



Atom News

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Ground Breaking of Nuclear Engineering Building at PIEAS

Construction activity for Nuclear Engineering Department building at PIEAS has been started with blessings and Ground Breaking by Scientist Emeritus, Dr. Inam-ur-Rahman (Aizaz-i-Kamal, Sitara-i-Imtiaz) on 30th October, 2014.

Three Storey Building, designed by WASO, has a covered area of 61000 Sft and is scheduled to be completed by December-2016.



Ground Breaking by Scientist Emeritus, Dr. Inam-ur-Rahman

6th Chemistry Conference on Chemistry in Engineering and Life Sciences at PINSTECH



Left to right DG PINSTECH, Member (Science), Chairman (PAEC) and Member Fuel Cycle, (PAEC)

The 6th Chemistry Conference on “Chemistry in engineering and life sciences” was organized by the Chemistry Division, Directorate of Science, PINSTECH in collaboration with the Directorate of Nuclear Fuel Cycle (DGNFC), New Chemical Complex (NCC) and Pakistan Institute of Engineering and Applied Sciences (PIEAS) from 11-13th of November 2014. The aim of this conference was to promote and conduct collaborative interdisciplinary research in state-of-the-art methodologies and technologies within chemistry, engineering and life sciences.

The conference was inaugurated by Dr. Ansar Parvez, Chairman, Pakistan Atomic Energy Commission. He applauded the idea of jointly holding such conferences. In his inaugural speech he appreciated the efforts for providing a common platform for PAEC establishments and other National Research institutions and Academia to showcase their work. Director General PINSTECH Mr. Iqbal H. Khan welcomed the conference participants. The Honorable

Member Fuel Cycle, Mr. Muhammad Naeem presented a key note lecture on “Chemistry in life Sciences and Engineering”. The conference closing ceremony was held on the 13th of November 2014. Dr. Shahida Waheed, coordinator conference presented the conference summary.

The conference was attended by more than 120 participants from 34 Multi disciplinary organizations, Research Institutes, and Different universities of Pakistan, while 13 establishments of PAEC also participated. Sixty five participants were from national universities and institutes while the remaining were from PAEC and other strategic organizations. The Conference program covered a large scope of diverse Chemistry topics.

The Chief guest Dr. Muhammad Aslam Rector PIEAS in his closing speech pointed out that current international publications reveal that the boundaries between science and technology have blurred as have the lines between various branches of science.

One Week Administrative Staff Training Course



A group photo of the participants with Member Admin and Secretary PAEC

The first formal five-day Administrative / Sectt Staff Training Course in the history of PAEC was held from 1st to 5th September, 2014 at DGD Training Centre Islamabad followed by Nilore, Lahore, Karachi and Kundian Complex. So far, 156 participants have successfully completed the course. The course has been organized by the Admin Division PAEC H.Q, Member (Admin) was the Chief Guest at Certificates Awarding Ceremonies at H.Q. and Nilore Complex.

The main objective of this training program was to impart basic orientation and awareness to PAEC Administrative Staff employees (SPS 2-7) regarding NCA Rules, Work Standards, PAEC Systems, Policies,

Procedures, Practices and IT skills to cope with their assigned tasks efficiently and effectively.

The course is organized at various stations simultaneously. Standardization & finalization of the modules, course contents and presentations was done at PAEC H.Q.

Member (Admin) awarded certificates to the successful course participants. He advised all the participants to practice the rules, procedures and other disciplines learnt during the course in true spirit for improvement in the existing systems to achieve the efficiency and effectiveness and in turn the job satisfaction.

Workshop on Advanced Characterization Techniques and Practical Applications of Nanomaterials at NIBGE

Three-day National Nanotechnology Training (NNT) Workshop on “Advanced Characterization Techniques and Practical Applications of Nanomaterials” was held on October 27-29, 2014 at National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad. The workshop was organized by Dr. Waheed S. Khan who is currently leading Nanobiotechnology Group at NIBGE. Pakistan Science Foundation (PSF) also played its role as sponsor of the event.

