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Regional Workshop on Biosafety and Biosecurity in Life Sciences Research



Participants of Inaugural Session with Chief Guest, Federal Secretary, Ministry of Climate Change

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The Regional Workshop on Biosafety and Biosecurity in Life Sciences Research was jointly organized in Islamabad by the Commission on Science and Technology for Sustainable Development in the South (COMSATS), Islamic Educational, Scientific and Cultural Organization (ISESCO), and Pakistan Academy of Sciences (PAS) from 26 to 28 April 2016.

The three-day Regional Workshop had participation from over 40 R&D organizations, universities, and government institutions from 20 cities of Pakistan, and speakers from Bahrain, Iran, Jordan, Kazakhstan, Nigeria and USA. In its 7 technical sessions the Workshop touched upon three major themes: Biosafety and lab safe handling; Biosecurity; and Bioethics.

Addressing participants of the Inaugural Session, the Chief Guest, Syed Abu Ahmad Akif, Secretary, Ministry of Climate Change said that today, Biotechnology and Genetic Engineering are being used to tap the potential of DNA and microorganisms for addressing the pressing issues concerning food security, disease eradication, and provision of low-cost industrial applications. He stated that, in his view, it is high-time to initiate efforts for developing a National Biosecurity Plan to address concerns regarding Pakistan's preparedness for bio-threats in the sectors of environment, agriculture, health and other areas. He said that Ministry of Climate Change is committed to improve quality and pace of research in Life Sciences, for socioeconomic development of the country.

Speaking at the Inaugural Session, Secretary General of PAS, Dr. Zabta Khan Shinwari, shared significance of the event in relation to the National DNA Day (25th April) that commemorates completion of the Human Genome Project in April 2003, and the discovery of DNA's double helix in 1953. He called for strong ethical guidelines to monitor radical trends in life sciences research, challenging moral fabric for society.

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The ISESCO Representative based in UAE, **Dr. Abdul Azeez Hameed Ali**, thanked COMSATS and PAS for collaborating with ISESCO for co-organizing the event. He stated that ISESCO has been working for over 30 years for the promotion of science by holding workshops and seminars within and outside the Islamic World.

Dr. Imtinan Ilahi, Executive Director of COMSATS appreciated ISESCO and PAS for their collaboration and said that we will also go to other regions of the world to enhance awareness for effective biosecurity measures. He stated that COMSATS always welcome south-south cooperation and works hard for the promotion of socio economic development.

On last day of the Regional Workshop, the speakers laid stress on improving status of genetic engineering and biosafety in the Islamic World.

Special emphasis was placed to bioethical code of conduct which is a pre-requisite for life sciences Research and Development.

In his concluding remarks, the Chief Guest Mr. M. Humayun, Secretary, Ministry of Federal Education and Professional Training, said that the present political leadership of Pakistan in their manifesto has stated Life Sciences as a priority area for gearing Pakistan towards Biotechnology Revolution. He assured his Ministry's support for execution of the useful recommendations given at the Workshop. Prof. Dr. Zabta K. Shinwari thanked all the Resource Persons, Foreign Delegates and National Participants for making this event more credible and informative for young life scientists. He also commended the young university students for their impressive poster presentations. Cash prizes were awarded to presenters of the top 3 Posters.



Secretary Ministry of Climate Change receiving a memento



Prof. Zabta K Shinwari receiving a memento from Dr. Imtinan Ilahi in the presence of Secretary Ministry of Education



Participants of the Concluding Session with Chief Guest, Mr. M. Humayun, Secretary, Ministry of Federal Education and Professional Training

Some Salient Glimpses of the Workshop

























Science Cooperation MoU signed between Latvia and Pakistan

A delegation from Latvian Academy of Sciences visited Pakistan Academy of Sciences to formalize arrangements for mutual cooperation and collaboration and for building broad-based, substantive and long-term relationship with Pakistan Academy of Sciences in a wide array of scientific and technological disciplines. A Memorandum of Understanding (MoU) for cooperation between Science Academies of the two countries was signed on March 22, 2016 in a well attended ceremony at PAS Headquarters, Islamabad by the President of Latvian Academy of Sciences, **Dr. Ojar SPARITIS** and the President of Pakistan Academy of Sciences, **Dr. Anwar Nasim**.

Dr. SPARITIS, apprised the audience that by working on fundamental and applied sciences with innovative S&T we can stay competitive in the world. He offered collaboration in all areas of S&T by way of joint projects, reciprocal visits of scientists, and joint conferences.

Dr. Anwar Nasim, welcomed the initiative and the offer of collaboration between scientists and scientific institutions of the two countries and assured the visiting dignitaries from Latvia of all out support and cooperation from the Pakistani side. He shared his eagerness for a productive and mutually beneficial collaboration for a win-win situation for both the countries.

