**FACULTY DEVELOPMENT PROGRAMME (FDP)**

**ON**

 **NANO SCIENCE AND TECHNOLOGY**

**ORGANISED BY**

**BEANT COLLEGE OF ENGINEERING & TECHNOLOGY, GURDASPUR - PUNJAB**

**(Under the aegis of PUNJAB INSTITUTE OF TECHNICAL TEACHER’S TRAINING AND RESEARCH, JALANDHAR - PUNJAB)**

**from**

**13 - 17th April, 2015**

**ABOUT THE PROGRAMME**

Nanoscience, the study of structures and materials on the scale of nanometers arouses our fascination about unusual and interesting properties due to quantum confinement effects at the nanoscale. Scientists and engineers from several disciplines including physics, chemistry, biology and materials science use nanoscience principles for advanced applications in energy, medicine, information storage, computing and elsewhere. Nanotechnology, the manipulation of matter at the atomic and molecular scale to create materials with remarkably varied and new properties, is a rapidly expanding area of research with huge potential to revolutionize our lives and to provide technological solutions to our problems in agriculture, energy, the environment and medicine. The future of Nano Science and Technology will likely involve scaling up from atomic assembly and individual nano-devices to macroscopic systems and structures with evolving properties and multiple functions. In order to fully realize this potential, we need to be able to control the synthesis of nanoparticles, the construction of nano-devices, and the characterization of materials on the nanoscale. The program will bring together research-active basic and applied scientists from different backgrounds in an intimate atmosphere to share their ideas about the needs and scientific advances in their respective fields and hence thereby to build healthy interactions and collaborations. Participants will be also given exposure to various characterization techniques such as XRD, AFM, SEM, UV-VIS, FTIR, PLD etc.

**TOPICS**

* **Introduction of Nano Science & Technology**
* **Characterization Techniques**
* **Nanomaterials and Composite Systems**
* **Nanoelectronics**
* **Nanomaterials for Energy and Environment**
* **Nanophosphors**
* **Applications of Nanomaterials**

**SPEAKERS**

* Prof. (Dr.) R.P. Tandon, Delhi University, New Delhi
* Prof. (Dr.) Ravi Kumar, BCET, Gurdaspur
* Prof. (Dr.) Vinay Gupta, Delhi University, New Delhi
* Prof. (Dr.) S. P. Lochab, IUAC, New Delhi
* Prof. (Dr.) Ramesh Chander, IIT, Roorkee
* Prof. (Dr.) Davinder Kaur, IIT, Roorkee
* Prof. (Dr.) Mahavir Singh, H.P.U., Shimla
* Prof. (Dr. )S.K. Arora, Physics Deptt., P.U. Chandigarh
* Prof. (Dr.) S.K. Tripathi, Physics Deptt., P.U. Chandigarh
* Prof. (Dr.) J.K. Goswamy, UIET, P.U. Chandigarh
* Dr. M.L. Sharma, Chandigarh
* Prof. (Dr.) Rakesh Dogra, BCET, Gurdaspur
* Dr. Vinay Dhiman, MVDU, Jammu
* Dr. A.P. Singh, NIT, Jalandhar
* Dr. Nripjit, BCET, Gurdaspur

**ABOUT THE INSTITUTE**

**Beant College of Engineering & Technology Gurdaspur** is an institute of state importance, established by Government of Punjab in 1995. The institution imparts technical instructions in six engineering disciplines at the graduate level and four at the post-graduate level. The institution has been granted Rs. 10.00 Crore under the sub-component 1.1 of TEQIP-II, NPIU, New Delhi. The Institute is identified under section 2(f) of UGC Act, 1956 and has been granted ACADEMIC AUTONOMOUS STATUS w.e.f. academic session 2014-15. The institution is accredited by National Board of Accreditation, New Delhi w.e.f. academic session 2009-2010.

**REGISTRATION DETAILS**

Registration form mentioning personal details, qualification, present status, address, area of interest, DD details (in favour of Principal, BCET, Gurdaspur) for registration fee of Rs. 1000/- (refundable on successful completion of FDP) duly signed by Head of Institution should be submitted before 25th March, 2015 to the Co-ordinator - FDP. Selected participants (limited to fifty participants) will be intimated via email on/before 27.03.2015. ***Participation of M. Tech. / Ph.D. Students is also encouraged with their POSTER PRESENTATION and registration fee of Rs. 1000/- (non-refundable). Abstract of the poster (limited to one page) should reach the organising committee latest by 05.04.2015. Poster (1 m x 1m) will be evaluated by an expert committee and best three poster presentation will be accoladed with commendations.***

**BOARDING & LODGING**

Participants will be provided free boarding and lodging within the institute. All the meals will be provided.

 **PATRON**

 **Hon’ble Prof. (Dr.) R. S. Khandpur Dr. Ravi Kumar**

 **Chairman, Board of Governors Principal**

**Co-ordinators**

 **1. Dr. Arvind Kumar 2. Dr. Nripjit**

**ORGANISING COMMITTEE**

**1. Sh. J.K. Behl 2. Dr. Vinod Kumar 3. Sh. Baljeev Kumar**

**4. Sh. Ajay Dogra 5. Dr. S.S. Sidhu 6. Mr. Amit Verma**

**7. Mr. Navneet Kahlon**

**Contact Details :** **Dr. Arvind Kumar Dr. Nripjit**

 arvind\_bcet@yahoo.com nripanu@gmail.com

 8437215600 9465182328

**ADVISORY BOARD**

* Dr. Kanjilal, Director, IUAC, New Delhi
* Dr. R.P. Tandon, Delhi University, New Delhi
* Dr. S.I. Patil, Pune University, Pune
* Dr. Arvind, IISER, Mohali
* Dr. R.J. Choudhary, IUAC, Indore