Twenty eight (28) participants including faculty members, scientists, researchers, scholars with different backgrounds from different regions of the country such as Quetta, Jamshoro, Muzaffarabad, Peshawar, Rawalpindi, Mardan, Mansehra, Gilgit participated in the workshop. The main theme of the workshop was to impart training on high tech equipment used in Nanotech research such as Field Emission Scanning Electron Microscope (FESEM), Atomic Force Microscope (AFM), Dynamic Light Scattering (DLS), and Transmission Electron Microscope (TEM) and also conducted practical demonstration of various applications of nanomaterials. Taking full

advantage of this opportunity, fruitful discussion was held between participants and NIBGE scientists for research collaboration purposes.

Dr. Munir Iqbal from The Pirbright Institute, UK delivered a very comprehensive talk on Avian Viral Diseases on the concluding day of the workshop. Participants showed great interest in the lecture and question-answer session was very informative. Participants appreciated the event a lot and declared it very useful. Dr. Shahid Mansoor (SI), Director NIBGE was the chief guest. In his concluding speech, Dr. Shahid encouraged the participants for meaningful collaboration with NIBGE and certificates were distributed among the participants at the end.



Group photo of the participants with guests and Director NIBGE

China Atomic Energy Agency Delegation visits Pakistan

An 8-member delegation from China Atomic Energy Authority (CAEA), China Institute of Radiation Protection (CIRP), China Institute for Atomic Energy (CIAE) General Hospital of Nuclear Industry (GHNI) led by Mr. YAO Bin, Director General, Department of Nuclear Emergency and Nuclear Safety Regulations (NE&NSR) CAEA, visited Pakistan, from 10-13 November 2014, in order to identify avenues of cooperation for strengthening the Nuclear Emergency Response arrangements and facilities.

Its members included Mr. SONG Gongbao, Division Director (NE&NSR, CAEA), Ms. DU Ying, Deputy Division Director (NE&NSR, CAEA), Mr. ZHANG Jiangang, Director (Department of Nuclear Emergency and Nuclear Safety, CIRP), Mr. LIU Yulong, Director (Nuclear Emergency Center, GHNI), Mr. DU Xiangyang, General Manager (Shanxi Zhongfu Nuclear Instrument Co. Ltd. CIRP), Mr. LUO Zhiping, Division Head (Radiation Safety Department, CIAE), Mr. CHENG Wei, Deputy Director (International Cooperation Division, CIRP).

The delegation visited PAEC headquarters and held meetings with Chairman, Members and other senior officers. The delegation also visited and held

meetings at several other PAEC establishments.

Discussions were held to pave foundations for bilateral cooperation through enhanced mutual interaction for improving the standing of both the countries in the field of Emergency Planning & Preparedness. Besides other issues which remained in focus, the deliberations also included Radiation Monitoring capability using high-tech equipment addressing specific needs, assembly & manufacture of radiation detection and contamination monitoring equipment in Pakistan, improvement of Nuclear Emergency Assessment and Decision Support System, participation in Emergency Exercises including nuclear medical emergency management exercises, R&D collaboration opportunities in equipment development for highly radioactive area using robots, upgradation of PAEC General Hospital Islamabad to provide support as a tertiary care facility in cases of Nuclear or Radiological Emergency, establishing technical support centers and teams for conducting surveillance & rescue operations, and further strengthen the relevant systems and linkages in the field of Emergency Management.

Breast Cancer Awareness Month Celebrated at NORI

October is Breast Cancer Awareness Month, which is an annual campaign to increase awareness of the disease. NORI Islamabad is regularly organizing this campaign. This year in collaboration with NORI Patients' Welfare Society (NPWS) and Pakistan Society of Clinical Oncology (PSCO), Oncology Department of NORI Islamabad celebrated October as breast cancer awareness month so as to disseminate information about causes, prevention and treatment of breast cancer and to encourage those who have either won the fight against breast cancer or are recently diagnosed.

