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153rd **Director's Meet**



For the first time since its inception, IIT Mandi hosted a Director's Meet on 26th March, 2016. Chaired by Prof. Timothy A. Gonsalves (Director, IIT Mandi), the 153rd meeting got together the Directors of 5 IITs (Kanpur, BHU, Hyderabad, Patna and Ropar) in person and 7 Directors (Madras, Kharagpur, Guwahati, Delhi, Bombay, Jodhpur, Gandhinagar) through Video Conferencing.

1st North Campus Building Inaugurated



Dr. Priscilla Gonsalves inaugurated the 1st building (IIT Mandi Takshila Primary School) in our North Campus on 18th April, 2016. The Director, Deans, Registrar, faculty, staff and parents were present during the inauguration. The school was established on the South Campus in 2014. The functioning of the school is taken care of by IIT's Campus Management School Committee (CSMC).

A bird's eye view of IIT Mandi

3rd Convocation



3rd CII - IIT Mandi Conclave

Industry-Academia Conclave on May 15 was organized amid a purposeful and enthusiastic participation by the attendees. attendees consisting Over 100 of representatives from the industry and academia came together and held discussions around the Conclave's theme, "Technology & Business Innovation at IIT Mandi". The Chief Guest at the Conclave, Prof. Ashok Jhunjunwala, Padma Shri, in his keynote address shared his experience in initiating many successful collaborations industry with and incubating a large number of start-ups.

Prof. Jhunjhunwala also launched the IIT Mandi Catalyst, a new Technology Business Incubator being set up to help meet IIT Mandi's Vision.

Prof. Timothy A. Gonsalves, Director IIT Mandi, provided an overview of the capabilities at IIT



Mandi, and Sh. Sanjay Khurana, CII HP State Council Chairman, shared his views on the opportunities ahead.

3rd Mandi IIT marked its on 31^{st} Convocation October. 2015. The Chief Guest of the occasion was Prof. N. Sathyamurthy, Director, Indian Institute of Science Education and Research Mohali. In the Convocation Ceremony, a total of 115 students received their degrees: 105 B. Tech. students, 7 M.S. (by research) students, and 3 Ph.D. scholars.

Sachin S.Bhat President's Gold & Institute Silver Medal



Prashant Prazapati Director's Gold Medal Balasundaram Endowment Prize



Ingale Swapnil Sushil Institute Silver Medal





7th Foundation Day

IIT Mandi celebrated its 7th Foundation Day on 24th February, 2016. Dr. Sanjay Kumar, Director, Institute of Himalayan Bioresource Technology, Palampur, was the Chief Guest for the function. With academic, research, cultural activities happening on its permanent campus, the Institute has developed a strong foundation and is already proving to be a single destination for excellence, innovation, and learning in the Himalayas. The day was commemorated with various sports events, cultural activities, and an award ceremony.





On 3rd February, 2016 an MoU between IIT Mandi and **McMaster** University, Hamilton, Ontario was signed by Prof. Timothy A. Gonsalves (Director, IIT Mandi) and Prof. Peter Mascher (Associate Vice-President International Affairs) McMaster. McMaster is one of Canada's top universities and one of leading research the universities worldwide.



Conference

A Conference on "Advances in Electron Spectroscopy -**Experiment and Theory**" was held at IIT Mandi from 18th - 21st January, 2016. The aim of the meeting was to discuss recent advances in electron spectroscopy and and microscopy, future directions. This meeting was the second of the series. The first one was organized in Göttingen, Germany. There were about 50 participants, included pioneers from India and abroad and also research scholars and post docs. The meeting started by giving condolence to Late Prof. Thomas Pruschke, who had contributed significantly in the field of dynamical mean field theory. The meeting concluded with panel discussion with Prof. Silke Biermann, Prof. J. Fink, Prof. F. Assad and Prof. Fujimori.

"Big Data Analytics"

The workshop was held at IIT Mandi on 7th May, 2016. Er. Johannes Kirschnick from DFKI (German Research Center for Artificial Intelligence, Berlin), Dr. Manohar Kaul from IIT Hyderabad, Dr. Srikanta Bedathur from IBM Research



and Dr. Vikram Goyal from IIIT Delhi were the invited distinguished speakers. Posters on Adwords problem, Weather Prediction, Recommendation systems, Spam filters etc. were presented towards the end of the workshop.

