PakAtom

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PAEC organizes Training Course on "International Nuclear Safety Standards"

Chairman, PAEC, Dr. Ansar Parvez addressing the inaugural session of the Training Course on "International Nuclear Safety Standards" organized by Directorate General of Safety, PAEC.

While safety is a national responsibility, international standards and approaches to safety promote consistency and help provide assurance that nuclear and radiation related technologies are used safely. International Nuclear Safety Standards provide guidance in meeting international obligations and facilitate in achieving safety paradigm closest to the highest level of safety. The international nuclear safety standards, incorporated into national regulations supplemented by relevant international conventions establish a basis for protecting people and the environment from the harmful effects of radiation.

Activities such as the medical uses of radiation, the operation of nuclear installations, the production, transport and use of radioactive material, and the management of radioactive waste must, therefore, be subject to standards of safety. In the global safety regime, IAEA standards have become a key element for the beneficial use of nuclear and radiation related technologies. In Pakistan, nuclear activities are managed safely by complying with national nuclear regulations developed by the independent nuclear regulator, PNRA.

In view of the significance of safety, PAEC's Directorate General of Safety (DOS) organized a training course titled "International Nuclear Safety Standards" at Islamabad from 12-13 January 2010. The objective was to provide information to the participants on the international standards which mainly include the IAEA, USNRC and PNRA standards containing the regulatory requirements and guidelines. Forty six participants from SPD, HQs Security Division, NESCOM, KRL, PNRA and various establishments of PAEC attended this training course. This activity was coordinated by Mr. Mohammad Abbas Qamar, Principal Scientist, DOS.

The Course was inaugurated by Chairman, PAEC, Dr. Ansar Parvez. In his inaugural address, the Chairman apprised the gathering of the importance of safety as being the vision to foresee safe working environment. He added that PAEC attaches great importance to safety, and has to its credit a splendid safety record. Chairman, PAEC appreciated the holding of such courses, which play a vital role in creating awareness among workers and urged the Directorate General of Safety to organize more such occasions of information dissemination on the subject of safety.

There were 4 academic sessions and 10 lectures. Lectures were delivered by speakers from PNRA and various PAEC establishments including DOS, IA&Trg. Division and Chairman Secretariat. The speakers covered topics like Importance of International Safety Standards, Safety Fundamental Principles and Safety Management System, Standards for Emergency Response and International Standards for Nuclear, Radiation, Waste and Transport Safety. The speaker from PNRA discussed PNRA regulations and guidelines. The use of standards in nuclear fuel cycle facilities and Relationship of Nuclear Safety Standards with International Treaties and Conventions were also covered by the speakers. A folder containing IAEA documents covering the required documents in the areas of Nuclear, Radiation, Waste, Transport and General Safety was provided to the participants. A CD containing 28 relevant IAEA & PNRA documents published by IAEA and PNRA so far in the aforementioned fields of safety was also provided to the participants.

The Course was concluded on Wednesday, 13 January, 2010 by Chairman PNRA Mr. Mohammad Anwar Habib in a simple ceremony. Chairman PNRA, in his concluding speech, said that this training course was very much required in the wake of development of international nuclear safety standards being issued worldwide by IAEA, PNRA and other concerned agencies. He further added that it is indeed commendable that PAEC's Directorate General of Safety is playing a significant role in the education and training of personnel involved in the areas of vital importance to the country like nuclear safety.

Chairman, PNRA, Mr. Mohammad Anwar Habib awarding a certificate to one of the course participants.

Chairman, PNRA categorically asserted that safety should be addressed at all levels and urged the participants not to compromise safety at any cost. He desired that such collaboration that includes knowledge sharing between PAEC and PNRA should be continued in future. He added that PAEC maintains excellent safety record at its establishments solely because of strict compliance to safety requirements.

Chairman, PNRA emphasized that the participants must apply the knowledge gained from this training course not only in enhancing their competence in safety management but also in improving safety practices at their work place. He further hoped that the course will prove to be extremely beneficial in improving safety norms at all levels in PAEC and other concerned organizations. Certificates were distributed to the participants and the teaching faculty by Chairman, PNRA.

Joint CERN Pakistan Committee (JCPC) Meeting

The Fifth meeting of the Joint CERN Pakistan Committee (JCPC) was held simultaneously via video conferencing at National Centre for Physics (NCP), Islamabad and Geneva on January 15, 2010. Dr. Shoaib Ahmad, Member Physical Sciences, PAEC was at CERN with CERN counterparts while Mr. Mohammad Naeem, Director, Pakistan Welding Institute (PWI) and Dr. Hafeez Hoorani, Director Research, NCP, Dr. Hamid Saleem, D.G. NCP, Dr. Ismat Fatima, Director Research, PAEC and respective Pakistani project counterparts participated in the video conference at NCP.

