

Director's Foundation Day Speech

24th February 2019

Ten years ago on 24th February 2009 the Foundation Stone of IIT Mandi was laid in the grassy terraces of Kamand amidst a couple of stables and a few horses. On 24th Feb 2010, 97 students of the Pioneer Batch of B.Tech + 1 Director celebrated the 1st Foundation Day at the same spot. Also present was the project team from IIT Roorkee headed by Prof. S.P.Gupta.

Today we have 1,300 students, 110 faculty, 1 lakh sqm of buildup space, a fully-functional residential campus with all amenities. IIT Mandi is a flourishing member of the IIT System. Our faculty, students and alumni have carried the name of IIT Mandi throughout India and to distant corners of the world through their remarkable achievements. IIT Mandi is rapidly becoming a jewel in the snow-capped Himalayan crown of India.

This amazing transformation in a short span of one decade was the result of dedication and tremendous effort and sacrifice by all segments of IIT Mandi – students, faculty, staff and their families. Today, we pay tribute to the efforts of two segments of the IIT Team: the very young and the very old. We are honouring today the very young, the Pioneer Batch 2013 as Chief Guest of Foundation Day.

When the Pioneer Batch came to Mandi in 2010, they found an almost non-existent IIT, a couple of classrooms, some faculty, a few barely equipped labs. They took the initiative to start student governance – the Gymkhana – and student activities – Exodia, Hiking and Trekking, many clubs and sports. Noticing the need for an Institute website, Raj Kamal, Saurabh Jain and Dhruv Parmar created a website on a laptop, demo'ed it to me and it then went live as the face of IIT Mandi. This website served us well for over 6 years.

When we needed to recruit faculty, Samrat Gavale developed an online application portal for faculty. He ran this portal for 2 years during which it received about 3,000 applications from around the world.

In 2011, the Pioneer Batch were willing guinea pigs in our maiden offering of the signature Design Practicum. They went through several experiments with practicum courses and remote teaching. It is a tribute to the Pioneers and to the faculty who taught them that after 4 years in this fledgling IIT, they went on to jobs in leading companies in India and higher studies in India and abroad. To mention a few: Raj Kamal and Samrat went to Microsoft, Mohit Malhotra started work on the Tejas LCA at ADA, Saurabh Jain joined MBA at SPG Mumbai, Amanjot Kaur went for MS at University of Toronto.

In 2010, I was faced with the challenge of building and running an IIT in remote Kamand with almost no support. Of course, we promptly hired a few young faculty and staff. None of them had experience of running an IIT. It was fortunate that several retired professors and staff came to the rescue. These include Prof. Lalit Malhotra, Prof. Subrata Ray, Prof. B.D. Chaudhary, Prof. S.C.Jain and Prof. Ramesh Oruganti. Among the emeritus staff were Dr. R.C. Sawhney, our first Registrar, Mr. J.R.Sharma, Finance, Mr. C.L.Sharma, Audit, Dr. S.N.Jha, Sports and Mr. R.S. Raghav, Workshop. These people gave up the comforts of retired life with children and grand children and plunged whole-heartedly into building the physical, academic, administrative and extra-curricular structures of IIT Mandi. Despite health and other other problems of age, they have worked long hours with great commitment on a variety of tasks. Although they came from conventional Institutes, they took ownership of our unconventional academics and other initiatives.

Today, we express our gratitude to the very young – the Pioneer Batch – and the very old – the emeritus professors and staff – for their crucial role in building IIT Mandi. Over the years, the growing number of young faculty and staff have gained experience in running an IIT. They have also been important partners in building IIT Mandi to what you see today.

I'd like to now recall some of the major successes of the IIT Mandi journey.

In 2017, Prof. K. VijayRaghavan, then Secretary DBT, visited IIT Mandi to inaugurate the BioX Centre. He was so impressed by our experimental facilities and inter-disciplinary culture that he asked IIT Mandi to lead the prestigious Rs. 10 crore FarmerZone Project. Recently, Prof. Kamanio Chattopadhyay globally-renowned materials engineer from IISc visited. He praised our research facilities as being among the best in India.

The experimental facilities costing close to Rs. 100 crores that earned us these accolades were the brainchild of Prof. Subrata Ray. After convincing the Board of Governors of the need, he and Prof Lalit Malhotra then spent several years to help the young faculty procure and setup the facilities, train the PhD students and produce world-class research results.

We have a unique project-oriented BTech curriculum with its 4-year long Design & Innovation Stream (Reverse Engineering, DP, ISTP and MTP), and the emphasis on practicums and inter-disciplinary courses. Today, I'm proud to say that we are the only IIT with a DP, perhaps the only institution in India with a Data Science IC for all BTech students, and soon may be the first IIT to have a BTech in Data Science & Engineering. Emeritus Profs Ramesh Oruganti, BD Chaudhary and SC Jain came from decades of teaching in traditional curricula. However, they took to our BTech curriculum like fish to water, took ownership and steadfastly drove the development of our very non-traditional teaching programmes over many years.

As we speak, teams of faculty are working on designing 3 new BTech programmes. These are likely to be rolled out in the next academic year.

An elite IIT in a remote rural Himalayan river valley is like a fish on a bicycle. From inception, it has been our mission to understand and to serve the region that we live in, to bring the fruits of globally state-of-the-art science and technologies to the Kamand Valley, to Himachal and to the Himalayan region. Our faculty and students have made many contributions to our neighbourhood. I will list just a few of them:

- Popularising and preserving Pahari painting techniques
- Technology for conversion of pine needles into fuel briquettes
- Low-cost landslide warning systems using sensors and AI technology. This is being commercialised in iIoT's, the first faculty-led startup to be incubated from IIT Mandi.
- AI-based crop management advisories for potato farmers, in the FarmerZone Project
- The Kamand Valley Monograph series. The first 3 volumes cover the ecology, social environment and animals of the Kamand Valley.
- Science & engineering popularisation and teaching for local school children, especially girls
- Over a dozen other projects

IIT Mandi is working to transform the largely agrarian and tourism economy of Himachal into one with a significant technology component. Two important vehicles for this are our business incubators, IIT Mandi Catalyst and EWOK. Catalyst has already trained dozens of entre-

preneurs. Some of their companies are at an advanced stage of incubation. EWOK focusses on businesses run by rural women. EWOK businesses have made history as the first women-owned businesses in Salgi.

Today, is my last Foundation Day as Director. Looking back to 2010 when I started the IIT Mandi journey at the 1st Foundation Day, our dream then was to create in the Uhl River Valley an IIT that was renowned as the best in the world in some field of science and technology. Call it field X. Today, we have laid strong foundations laid. Today, we have several candidates for field X. I am confident that one of these will catapult IIT Mandi into global leadership in the coming decade through the ambition, hard work and innovation of the faculty and students. Which one will be the X, only time will tell!