department. In this endeavour, Mechanical Engineering Department invites reputed companies to employee fresh graduates of the department. Most recently, the companies like KESC, United Refrigeration Industries Limited (Dawlance), SUPARCO and ENGRO chemical Pakistan Limited have conducted tests from fresh graduates and employed many students. Besides this in order to aware our young Engineers with the latest technology, new techniques, problems and overall culture in industry, the
department arranges internships for the final year students on a continual basis.

**Mini Project Fabrication Contest Held in 2009 & 2010**

The students generally tend to avoid model oriented projects during their final year studies; instead they prefer only theory/design oriented projects. All faculty members in the department have been specially advised by the chairman to encourage the activities that involve model oriented projects. In this connection Prof. Dr. M.I Panhwar, Prof. Muhammad Atif Khan K.K and Mr. Sarwar Siddiqui being the subject teachers of Manufacturing Technology organized a mini project fabrication competition among the students of 07 batch with the strong support of all faculty members who spared enough time to supervise them, without their guidance and cooperation the task would have not been achieved to this success.

The students of 07 batch were instructed to form a group and select a small model/equipment/apparatus as a mini project having significant laboratory utilization. In this context a mini project fabrication competition and exhibition was held in April 2009. Faculty members, Prof. Shoukat Ali Memon and Prof. Abdul Ghafoor Memon lead by Dr. Khanji Harijan evaluated and ranked the mini projects.

Vice chancellor, Pro Vice Chancellor, Dean Faculty of engineering, Dean Faculty of Technology along with the chairman and faculty members of Mechanical Engineering Department visited the exhibition and highly appreciated the efforts of the students. The Vice Chancellor highly appreciated the performance of students and all faculty members who contributed in this event. At the end of the exhibition, top three ranked mini projects were given cash prizes by the honorable Vice Chancellor.

A mini project fabrication competition was also supervised by Prof. Muhammad Atif Khan K.K and workshop superintendent Mr. Sarwar Siddiqui. The competition was held among the students of 08 batch. Mini projects fabricated by various student groups were exhibited in the department on 26th April, 2010. It is worth mentioning that this is the third consecutive year, as similar competitions are being held in the department.

**All Pakistan Digital Innovation Competition and Exhibition (DICE) 2007 and 2008**

To promote the advancement of digital technology/software in Pakistan and to strengthen the link between industries and universities, All Pakistan Digital Innovation Competition 2007 was organized by the College of Electrical & Mechanical Engineering (EME) National University of Science & Technology (NUST), on 27th December 2007. Students (Undergraduate/Post graduate) from the universities all over Pakistan participated in the event under twelve different fields/categories.

A group of students formed by the Chairman Professor N.R. Shaikh, worked on a project Design of Gear Box Using CAD Software under the supervision of a faculty member Mr. Muhammad Atif Khan K.K, to participate in the competition.

The participating projects were evaluated in three different phases/stages by a panel of experts from the leading universities, institutes and industries. Project of the Department of Mechanical Engineering MUET Jamshoro secured Second Position under the category of mechanical engineering. The students were awarded a cash prize of Rs.15000 along with a shield and merit certificates.

Members of organizing committee highly appreciated the project in the context of utilization of digital technology for the design and development of products.

All Pakistan digital innovation competition and exhibition 2008 (DICE-2008) sponsored by the industries, was organized by NED University of Engineering and Technology, with following objectives,
Students from Mechanical Engineering Department, MUET, Jamshoro receiving awards in 2007 and 2008 DICEs.

To expedite the process of Digital Revolution in Pakistan by motivating both academia and industry to acquire, promote and utilize state-of-art digital technologies/high-tech software for the rapid development of innovative products.

To provide a common platform for both academia and industry to interact and share innovative ideas and products.

To market Pakistan's high tech image and to create an image of Pakistan in the eyes of international community as a nation rich in high tech workforce, and fully capable of providing services to the rest of the world, particularly in the area of Digital Design and Digital Simulation.

Students from the universities/institutes, all over the Pakistan were invited to participate in the contest under fourteen different fields of engineering.

A group of final year students 05 batch (Mr. Bilal Ahmed, Mr. Zohaib Elahi, Mr. Salmn Ahmed, Mr. Saif Ali & Mr. Farhan Khan ), worked on the Design of Vertical Axis Wind Turbine, using CAE software, under the supervision of Mr. Muhammad Atif Khan K.K participated in the contest. A panel of judges consisting of experts from both academia and industry evaluated the contesting projects. The project of the Department of Mechanical Engineering MUET Jamshoro secured SECOND POSITION under the category of mechanical engineering. The students were awarded a cash prize of Rs. 10000 along with a shield and certificates of participation. The department proudly announces that this is the second consecutive success, as our students secured second position in a similar competition held in the year 2007 too.

**BEST TEACHER AWARDS**

Prof. Dr. Muhammad Ibrahim Panhwar and Prof. Dr. Mujeebuddin Memon were conferred upon the Best Teacher Awards, for the year 2007 and 2008 respectively. The awards were awarded by the Higher Education Commission (HEC), Government of Pakistan on the basis of their excellent performance in teaching and research. This achievement is not only the recognition of Prof. Dr. Panhwar's and Prof. Dr. Memon's work but also is an honor for Department of Mechanical Engineering and Mehran University of Engineering & Technology, Jamshoro, Pakistan.

**FACULTY DEVELOPMENT**

Mr. Khanji Harijan and Mr. Rizwan Ahmed Memon have been awarded Ph.D degrees after successful completion of their studies. Dr. Harijan received his degree during the 10th convocation of Mehran University of Engineering and Technology, Jamshoro. Dr. Harijan is the 1st PhD produced by the Department of Mechanical Engineering, Mehran University of Engineering & Technology, Jamshoro.

Dr. Memon received his degree from the University of Hong Kong in 2009. He joined the department of Mechanical Engineering after completion of Ph.D studies and presently working as the first employee of the university under Tenure Track System (TTS).

**PAPER PRESENTATION**

Dr. Khanji Harijan, Associate Professor, Department of Mechanical Engineering presented his research paper entitled “Assessment of Hydrogen Production from Wind Energy in Pakistan” in 10th International Conference on Clean Energy (ICET - 2010) 15-17 September 2010, Famagusta, North Cyprus.