# **IIT Mandi seeks Academic Leaders**

Nestled in the Sivalik Range of the Himalayas, away from the bustle of the metropolis, a new abode of learning has germinated. A few hours before the Himalayan resort Kullu in Himachal Pradesh, once considered "the end of the habitable world", the youngest IIT is coming up. The location is the forested hills of Kamand on the banks of the Uhl, a tributary of River Beas. The historic town Mandi is 14 km away.

The first batch of BTech students in Computer Science & Engineering, Electrical Engineering and Mechanical Engineering are studying at the mentoring Institute, IIT Roorkee. In July 2010, classes will shift to a transit



The campus site on the bank of the Uhl

campus in Mandi town. Occupation of the permanent campus in Kamand is slated to begin in 2011. MTech and MSc programmes will commence in 2012. From 2010, IIT Mandi will admit research scholars, both MS (by research) and PhD in many disciplines.



The road from Mandi

The campus in Kamand will offer a world-class academic environment with a high quality of life in a setting of natural splendour. The amenities will include modern classrooms, labs and libraries, sports and extra-curricular facilities, on-campus housing for all faculty and students, guest houses for visitors, a shopping centre, and a school.

IIT Mandi seeks accomplished people as the nuclei around which research groups will crystallize.

#### The Vision

The vision of IIT Mandi is to spearhead cutting edge research and development of technologies needed by the world in the years to come. Research groups will work together in creating and harnessing the newest technologies needed to serve the people of the region and the country, to tackle problems of global importance. In order to achieve excellence and high impact locally and globally, IIT Mandi will strongly foster inter-disciplinary R&D. With a view to innovating sustainable technologies for widespread use, IIT Mandi will encourage strong Humanities and Social Sciences participation in technology R&D.

#### The Focus

The initial thrust will be in the following areas:

Information and communication for sustainable development: rapid development usually involves rapid increase in resource consumption and pollution. This is not sustainable given the large number of less developed people in the world. The sunrise information and communication technologies have the potential to permit sustainable modes of development.

The stream through the campus

Green energy technologies: in the next few decades, oil and coal as energies sources will start to get depleted. Nuclear energy has potentially enormous costs for decommissioning and risk mitigation. In the long term, the future of energy is likely to be dependant on renewable sources such as solar, hydro, geothermal, biomass, etc. Hydro and geothermal are especially relevant in the Himalayan region where IIT Mandi is situated.

Integrated mountain development: mountains such as the Himalayas with scenic beauty, fragile ecosystems, high seismic risk and difficult terrain pose especial problems for development. Only a holistic approach to the problems of construction, roads and railways, social structures, etc can hope to achieve high standards of living in harmony with the natural environment.

Agricultural and food processing technologies: India's large agricultural sector is has great potential but is also facing several threats. Higher value-addition by farmers

through food processing and greater use of inexpensive mechanisation will be the key to preserving the vitality of this sector. This is crucial to India with its large population.

But in the end, the Institute will be shaped by the people who join it.

## The Opportunities

You are a faculty member in an IIT or other good University in mid career. You have established an impressive record of academic achievement, teaching and /or research. You are bubbling with ideas. IIT Mandi offers a unique opportunity for you to build from scratch the research group or the academic programme of your dreams. The only IIT in the Himalayas, the serene valleys of Kamand are a clean slate for you to help build a unique IIT.

Remote from the distractions of city life, at IIT Mandi you will find a quiet environment in which you and your colleagues can immerse yourselves in your pursuit of academic excellence. Despite its remoteness, IIT Mandi will offer the full services and conveniences that you expect in a modern technological university. These will be provided by an efficient administration that frees you from the overheads often associated with academic appointments.

The Himalayan location will be a particular attraction to visiting researchers. IIT Mandi is already talking with select European Universities, and faculty members will be encouraged to develop global collaborations. We expect the campus to be buzzing with talks, seminars and discussions. IIT Mandi is also establishing partnership agreements with industrial research labs in India. exchange of Again, searchers will be a key part of these partnerships.



A pine forest in the campus

## Create a Research Group

If your vision is to create a research group that will be known worldwide, that will make a lasting impact, you may choose one of the focus themes or define your own focus. IIT Mandi will help you with the key ingredients: funding, researchers, collaboration and administration.

#### Support will include:

- generous seed funding to setup and operate your research facility
- special research collaboration arrangements with select European Universities
- special research collaboration partnerships with select industrial research labs in India
- Institute support to get external funding
- freedom to recruit faculty and research scholars for your group
- appointments and joint appointments of faculty in Schools that will facilitate interdisciplinary research
- low-friction administrative support

### Craft an Academic Programme

If you think teaching is important, so do we. If you wish to create an innovative academic degree programme, IIT Mandi will provide the framework. You can look forward to,

- recognition for innovation in teaching
- a flexible credit system that can be tailored to different programmes
- support for labs, educational technology and development of teaching materials

Apart from academic activities, if you wish to take on a broader challenge, you can participate in some administrative capacity required for building and sustenance of the Institute, its activities, and its people.

### **Practical Matters**

IIT Mandi will offer a comfortable life for its staff and their families. The only thing you it will not give you is life in a bustling and crowded metropolis.

For your children, Mandi town ( $\frac{1}{2}$  hour from the Kamand campus) has a well-established DAV school and a Kendra Vidyalaya. Indus School, currently upto 5<sup>th</sup> Std, plans to grow upto Plus 2 with CBSE syllabus. Two other Central Board schools are 45 and 60 minutes from the campus. There are 2 good English-medium nursery schools in Mandi. IIT plans to have a creche and primary school on the campus. We would also try to attract another high school on or near the campus.

Mandi does not boast of big industry and higher educational institutions, so opportunities for spouses may be limited. But for the same reason Mandi, and in the future Kamand, will be ideal for work in education, for running an NGO, for writers and painters and social workers, for doctors and for anyone who can work via the Internet. IIT will have R&D projects particularly in ICT and policy research that would offer opportunities for a spouse with expertise in technology and also humanities and social sciences. For a spouse with a PhD, a part-time or regular faculty appointment would be an option.

Mandi town has unusually comprehensive shopping given its small size. Of course, it lacks the malls and cosmopolitan choice of the big cities. For these one has to go to Shimla or Chandigarh. Mandi has many doctors and some hospitals/clinics. The IIT campus will have basic medical facilities. The nearest specialty hospitals are in Shimla and Chandigarh.

Kullu, about an hour away has an airport with a few flights in the morning. No doubt as IIT grows frequency of flights will increase.

### In the End

If you love the mountains, if you have a passion for research and education, if you have dreamt of building a new Institute, if you desire to contribute to the growth of higher learning in India, a unique and rare opportunity has presented itself. To take up the challenge, or for more information, contact:

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The bridge to IIT Mandi