The Secretary General of PAS, **Prof. Zabta K. Shinwari**, briefed the audience about the background and objectives of the Academy. He said that the Academy has a catalytic role in economic development of the country by way of promoting S&T by forging and facilitating working relations between Pakistani and foreign scientific institutions.

The MoU signing ceremony was attended by senior scientists, young faculty members and postgraduate students.



Presidents of both Academies Signing the MoU

Ambassador of Czechoslovakia is Keen to Bridge Ties of Scientists of Both Countries

A Memorandum of Understanding (MoU) on Scientific Cooperation between PAS and the Academy of Sciences of Czech Republic was signed in Islamabad on 10 May 2007 by Presidents of both the Academies. However, the MoU remained dormant.

The newly appointed Ambassador of Czech Republic to Pakistan, H.E. Mr. Jan Fury, visited PAS on 31 March 2016 and expressed his keen desire for collaborative scientific activities as envisaged in the MoU. The President of PAS, Dr. Anwar Nasim, Secretary General of PAS, Prof. Dr. Zabta K. Shinwari and Treasurer of PAS, Prof. Dr. M. D. Shami appreciated this unusual initiative on the part of Czech Ambassador and assured him of all possible cooperation in this regard. Consequently, PAS has suggested Ministry of Science and Technology (MoST) that a delegation, comprising of two

Fellows of the Academy and a member from MoST, be sent to Czech Republic to work out strategies for mutual cooperation.



Workshop on Past, Present and Future of Science

The Pakistan Academy of Sciences (PAS) recently organized a unique event of interaction and dialogue between three generations of intellectuals in science and education for a brainstorming session on 17 February 2016 on "Past, Present and Future of Science in Pakistan."

Participants of this event under the banner of "Making Pakistan Science Conscious" included winners of the Olympiad in Science; MPhil and PhD students of various universities and young scientists.

The Secretary General PAS, **Prof Zabta Khan Shinwari**, apprised the participants about the objective of this interactive event. He argued for substantial improvements in the education and science arena of the country. PAS President, **Dr. Anwar Nasim**, apprised the audience about historical role of PAS in the promotion of science and

technology and encouraged the participants to contribute for national development by adopting the role of non-government individuals (NGI).

Renowned scientist and Chief Guest of the event, **Dr. A. Q Khan**, shared his perceptions and experiences about the role of science and technology in national development and well being of humanity. He encouraged the young participants to excel in science to serve the nation and humanity. Later, the winners of Olympiad in science (school children) received gifts from Dr. A. Q. Khan.

Senior scientists of the country, like Prof. M. D. Shami, Prof Khalid Mahmood Khan and Professor Qasim Jan, Prof. Dr. Anwar ul Hassan Gilani, highlighted the contributions of science and technology in national development and human well being.



Participants of the Event with Dr. A. Q. Khan, Prof. Dr. M. D. Shami, Prof. Dr. Khalid M. Khan, Prof. Dr. Anwar ul Hassan Gilani and Prof. Dr. Zabta K. Shinwari

Prof. Dr. Atta-ur-Rahman Establishes Genome Center

Prof. Atta-ur-Rahman has recently established a research center at University of Karachi in the field of Genomics from a personal donation. The Center is named "Jamil-ur-Rahman Center for Genomics Research". It is now fully operational with state-of-the art gene sequencing facilities and highly qualified personnel. The Center has already completed the gene sequence of different ethnic populations and has also embarked on projects to improve the milk yields of Sahiwal cows as well as to create food crops which are salt tolerant and resistant to diseases.



Acting President of Pakistan Academy of Sciences

Dr. Anwar Nasim, President Pakistan Academy of Sciences is currently out of the country. In his absence, Vice President **Prof. Dr. Khalid M. Khan** is Acting President of the Academy.

Dr. Anwar Nasim is expected to return back on July 3, 2016.



Inauguration of Balochistan Chapter of PAS

The Pakistan Academy of Sciences (PAS) inagurated its Balochistan Chapter on 20 April 2016 at University of Balochistan (UoB). **Prof. Dr. Zabta K Shinwari**, Secretary General of PAS and **Prof. Dr. Masoom Yasinzai**, Secretary Balochistan Chapter of PAS visited the University to formally inaugurate the Regional Chapter Office at UoB and conduct a seminar on "Making Pakistan Science Conscious".

The establishment of PAS Chapter at UoB is expected to be beneficial for promoting S&T in the province. The University of Balochistan provided the physical infrastructure to establish the Regional Chapter of PAS at UoB.

Inauguration of the PAS Chapter was done by The Minster of Education, Government of Balochistan and the ceremony was attended by a large number of stakeholders, scientists and students.

The functions of the Regional Chapter will be:

 To establish and maintain association and relations between Balochistani scientists and

- the national and international groups, and unions of scientists;
- 2) To promote higher studies and research on pure and applied sciences in Balochistan and to disseminate scientific knowledge;
- 3) To do all other lawful things that the Academy may consider conducive to, or necessary for, the attainment of its aims and objects that would benefit UoB and other scientific institutions in the Balochistan province.