"Controllability of Heat and Wave Equations"



The School of Basic Sciences, IIT Mandi in collaboration with the National Program on Differential Equations: Theory, Computation and Applications (NPDE-TCA 2015), IIT Bombay, organized this 5 day Advanced Level Workshop from 16th - 20th November, 2015. During the workshop lectures were delivered by eminent mathematicians, Prof. D Bahuguna (IIT Kanpur), Prof. N. Sukavanam (IIT Roorkee), Prof Amiya K. Pani (IIT Bombay), Prof. Raju K George (IIST Trivandrum), Prof. K. Sakthivel (IIST Trivandrum), Prof. A. K. Nandakumaran (IISc Bangalore) and Dr. Muslim Malik (IIT Mandi).

"Product Design and Innovation"



Design Innovation Center, IIT Mandi organised this workshop on 18th & 19th December, 2015. The workshop drew participants from all over the country. Prof. B.D Chaudhary (Dean Academics),

Prof. Ramesh Oruganti (Advisor to Dean SRIC), Prof. M. Balakrishnan (IIT Delhi), Prof. P.V.M Rao (IIT Delhi), Dr. Rajnesh Sharma (IIT Mandi), Dr. Rajeev Kumar (IIT Mandi) and Dr. Om Prakash Singh (IIT Mandi) delivered lectures and interacted with the participants.



"Part Modeling, Assembly Modeling & Production Drawing for Engineers & Designers"

The training programme was organised at IIT Mandi from 25th - 27th January, 2016. Creation of a virtual 3-D model is the very first step of product development process. A 3-D virtual model provides all the basic information essential in the pre-processing step in finite element analysis (FEA) or computational fluid dynamics (CFD). The finalized design of the product too need be represented by the production drawings for use by manufacturing division. Hence the programme was aimed at training participants about assembly modeling, piping/circuit diagrams and production drawings.

Few images of models practised by the candidates:



Welcome to the new Faculty

Dr. Shyamasree Dasgupta (Assistant Professor in the School of Humanities and Social Sciences). Ph.D.: Jadavpur University, Kolkata in 2015. **Research interests**: Applied Microeconomics, **Energy Resource and** Environmental Economics and Economics of Climate Change.



Dr. Astrid Kiehn (Visiting Associate Professor in the School of Computing and Electrical Engineering). Ph.D.: TUMunich, Germany in 1989. **Research interests:** Verification of Distributed Algorithms, Formal Models of Distributed Systems, Verification and

Model Checking.



Dr. Dhiraj V. Patil (Assistant Professor in the School of Engineering). Ph.D.: Indian Institute of Science in 2010.

Research interests: Lattice-Boltzmann method, Multiphysics, Multiphase flows and Complex Fluids Rheology.

Gokul Somasekharan (Teaching Fellow in the School of Humanities and Social Sciences) from the Free University Berlin, Germany.

Research interests: German Literature.

Scaling the heights Awards

Prof. Pramod Talgeri (Visiting faculty, SHSS, IIT Mandi)



The President of the Federal Republic of Germany, Dr. Joachim Gauck, has conferred upon Prof. Pramod Talgeri the Order of Merit of the Federal Republic Germany of in recognition of his outstanding achievements in promoting Indo-German cultural interaction and deepening the relations between Germany and India.

Abhijeet Sachdev, together with

(Asst. Prof., Dept. of CSE, NIT

Goa), received the best paper

award for their work entitled "A

Family of Example-Specific

Kernels for Classification of

Varying Length Patterns of

Speech using Support Vector

in

Soft Computing & Machine

based

Dr. A. D.Dileep (Asst. Prof., SCEE, IIT Mandi)

Veena

Dr.

Density

Machines"

International

Intelligence.