Breast cancer awareness campaign at NORI Islamabad for the year 2014 was formally inaugurated on 2nd October 2014 by Mr. Aizaz Ahmad Chaudhry Secretary Foreign Affairs.

A series of events was arranged starting from 1st October 2014. Mini symposia were arranged for female employees of NORI and free consultation and breast cancer screening services were provided throughout the month.

Closing ceremony was organized on 1st November, 2014. Member Administration Pakistan Atomic Energy Commission Major General (R) Syed Guftar Shah graced the occasion as Chief Guest. The event was largely attended by renowned professors of different medical specialties of the hospitals in twin cities of Rawalpindi and Islamabad.

NORI also organized grand seminar on 25th October to create awareness about this deadly disease and to show solidarity with those who have already suffered from breast cancer.

The event was attended by more than 350 women from different walks of life. On the occasion Director NORI Dr Javaid Irfan briefed the services being provided by Pakistan Atomic Energy Cancer Hospitals in general and NORI in particular.

The event was followed by walk against breast cancer in which there were participants from all walks of life.



Member Admin PAEC, Secretary Foreign Affairs and other speakers addressing the seminar

PAEC Scientist Wins various National and International Awards

A young officer Mr. Muhammad Ali from Pakistan Atomic Energy Commission won the World's biggest CleanTech Innovation Award called 'Global Clean Tech Academy Award' in Global CleanTech Forum held at Treasure Island, San Francisco-United States of America. More than 50,000 renowned innovators participated from more than 45 countries and young innovators from Pakistan won the Global CleanTech Academy award on their innovative project of 'Converting the Waste Cooking Oil into Bio-Diesel using Nano-Catalyst'.

His team devised an optimized process that gives 20 times faster conversion, 99 % of yield and enables to process waste cooking oil at room temperature (25o C). Their Bio-Diesel will be Economical (Selling price is PKR 85/liter), Eco-Friendly (Cuts down 75% of Carbon Emissions) and has better lubricating properties which will prolong Vehicle's engine life. Every year 2.6 Million metric tons of waste cooking oil is being wasted in Pakistan which can be

converted into Bio-Diesel of worth PKR 10 Billion/year using their technology. They were invited to participate in 'Global Innovation through Science and Technology (GIST)-TECH' Competition. They were again appreciated as one of the best project from Pakistan and were invited to represent Pakistan in GIST TECH Finals-Dubai as well as in Global Entrepreneurship Summit-UAE in 2012.

Eco-Fuelants were then invited to participate in TiE International Business Plan Competition-2013 in which they won the 2nd Runner-Up award and invited to participate in European Regional Finals of TiE international Business Plan Competition at Brussels, Belgium. They continued their R&D in Pakistan Institute of Engineering and Applied Sciences till September 2013 when they finally got a breakthrough in their process optimization. This time they decided to Participate in World's biggest CleanTech Innovation program called GCIP (Global Cleantech Innovation Program). Now Pakistan is one of the Global Academy Award Winning Country.



Receiving winning award from Zahid Hamid (Then Federal Minister for Science and Technology)

Ph.D Degree Awarded to PAEC Scientist



Dr. Asif Naeem, Junior Scientist, Nuclear Institute for Agriculture and Biology (NIAB) Faisalabad has successfully completed his Ph.D. studies in the subject of "Soil Science" from University of Agriculture, Faisalabad. The title of his Ph.D. dissertation was "Use of Genetic Variability and Mineral Nutrition to

Minimize Cadmium Accumulation in Wheat". It is worth mentioning that Dr. Naeem completed some of his research work at University of Western Australia, Australia where he was supervised by Winthrop Professor Zed Rengel, a renowned scientist in the field of plant nutrition.

He published research articles in well reputed peer reviewed international journals.