## IIT Mandi Industry - Academia Conclave, 5 May

The Indian Institute of Technology (IIT) Mandi in collaboration with the Confederation of Indian Industry (CII) organized the first Industry - Academia Conclave on Saturday, 5 May 2012 at the Kamand Campus of IIT Mandi.

Prof. T. A. Gonsalves, Director IIT Mandi, and Dr. Arti Kashyap, the Organizing Chair welcomed Academia and Industry to IIT Mandi. The keynote address titled **India's Power Crisis and the Potential of Decentralised Solar PV DC Power**, was delivered by Prof Ashok Jhunjhunwala, Padma Shree, Department of Electrical Engineering, Indian Institute of Technology Madras. Prof. Jhunjhunwala set the tone for the Conclave by explaining the power crisis in India and the need to look for alternatives as well as smart solutions, which require the partnership of Academia and Industry.

Mr. C. N. Dhar, Chairman, CII HP State Council, and Prof. R. Shrivastava, Director NIT Hamirpur, also welcomed this initiative of IIT Mandi and stressed on the importance of such collaborations between Industry and Academia.

Besides the participation of the faculty and students of IIT Mandi, there were representatives from CII, IIT Delhi, IIT Madras, IIT Ropar, IIT Hyderabad, NIT Hamirpur and SASE Manali. The idustry was represented by companies like Microsoft Research, CAD Studio, TCS, ABB, Siemens, Mahindra Swaraj, Altair Engineering, Aricent, Tejas Networks, Sandhar Technology, Benchmark Microsystems, Altruist Technology, Nucleus Software, etc.

Presentations made by faculty showcasing the research expertise of various Schools in IIT Mandi marked the background to panel discussions. After Prof. T.A. Gonsalves' presentation highlighting the vision and focus areas of IIT Mandi, Prof. Kenneth Gonsalves elaborated upon the interdisciplinary research being done in material sciences and engineering. Dr. Vishal Singh Chauhan showcased the research in engineering. Prof. Anand Srivastava discussed several research initiatives in computing, electronics and electrical engineering. The interdisciplinary nature of research at IIT Mandi came into focus time and again via these presentations.

The objectives of this conclave were to showcase the strengths of IIT Mandi to partner the industry, to understand the problems being faced by industry and society in large and their possible solutions. There were four broad panel discussions coinciding with these objectives -- Innovative Product Design by Indian Industry in collaboration with IIT, Can/should IIT produce graduates ready-made for Industry?, Towards a Research Park at IIT Mandi, and IIT Mandi as an R&D Partner for Industry.

**Innovative Product Design by Indian Industry in collaboration with IIT**: The panelists discussed how Indian industry could accelerate its movement towards inclusive growth by pursuing high value addition engineering and product design by collaboration with IIT Mandi. It was concluded that high-end design and IP (intellectual property) generation are essential for Indian industry and that there would be substantial benefits of working with Academia. Prof. Jhunjhunwala emphasized that faculty needs to take the long-term view and work with the industry without worrying about short-term rewards. If they provide value to industry, rewards will come in the long-term.

**Can/should IIT produce graduates ready-made for Industry?**: While Industry wants competence in specific tools and skills used by various companies, Academia prefers to teach broad principles and practices. Can and should this divide be bridged? After the discussion it was felt that Industry wants graduates who have strong fundamentals, who can learn whatever is needed, and who have good communication and inter-personal skills. And Industry itself imparts specific skills during induction training and project-specific training.

**Towards a Research Park at IIT Mandi**: To give a boost to high-tech industry in Himachal Pradesh and J&K, a region that is still largely rural in nature, the panel discussed whether this the right time to initiate a Research Park and what model of Research Park would be appropriate for Mandi. What are the unique opportunities and challenges offered by this location? Prof. Jhunjhunwala outlined the modus operandi of the IIT-Madras Research Park, the first such Research Park in India. Over 40 companies have setup their R&D units in this Research Park and the "credit-based lease" ensures active collaboration with IIT Madras. It was concluded that a Research Park at IIT Mandi is essential since it will spur the industrial development of this Himalayan region, and will build up an industrial ecosystem in Mandi. The Research Park should focus on sectors where IIT Mandi has strengths, such as materials, renewable energy, and innovative technologies for rural Himalayan region.

**IIT Mandi as an R&D Partner for Industry**: The discussion largely focused on what are the mechanisms within the IIT framework for industry collaboration and what are the needs and constraints of industry in working with IIT. How can a common

IIT Mandi Industry - Academia Conclave, May 5, 2012 << News << IIT Mandi

ground be achieved? Many of the industry participants expressed their interest to collaborate closely with IIT in various ways.



**One of the Panel Discussions** 



Faculty and Industry Participants at the Conclave at the Kamand Campus

Credits : Web Development Team © 2010 IIT Mandi All rights reserved