Welcoming the members of the committee, J.P. Revol introduced new D.G. CERN, Professor Rolf Heuer with the participants. Dr. Shoaib Ahmad in his opening statement felicitated all participants on the start of New Year 2010, which is important and significant for CERN and its collaborators as we all await results of the mega experiments for which this year will be remembered. He added that the meeting is being held in the background of a continuing serious financial crisis faced by Pakistan. He proposed and requested CERN to keep our difficult financial condition in perspective. Pakistan already spent half of the pledged five million CHF under PAK-CERN Protocol 2006. He proposed that manufacturing of major items to be done under 2003 protocol. This relates specifically to a proposed shielding wall and remaining resistive plate counts where material might be provided by CERN and the value addition done by PAK collaborators.

The progress made on PAK-CERN Protocol 2006 was discussed. CERN appreciated the contribution made by Pakistani scientists/ engineers and technical staff in designing and manufacturing of HF Collar, RPCs, Vacuum vessel and Optical Transition Radiation Monitors etc. under this protocol. In the end, J.P. Revol added that CERN will do everything possible to help Pakistan in fulfilling its commitments under 2006 Protocol, as Pakistan is fully committed.

Announcement

35th International Nathiagali Summer College on Physics and Contemporary Needs

(28 June – 10 July 2010)

International Nathiagali Summer Colleges (INSC) on Physics and Contemporary Needs have been organized every year since 1976, mostly at the scenic hill resort of Nathiagali near Islamabad, Pakistan. The idea of holding these Colleges came from the distinguished Nobel Laureate, Professor Abdus Salam who emphasized the vital need of communication, as well as for transferring and sharing scientific knowledge, among the scientific community of the Third World. The primary aim of the College is to break the isolation of the scientists in the developing countries by enabling them to interact with an international faculty and colleagues from the Third World.

This annual College is being organized by Pakistan Atomic Energy Commission (PAEC) since 1976, and from year 2001, jointly by PAEC and National Centre for Physics (NCP). Besides, this activity is supported by International Centre of Theoretical Physics (ICTP), United States National Science Foundation (US-NSF), Chinese Academy of Sciences (CAS) and from 2008 by Academy of Sciences of the Czech Republic (ASCR).

The college is primarily intended for scientists actively engaged in teaching and research activities in developing countries. Advance graduate students from Pakistan are also encouraged to attend. About 350 scientists from developing nations benefit from this scientific discourse. During the last 34 years, about 610 eminent scientists including six Nobel Laureates as faculty from developed countries shared their knowledge and experience with more than 1000 foreign and 6700 local scientists from over seventy developing countries.

The scientific activities of INSC aim at the broad coverage of topics at the frontiers of knowledge in Physics and allied sciences. Every year, one or two subjects of current interest and their applications for technological development, with special reference to needs of the developing world, are highlighted. This year college is covering the following topics:

Activity 1: Quantum Condensed Matter Systems (28th June to 03rd July 2010):

Condensed Matter Physics deals with theoretical and experimental aspects of solid state physics. For the first activity of the summer college topic is "Quantum Condensed Matter Systems" which will deal with microscopic and macroscopic properties of emerging systems exhibiting quantum mechanical effects. During the activity, areas such as crystalline and non-crystalline solids, soft condensed matter, phases and interfaces will be covered.

Activity 2: Scientific Computing and Mathematical Modeling (5th July - 10th July 2010):

The scientific computing and mathematical modeling is an important emerging area. In last twenty years there has been a phenomenal growth in the field. Today it is said that there are three pillars of science namely: theory, experiment and computing.

There are number of areas where scientific computing is the most essential tool i.e. Molecular science, weather and climate forecasting, earth science, astrophysics and astronomy, particle physics, and life science. The development of sophisticated and detailed algorithms pushing the demand for CPU power from teraflops to petaflops. This requires new level of understanding in the field of high performance computing. This activity will cover areas of science where computing is a must and some activities already exist in Pakistan. The participation forms are available on website:

www.insc.paec.gov.pk

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Ph. D. Degree for PAEC Scientist

Mr. Muhammad Ashraf, Senior Scientist, at Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad has been declared successful for the award of Ph.D. degree in Botany under the supervision of Prof. Dr. Shahida Hasnain, Dean Faculty of Life Sciences, University of the Punjab, Lahore. The research work encompassed genetic variation in the lentil germplasm, diversity among the parental lines used to develop segregating populations, estimations of nature of gene actions influenced by different genetic parameters for seed yield and other important plant/yield related traits.