New Appointment in PAS

Ms. Zaib un Nisa has been appointed as **Assistant Secretary** in Pakistan Academy of Sciences. She has joined her duty w.e.f. 30 March 2016. Her contact details are as under:

Tel: +92 51 921 5478

Email: asst.sec@paspk.org



Recognition of Pakistani Scientists

Prof. Atta-ur-Rahman appointed as

Co-Chairman of UN Science Technology and Innovation Committee

United Nations (UN) has appointed Prof. Atta-ur-Rahman, FRS, former Federal Minister of Science & Technology, as Co-Chairman of a UN Committee on Science, Technology and Innovation (STI). The member states of the Economic Social Commission for Asia and Pacific (ESCAP) decided that the main theme for the 72nd Commission Session, 2016 would be "Harnessing Science, Technology and Innovation for Sustainable Socio-Economic Development." The Committee is Co-Chaired by Tan Sri Zakri Abdul Hamid, Science Adviser to the Prime Minister of Malaysia. Prof. Atta-ur-Rahman chaired the first meeting at the UN ESCAP meeting in Bangkok on 7th March 2016. The Committee discussed the ways and means to promote science, technology and innovation so that member states can benefit from the explosive growth of knowledge.

Prof. Atta-ur-Rahman obtained his Ph.D. in organic chemistry from Cambridge University (1968). He has 1023 publications in several fields of organic chemistry including 729 research publications, 37 international patents, 68 chapters in books and, 189 books published largely by major US and European press. Prof. Atta-ur-Rahman also headed the Higher Education Commission of Pakistan as chairman.



Chinese Academy of Sciences elects Dr. Atta as Foreign Member

The Chinese Academy of Sciences (CAS), the largest national scientific institution of China, has elected the internationally renowned Pakistani scientist **Prof. Dr. Atta-ur Rahman** as its Foreign Member.

Prof. Atta-ur Rahman, the former Federal Minister for Science and Technology, has become the first scientist of the Muslim World to have this honor. President of Chinese Academy of Sciences, Prof. Chunli Bai, in an official letter congratulated him for being elected as a Foreign Member of CAS. Dr. Rahman will attend the 18th General Assembly of CAS in June 2016 in Beijing, during which a certificate of Foreign Membership will be presented

to him.

As the comprehensive and largest national scientific institution, CAS comprises of three major parts -- a comprehensive research and development network, a traditional merit-based academic society (like National Academy of Sciences in many countries) and a system of higher education consisting of three universities. The merit-based part of CAS is represented by CASAD, founded in June 1955. CASAD has served as an advanced national think-tank to the Chinese Government on major science and technology issues and now has 777 Members and 82 Foreign Members.

Prof. Dr. M. Zakria Butt edits Proceedings of "Materials Today"

Volume 2 of Issue 10 Part B of the series "Materials Today: Proceedings" published by Elsevier in December 2015 was edited by **Prof. Dr. M. Zakria Butt** as guest editor. It contains 131 peer reviewed research papers on Solid State Physics.



Prof. Dr. M. Iqbal Choudhary declared as Adjunct Distinguished Professor by Jordanian University

The University of Petra (UOP), Jordan conferred upon **Prof. Dr. Muhammad Iqbal Choudhary** the title of "Adjunct Distinguished Professor" in recognition of his meritorious scientific research and services in the field of chemistry.

The UOP President, in an induction ceremony held in Amman, granted the Adjunct Distinguished Professorship certificate to Prof. Iqbal Choudhary.

Prof. Iqbal Choudhary has written and edited 27 books, most of which have been published in USA and Europe. He is also the author of over 900

research papers and chapters in top international science journals of the West, as well as 32 US patents.



Prof. Dr. Atta-ur-Rahman's Book Translated into Chinese Language

Prof. Dr. Atta-ur-Rahman's book entitled "Wondrous World of Science" has been translated into Chinese language to benefit the Chinese all around the world. The translated book was published in January 2016



New Website of Academy: Interactive, Attractive and Secure

The newly designed Website of Pakistan Academy of Sciences is interactive, attractive and more secure. Apart from being aesthetically pleasing, the Website is more agile, and is easier to scan, read and navigate, enabling the visitors to find what they need quickly.

One of the main objectives of designing the new Website was to help our visitors get to know us better and apprise them of our mission, activities and accomplishments as an organization.

In addition to its improved design and or scientific outlook, a number of new features have been added to the Website. Now we are using a responsive design, which means that the user will

see essentially the same design optimized for smart phone, tablet and desktop. Photo Galleries have been enabled.

We hope that more and more Fellows and other stakeholders in science will visit the new Website and acquaint themselves with the new design. In the coming months, we would continue improving the site to communicate better with the stakeholders and with the world.

Please feel free to apprise us of your opinions about the new Website.

URL: www.paspk.org