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Matching

2nd

IIT Mandi Developed Indigenous Technology for Next Generation IC Industry

The goal of this project under the guidance of Prof. Kenneth Gonsalves, Visiting Distinguished Professor, was to design and develop a suitable and sustainable **resist technology** for next generation EUV technology at IIT Mandi, with the support of Intel Corp USA. Intel provided about Rs. 2.5 Crore to IIT Mandi with an additional Rs. 2 Crore for use of the EUV exposure facility at LBNL, USA. After 4 years of successful development of indigenous high end DUV, EBL and EUVL photoresists and meeting the expectation of front

line semiconductor industry, Intel, USA, IIT Mandi has recently received about Rs. 7 crores from various Indian funding agencies including SCL (ISRO), DST and MHRD to develop indigenous resist technology. Encouraged and excited with the success of the highly prized nanotechnology research, IIT Mandi is gearing up to boost its nanofabrication technology research by putting up an advanced and sophisticated Centre for Design & Fabrication of Electronic Devices (C4DFED) at IIT Mandi. Read More: http://www.iitmandi.ac.in/research/intel_project.html

New Programs at IIT Mandi

Integrated PhD program in Physics: IIT Mandi commenced the iPh.D. program in Physics, during the Aug 2015 – Dec 2015 Semester. This program is designed to attract bright and young minds towards the front line areas of research in physics. Students enrolled in the integrated Ph.D. (iPh.D.) program, on successful completion, will be awarded two degrees: a M.Sc. and a Ph.D. degree.

M.Tech. in Biotechnology (Specialization: (i) Systems Biology and (ii) Medical & NanoBiotechnology), M. Tech. in Electrical Engineering (Specialization: VLSI), M. Tech. in Energy Engineering (Specialization: Materials) and M.Sc. in Applied Mathematics are commencing from August 2016.



Dr. Atul Dhar (Asst. Prof., SE, IIT Mandi)



the

Conference on

Atul Dhar has Dr. been awarded the Young Scientist Award by the **ISEES** (International Society for Environment Energy, and Sustainability). The award was conferred during the 7th ISEES International Workshop on Sustainable Energy, Environment & Safety with Railway Centric Theme.

Scaling the heights

Achievement

Athar Aamir Khan, IAS AIR 2, 2015 Aamir, an **IIT Mandi alumnus** of 2014 B.Tech. (Electrical), has secured second rank in the prestigious civil services examination, 2015. It is a proud moment for all, at the alma mater. While at IIT Mandi, Aamir always proved his worth in academic and extra curricular activities.

Photo - From left to right: Prof. Subramanian, Athar Aamir Khan and Prof. Timothy A. Gonsalves (Director, IIT Mandi)



Issue-2 of the technical magazine of IIT Mandi – '**ESSENT**' was launched on 2nd June, 2016. Prof. Timothy A. Gonsalves (Director, IIT Mandi) congratulated the coordinator and the whole team of **SCRI** (Society For Collaborative Research And Innovation) IIT Mandi on the occasion.

Inter IIT Tech Meet 2016

The **4th Inter IIT Tech Meet** was held at IIT Mandi from 29th - 31st January, 2016. Participants from 9 different IITs came together during the event. This was a panIIT event which comprised of various IITs coming together and competing. The enthusiasm of the students and the quality of the projects on display was highly appreciated.



The tech meet was a great success and ended with prize distribution and joyous celebrations.

WPI 2016 Students and faculty members from Worcester Polytechnic Institute (WPI), USA, jointly worked with IIT Mandi students and faculty on a variety of sociotechnical projects.

The projects they undertook included assessing healthcare infrastructure in villages around IIT Mandi, smart origami shelter, smokeless chula and many more.

4th Graduation Dinner

IIT Mandi celebrated the **imminent graduation** of over 140 students on 20th May, 2016. It was a historic event, as for the first time M.Sc.



and M.Tech. Students are graduating along with the B.Tech. and M.S. students and Ph.D. Scholars. Prof. Gonsalves (Director, IIT Mandi) congratulated the graduating students and their teachers, while forwarding his best wishes for their future endeavors.

International Students at IIT Mandi This spring semester IIT Mandi welcomed it's **first exchange students**. With the completion and occupation of 2 more hostels in April 2016, the institute is now all set to host more international students in future.



Ramona Sygula M.Sc. Student, University of Stuttgart, Germany



Julian Baumgärtel M.S.E. student, TU Munich, Germany



Zipporah Wanjiku Ph.D. scholar in Physics, Universtiy of Nairobi, Kenya

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Student News