PAEC Scientist honored by Chinese University

Mr. Ehsan Ullah Khan, Senior Scientist, Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad has been declared "Excellent Student in 2009" and awarded `Wencai Zhang Scholarship' by Huazhong Agricultural University (HAU), Wuhan, P.R. China for his outstanding performance in studies. Mr. Khan earned this honor for his research and protocols developed by him that would have great impact in citrus genetic improvements. This award is given to students performing exceedingly well in a calendar year on the name of late Prof. Dr. Wencai Zhang, the founder of citriculture in China and memorized as the `Father of Citrus in China'.

Mr. Khan is currently a Ph.D. scholar at HAU, Wuhan under Islamic Development Bank's Merit Scholarship Program. He is the first ever foreigner who won this award which is a great honor not only for him but also for the country and PAEC .

It is a matter of pride that this news was also circulated internationally online in Science & Development Bulletin, Issue No. 60 February 2010 by the Science Development Network, Cairo managed by Prof. Wagdy A. Sawahel (Wagdy.Sawahel@sciencedev.net).

Agricultural Research is Vital for National Economy and Prosperity: Federal Minister for Food and Agriculture

PAEC's Nuclear Institute for Agriculture and Biology (NIAB) arranges National Conference on Cotton Production

Agricultural research is vital for increasing domestic production and achieving targets set for economic growth and prosperity of the country. This was stated by the Federal Minister for Food and Agriculture, Mr. Nazar Muhammad Gondal, at the inaugural session of the 3rd National Conference on Cotton Production on November 13, 2009 at Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad. Mr. Raja Riaz Ahmad, Senior Minister, Government of Punjab was also present on the occasion. Mr. Gondal reviewed the present scenario in agriculture sector covering various aspects starting from inputs availability, pricing, production to market-related issues effecting economics of small farms and the steps being taken by the government to resolve such problems. The Minister added that the country was blessed with a huge wealth of natural resources and diverse climate suitable for growing large variety of crops throughout the year, but unfortunately the country is struggling to attain self-sufficiency in food and other agricultural products. He said that improved crop varieties and innovative products like genetically modified (GM) cotton and other crops have a pivotal role in efforts aimed at narrowing the gap between potential and average yields of crops realized in the country. The Minister also reiterated that government was cognizant of the needs and is extending fullest support for agricultural and biotechnological research.

Speaking on the occasion, Dr. Abdul Rashid, Member (Bio-Sciences) briefly mentioned about R&D programs of Pakistan Atomic Energy Commission (PAEC) in the fields of agriculture, biotechnology and medicine.

Highlighting the achievements, he informed the gathering that agriculture and biotechnology institutes of PAEC have, so far, evolved 63 high yielding, disease resistant and stress tolerant varieties of crops such as cotton, wheat, rice, sugarcane, rapeseed and pulses that had made a significant economic impact towards the national economy.

Mr. Nazar Muhammad Gondal, Federal Minister for Food and Agriculture addressing the inaugural session of 3rd National Conference on Cotton production. Seated are (L to R) Syed Anwar Shah, Director, NIAB, Dr. Qadir Bux Baloch, Agri. Development Commissioner, Dr. Abdul Rashid, Member (Bio-Sciences), PAEC, Raja Riaz Ahmad, Senior Minister, Govt. of Punjab and Dr. M. Aslam, DCS.

Earlier Syed Anwar Shah, Director, NIAB mentioned that using nuclear techniques NIAB has evolved 27 improved varieties of crops including 8 varieties of cotton, 2 of rice, 5 of chickpea, 10 of mungbean and 2 of lentil. These varieties have made significant contributions in boosting agricultural production. In addition to crop improvement, research efforts of NIAB have resulted in development and optimization of several technologies for the benefit of farmers. Worth mentioning among these include biosaline agriculture technology, crop protection, fertilizer and water management for major crops and improvement of livestock health and reproduction, and production of vaccines for cattle and poultry.

