

A Quarterly Newsletter of Preston Institute of Nano Science & Technology (PINSAT)

PRESTON UNIVERSITY ISLAMABAD - PAKISTAN





China being welcomed on his arrival at Preston University

Function held in honor of participants of International **Workshop and Nano** Conference organized by NCNST, Beijing, China.



A view of the participants of the function

A function was arranged at Preston University on 7 Oct. 2015 to honor the ten students of PINSAT, Preston University who had participated in the International Workshop on Nanotechnology as well as the Nano Conference organized by NCNST, Beijing, China from 2-11 Sept. 2015. The Chief Guest on the occasion was Mr. Zhang Haihua, Secretary Science and Technology at the Embassy of the Peoples Republic of China, while the Guest of Honor was Dr. Abdul Basit, Chancellor Preston University.

Dr. N.M. Butt, Chairman PINSAT gave a brief history of the formation of PINSAT and its various activities. He mainly focused on the follow up activities as a consequence of the MoU that was signed between PINSAT and NCNST in 2012. Three graduates of PINSAT were already at NCNST for their PhD studies while three more would be joining them in March 2016. The participation of the ten students in the International Workshop and Nano Conference was also under the terms of the MoU. Moreover, an International Conference on Nanotechnology is being planned in Islamabad in collaboration with NCNST in Dec. 2016.



Dr. Abdul Basit, Chancellor Preston University, Mr. Huang Haihua Secretary S&T Chinese Embassy and Dr. N.M.Butt, Chairman PINSAT presiding over the function





Dr. K. Yaldram, Ms. Momina Amir and Ms. Shazrah Shahzad addressing the participants of the function

The speech of Chairman PINSAT was followed by a brief presentation by Dr. K. Yaldram on the future prospects of PINSAT graduates. According to him almost all the students of the two batches who have graduated so far have opted to pursue higher studies and almost 90% of them have been accepted by reputed National and International Universities. Three of the students who participated in the International Workshop and Conference on Nanotechnology namely Ms. Shazrah Shahzad, Ms. Momina Aamir and Mr. Junaid Iqbal presented their views regarding the Workshop, the Conference and cultural activities that they pursued during

Mr. Zhang Haihua, Secretary Science and Technology at the Chinese Embassy congratulated the students on their successful visit to China. He described the various scholarships being offered by the Chinese government to foreign students and how the students from Pakistan could benefit from these. According to him Pakistan is among the countries that has the highest number of students availing these scholarships.

Dr. Abdul Basit, Chancellor Preston University, shared his impressions about the developments that he had seen in China during his numerous visits to that country. According to him China is now Pakistan's biggest economic partner and will be investing heavily in Pakistan in the foreseeable future. Anticipating this future scenario, Preston University has introduced Chinese language course in three of its campuses in Karachi. The Chancellor singled out the PINSAT-NCNST MoU for special praise, as it was being implemented most effectively in its true spirit. The function came to an end with presentation of vote of thanks by Dr. Fayyaz Chaudhry. Also present on the occasion were Prof. Dr. Daud Awan, Dean Faculty of Computer Sciences and Mr. Javed Khan, Advisor Academics.



Dr. Abdul Basit presenting the Preston University shield to the Chief Guest Mr. Huang Haihua

Welcoming the fresh batch of students

A colorful and light hearted program was arranged by PINSAT Nano Society to welcome the fresh batch of students on 14th Oct. 2015. The program consisted of a humorous talk by Arsalan Omar, a video presentation produced and directed by Mohammad Humza and a song by Thecla Trinity. The role of the stage secretary was performed by Nimra Shahzad and Ayesha Tahir while recitation from the Holy Quran was performed by Ahmed Murtaza. The President of the Society Daniyal Ghauri and Chairman PINSAT Dr.N.M. Butt also addressed the audience on the occasion.



From left to right: (top) Nimra Shahzad, Ayesha Tahir, Ahmed Murtaza, (bottom Thecla Trinity, Daniyal Ghauri and Chairman PINSAT Dr. N.M.Butt addressing the audience



A view of the audience



A group photo of participating students with faculty and Chairman PINSAT

Seminars by Guest Scientists

Prof. Dr. Anwar-ul-Hassan Gilani, Chairman Pakistan Council of Science and Technology (PCST), delivered a lecture on "Healing Power of Fruits" on 21st Oct. 2015 at PINSAT. Dr. Gilani discussed the beneficial effects of fruits and vegetables on human health. He gave examples of several fruits and vegetables that have both preventive and curative properties. For instance ginger is good for stomach problems, while coriander helps in digestion if taken after meals, olive oil is good for controlling obesity and almonds are good for the brain as well as the heart. He was of the opinion that medicines are not a solution for eliminating chronic diseases rather they only suppress the symptoms. According to him "Prevention is better than cure".



Prof. Anwar ul Hassan Gilani being welcomed at PINSAT

Prof. Gilani being briefed by Dr. N.M.Butt about the R&D



Prof. Anwar ul Hassan Gilani, Chairman PCST addressing the students and faculty of PINSAT

Prof. Dr. Mohammad Mujahid delivered a talk on "Nano-Bio Research at SCME-NUST" at PINSAT on 4th November, 2015. Dr. Mujahid spoke about the status of Nano-Bio Research at the School of Chemical and Metallurgical Engineering (SCME),NUST. The school consists of 37 Faculty members, 378 students are enrolled for the Bachelors program, 275 for the Masters program and 47 for Ph.D. The Nanoscience and Engineering department at NUST is well equipped with FTIR, SEM, XRD, AFM, XAD, SPM, Tube Furnace, Muffle, Mechanical testing and Particle size analyzer.