A large number of scientists, policy makers, farmers and representatives of business community from all over the country participated in the two-day deliberations and 25 eminent experts in cotton research and production presented their findings. Cotton is among the most important cash crops contributing towards national economy. Due to heavy and wide spread infestation of Cotton Leaf Curl Virus disease and Mealy bug in the country, cotton suffered badly during the last few years. It was, therefore, very timely to provide the scientists and other stakeholders a forum to exchange the knowledge and experiences, and plan for effective strategies to boost the cotton production in the coming years. It is hoped that the recommendations synthesized in the conference will help meet the national targets for cotton production.

On this occasion, a Farmers' Field Day was also organized besides cotton conference. The chief guest, along with other dignitaries, visited the experimental fields of cotton at NIAB research farm and appreciated the efforts of scientists. A large number of farmers had an opportunity to visit experimental fields of cotton and discuss their problems with the researchers. They took keen interest in the NIAB cotton germplasm and appreciated the efforts of NIAB scientists for developing different high yielding, heat tolerant and CLCuV resistant genotypes.

Mr. Nazar Muhammad Gondal, Federal Minister for Food and Agriculture visiting cotton field at NIAB Farm.

Annual Radiological Emergency Exercise at Karachi Nuclear Power Complex (KNPC)

An Annual Radiological Emergency Exercise was performed at Karachi Nuclear Power Complex on Wednesday, December 30, 2009. The Exercise was performed as per scenario and event time-line mentioned in the "Execution Plan - Radiological Emergency Exercise 2009". KANUPP Radiological Emergency Plans were activated. The Exercise was started at 10:30 hrs and lasted for two hours. All emergency facilities at plant were activated including Emergency Control Centre (ECC), which was used as Command Point. Following actions such as search & rescue operation, decontamination of injured person, first aid, fire fighting, assembly of the station personnel, on-site/off site radiological survey, control of public transport were demonstrated in the exercise. Additionally limited evacuation of KANUPP personnel and sheltering and KI pills distribution at KANUPP Colony were also demonstrated.

View of ECC Room and Communication Facility at ECC.

The Exercise was witnessed by the members and inspectors of Pakistan Nuclear Regulatory Authority (PNRA), observers of Directorate of Nuclear Power Safety (NPS) and Directorate of Safety (DOS) and local observers.

Assignments of PAEC Officers Abroad

- Dr. Shoaib Ahmad, Member (Physical Sciences), PAEC attended the Fifth Meeting of the Joint CERN Pakistan Committee (JCPC) on January 15th, 2010 at Geneva.
- Mr. Ghulam Rasul Athar, Director, Applied Systems Analysis Division (ASAD), PAEC, Islamabad will proceed to Thailand on 31-01-2010 for undertaking Mission as an IAEA Expert to assist Thailand National Team in Finalization of its Country Study for one week from 01-05 February, 2010.
- Mr. Hamid Mahmood, Senior Director, Directorate of Nuclear Power Engineering Structures (DNPES), PAEC, Islamabad will proceed on 31-01-2010 to undertake Expert Mission on Site Safety Review in Relation to Site Selection/Evaluation for a NPP at Tunis, Tunisia from 01-05 February, 2010.

Visit of Foreigner to Pakistan

- Dr. Osman Asghar Mirza, (Danish), Associate Professor, Faculty of Pharmaceutical Sciences, University of Copenhagen, Denmark visited NIBGE, Faisalabad from 15-20 January 2010 for conducting collaborative meeting with Dr. Moazur Rehman, Senior Scientist, NIBGE, Faisalabad and a Special Seminar.

Appointment Abroad

- Dr. Javed Anver Qureshi, Deputy Chief Scientist, NIBGE, Faisalabad proceeded to Saudi Arabia on 16-01-2010 for undertaking appointment as Associate Professor (Biochemistry) at King Khalid University Abha, Saudi Arabia for a period of one year.

Ph.D. Degree for PAEC Engineer

Dr. Abdus Samee, Principal Engineer, C-1, has been awarded Ph.D. degree in Electrical Engineering (High Voltage Engineering) by Harbin Institute of Technology (HIT), China. The research work titled "Multifactor Investigation on Electrical Treeing and Aging in Solid Insulation under Non-Uniform Electrical Field" has been carried out under joint supervision of Professor Zhang Chao Hai and Professor Li Zhong Hua of HIT, China. Electrical treeing is a sort of degradation in cable insulation, which is inevitable under high voltage. A novel technique was developed to slow down the electrical treeing process based on SiC conductivity characteristics at higher electric fields. Five research papers from his thesis have been published in the internationally reputed journals/ conferences.

First National Training Workshop on Electron Microscopy at PAEC's NIBGE, Faisalabad

PAEC's National Institute for Biotechnology & Genetic Engineering (NIBGE), Faisalabad, being a federal research body and center of excellence in Biotechnology has a mandate to apply modern and innovative techniques in agriculture, health, industry and environment and routinely offers up-to-date training programs to support the study of diverse disciplines of science and technology in the country.

In pursuance of its academic activities, a national training workshop on electron microscopy was held from December 14 to December 24, 2009, with the aim to introduce and teach both the theoretical principles and the practical aspects of Transmission and Scanning Electron Microscopy. The training was organized by the Technical Services Division of NIBGE, Faisalabad. A total of twelve participants were selected for the training workshop including researchers, medical doctors and Post graduate fellows from academia, research institutions, universities and hospitals.

(L to R) Dr. Sohail Hameed (Workshop Convener/Head, STD), Prof. Dr. Kauser Abdulla Malik, (chief guest) and Dr. Zafar M. Khalid (Director, NIBGE) at the concluding ceremony of the workshop.

The workshop was concluded on December 24, 2009. Prof. Dr. Kauser Abdulla Malik graced the occasion as chief guest and distributed certificates among the participants.

26th Training Course on The Use of Nuclear and other Techniques in Food and Agricultural Research concludes at NIFA, Peshawar

A two-week postgraduate training course on the "Use of Nuclear and other Techniques in Food and Agricultural Research" was conducted from December 7-18, 2009, at PAEC's Nuclear Institute for Food and Agriculture (NIFA), Peshawar. The course was designed primarily to create awareness about radiation as well as its peaceful uses and to provide hands-on training to scientists/ researchers, universities/colleges teachers and postgraduate students in the application of irradiation, radioisotopes and other contemporary techniques in the field of food and agriculture. The course was organized by Dr. Abid Farid, Principal Scientist and his team. A total of 22 trainees representing various universities and R&D organizations from different parts of the country participated in the course.

A group photo of course participants along with faculty members at NIFA, Peshawar.

PAEC Cancer Hospitals observe World Cancer Day on 4th February 2010

World Cancer Day is being observed all over the world on 4th February every year since 2006 for creating awareness among masses regarding prevention, early detection, and subsequent treatment.

The year 2010 has been declared as Cancer Prevention Year and slogan of this year is "Cancer Can Be Prevented Too."

PAEC NM&O (Cancer) Hospitals organized various activities aimed at outreaching the public, media and the medical community for disseminating important related information.

activities aimed at educating the public on the need of Physical Activity, Health Foods, Risk Factors, Early Detection and Subsequent Proper Steps of Treatment.

Atomic Energy Medical Centre (AEMC), Karachi organized a seminar for General Public for awareness which also included a speech on "Cancer and Its Prevention in the light of Islamic Teachings".

Bahawalpur Institute of Nuclear Medicine and Oncology (BINO), Bahawalpur arranged a "Walk Against Cancer" for public awareness regarding the prevention of cancer. Various dignitaries, societies and general public participated in this activity. Special "Informative and Diagnostic Camp" was also set up at BINO where banners were displayed and free check up provided along with informative pamphlets.

Centre for Nuclear Medicine (CENUM), Lahore arranged a Symposium in which different speakers pointed out the ways to "Prevent Cancer".

Centre for Nuclear Medicine and Radiotherapy (CENAR), Quetta also arranged a Seminar in which, in addition to speeches, a "Question Answer Session" was also arranged for general public.

Institute of Nuclear Medicine Oncology and Radiotherapy (INOR), Abbottabad arranged a seminar and displayed banners in Urdu and local languages. INOR Patients Welfare Society also participated and people were informed about various risk factors causing cancer with particular emphasis on "Smoking".

Bahawalpur Institute of Nuclear Medicine & Oncology (BINO), Bahawalpur arranged a walk to create public awareness on World Cancer Day.

Institute of Nuclear Medicine and Oncology (INMOL), Lahore observed the day by arranging a seminar where it was pointed out that with awareness for precautions & screening among general public, about 40% of cancers can be prevented.

Institute of Radiotherapy and Nuclear Medicine (IRNUM), Peshawar planned a symposium where experts stressed upon importance of awareness for prevention of cancer and early detection. Banners were displayed all over the city of Peshawar in local languages. Many people donated various amounts for the treatment of poor patients to IRNUM Patient Welfare Society on the same day.

Karachi Institute of Radiotherapy and Nuclear Medicine (KIRAN), Karachi while observing the World Cancer Day stressed upon preventing cancer by "Quitting Smoking and Tobacco Related Products".