The speaker highlighted the research areas being pursued by the faculty at SCME. He placed special emphasis on materials being developed for applications in the solar cell technologies. In addition, an introduction to biomaterials and development of products for replacement of hard tissues in the human body was also discussed.



Prof. Dr. M. Ashraf Chairman of Pakistan Science Foundation (PSF) delivered a talk on the "Role of PSF in promoting scientific research in the country" on 16th Dec. 2015 in the seminar room of PINSAT. According to him the basic objective of PSF includes funding of basic and applied research and also the popularization of science in the country. He laid emphasis on the need of introducing Inquiry Based Science Education in the schools of Pakistan. He also spoke about the functions of Pakistan Science and Technology Centre (PASTIC) and Pakistan Museum of Natural History (PMNH), two organizations that fall under the purview of PSF.



Chairman PSF, Prof. M. Ashraf visiting the R&D lab. of PINSAT



Chairman PSF, Prof. Mohammad Ashraf addressing the faculty and students of PINSAT

Dr. Ishaq Ahmad, Director of Accelerator Lab. at NCP was the invited speaker at the fortnightly seminar series arranged by PINSAT Nano Society on 23rd Dec. 2015. He spoke on "Application of ion beam accelerator in nanoscience and nanotechnology". His talk was based on the the possible applications of MeV ion beams in nanoscience and nanotechnology. He broadly covered the following aspects in his talk:



Dr. Ishaq Ahmad delivering his talk

- lon beam synthesis of nanostructure materials
- Ion beam induced modification of nanostructure materials to tune the properties of nanomaterials as per requirement
- Ion beam induced welding of nanowires/nanotubes for future fabrication and integration of nanodevices



Three PINSAT graduates to join NCNST as visiting students in

NCNST authorities have communicated to PINSAT that students from this year will only be accepted for the PhD program during the Fall semester. The three graduates of PINSAT namely Kamran Amin, Jabran Saleem and Saud uz Zafar who were to join NCNST under this program in March will now join NCNST under the visiting students program in March. They will be able to start their research under the visiting students scheme, however they will be enrolled for the PhD program in Fall 2016.

New Induction at PINSAT

March 2016

Mr. Kamran Amin joined PINSAT on 1st December for a period of 3 months as a Fellow in Physics Lab. He completed his BS in Nanoscience and Nanotechnology from Preston Institute of Nano Science and Technology (PINSAT) in the Fall of 2015.

Honour for PINSAT graduate

Mr. Kamran Amin (graduate Fall 2015) was a guest of honor in Educational Excellence and Talent Award show organized by "Islami Nizamat e Taleem Pakistan" at Bagh district, Azad Kashmir. A prize for best student along with a shield for guest of honor was presented to him.



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Chairman's engagements

- Dr. N.M. Butt, Chairman PINSAT attended the 11th meeting of the Board of Governors of Preston University Kohat on 12th Dec. 2015. He presented a brief on the activities pursued by PINSAT under the MoU signed between PINSAT and NCNST, Beijing, China
- Dr.N.M.Butt delivered an Invited lecture on "Novel Role of Nanotechnology" at a Workshop on Vacuum Coatings and Nano-Technology held at National Institute of Vacuum Science and Technology (NINVAST), Islamabad 19th November, 2015



Dr. N.M.Butt delivering his invited lecture at the Workshop on Vacuum Coatings and Nanotechnology at NINVAST.



Dr. N.M.Butt was invited as an ISESCO Expert on Nanotechnology to attend the "Second Gulf Conference for Enlightenment on Nanotechnology" held at Sultan Qaboos University, Muscat, Sultanate of Oman from 28-29 December 2015. Dr. Butt presented two papers at the conference regarding Nanotechnology education in general and Nano education in Pakistan. He also held discussions with high officials of the University to promote cooperation between PINSAT and Sultan Qaboos University in the field of Nanotechnology

- As Member of the PAS Council Dr. N.M.Butt attended the meeting of the PAS Council to review the status of the evaluation reports received from experts on the nominees for PAS Gold Medals and Prizes of the Pakistan Academy of Sciences, on 2nd November, 2015
- Dr. N.M. Butt was invited for radio talk of a group of universities on "Basic Science Education in Pakistan" at the Zulfiqar Ali Bhutto Institute of Science and Technology (ZABIST), H-8/4, Islamabad, on 12th November, 2015
- Dr.N.M. Butt was Invited as co-Chairman at the International Nanomedicines Symposium on "Nanotheranostics: A New Concept in Imaging and Drug Delivery" held at NORI on 26th November, 2015
- Dr. N.M. Butt attended the Eighth Meeting of Academic Council of Preston University, Kohat on 16th December, 2015 at Preston University, Islamabad
- Dr.N.M. Butt was Invited to attend and speak, as former D.G of PINSTECH at the "PINSTECH Golden Jubilee Interactive Session to Commemorate 50 years of Excellence of PINSTECH" on 21st December, 2015 at Dr. I. H. Usmani Auditorium, PINSTECH
- Dr.N.M. Butt was invited to attend the Inaugural Ceremony of "2nd Conference of Emerging Materials and Processes" on 22nd December, 2015 at SCME NUST, Islamabad



Dr. N.M. Butt presiding over a session at the International Nanomedicine Symposium on Nanotherapeutics at NORI



Dr.N.M. Butt being received by Director NORI at the Symposium on Nanotherapeutics

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