Larkana Institute of Nuclear Medicine and Radiotherapy (LINAR), Larkana arranged a walk for increasing the awareness amongst general public about the causes, risk factors and symptoms of cancer. Posters and banners were displayed.

Experts from Multan Institute of Nuclear Medicine and Radiotherapy (MINAR), Multan were interviewed live on air by FM Radio and a Press Conference was arranged for awareness of cancer.
Nuclear Institute of Medicine and Radiotherapy (NIMRA), Jamshoro also arranged a symposium for awareness of cancer in general public. Stress was laid on Hepatitis B and C / Human Papilloma Virus (HPV) for causing Liver and Cervical Cancer and its prevention.

Nuclear Medicine, Oncology and Radiotherapy Institute (NORI), Islamabad also arranged a symposium for awareness & early detection of cancer among general public.

Punjab Institute of Nuclear Medicines (PINUM), Faisalabad arranged a symposium for awareness of cancer with special focus on "Breast Cancer Prevention". Four Breast Cancer Patients were also invited to share the experience and fight against this horrible disease to encourage the females for screening programs.

PAEC has already a program in place for reaching out the remote areas of the country for advice and screening of various sections of public with particular emphasis on Breast Screening of Rural Female Population through Mobile Breast Care Units stationed at INMOL, Lahore, BINO Bahawalpur, and NIMRA Jamshoro.

It may be recalled that PAEC is running thirteen NM&O (Cancer) Hospitals across the country and five such hospitals are under construction out of which one is going to be functional at Gujranwala within next few months. About 500,000 patients benefit from very sophisticated diagnostic and treatment facilities available at PAEC hospitals annually. The information provided in these

NIAB releases a new variety of Cotton NIAB-777

PAEC's Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad has released another high yielding cotton variety developed through a cross between NIAB-78 and REBA-288 using gamma irradiated pollen. The variety named NIAB-777 was approved by the Punjab Seed Council in its 38th meeting held on 23rd October 2009 at Lahore, for general cultivation in the Punjab Province. The development of this variety is the outcome of the concerted efforts of Dr. Muhammad Aslam, DCS, Dr. M. Ahsanul Haq, CS (Rtd.) and Mr. Akbar Ali Bandesha PS (Rtd.).

NIAB-777 exhibited 9 to 22% higher yield at several locations in National Coordinated Varietal Trials (NCVT) and 21% higher yield under irrigation stress than the standard variety CIM-496. This variety has desirable fibre quality traits (fibre length 28.8 mm, fibre fineness 4.67 µg/in, uniformity index 85, fibre maturity 81% and fibre strength 31.6 G/Tex). NIAB-777 is moderately hairy with medium sized desirable plant along with better foliage, and is thus suitable for high planting density. It gave 14% higher yield at low plant spacing, i.e. 15 cm plant to plant spacing compared to the recommended 30 cm spacing.

Field view of newly approved cotton variety of NIAB.

NIAB-777 is tolerant to heat and CLCuV-B.

Cotton contributes significantly to the national economy and accounts for 10% of value added in agriculture and 2.4% to GDP. As estimated by Ministry of Food and Agriculture and All Pakistan Textile Mills Association (APTMA), the domestic textile industry would require 20 million bales of lint by 2015 having 26% of the long staple cotton. Therefore, the improvement in fibre quality along with its quantity is the dire need of the national production of good quality cotton for meeting the domestic textile industry requirements and also adding to the national exchequer through export of raw cotton and value-added products.

WANO-Tokyo Centre Special Review Team visits KANUPP

A WANO-Tokyo Centre Special Team comprising four experienced nuclear professionals from Japan and South Korea visited KANUPP from January 11 to 16, 2010. The goal of such WANO reviews was to assist stations in achieving the standard of excellence in nuclear plant operation.

The team reviewed four main areas i.e. Operation, Maintenance (Mechanical and E&C), Engineering Support and Organization & Administration. In additions to this, the team also reviewed the cross functional areas like Equipment Performance & Condition, Human Performance, Work Management and Industrial Safety, etc.

The team has recognized that many activities and practices performed by KANUPP are routinely done well. In order to enable others to emulate KANUPP, the team has identified several of its strengths.

The areas for improvement are based on best practices, rather than minimum acceptable standards or requirements, and are not necessarily indicative of unsatisfactory performance. The team has identified various areas requiring improvement.

WANO-Tokyo Center Team visiting Control & Instrumentation shop during Special Review of KANUPP.

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