



INDIAN INSTITUTE OF TECHNOLOGY MANDI

7th CONVOCATION

SATURDAY, 5TH OCTOBER, 2019



CHIEF GUEST

SHRI BABASAHEB NEELKANTH KALYANI

PADMA BHUSHAN

Chairman and Managing Director
Bharat Forge Limited

SHRI SUBODH BHARGAVA
CHAIRMAN, BOARD OF GOVERNORS
Former chairman, Tata communication Ltd.

PROF. TIMOTHY A. GONSALVES
DIRECTOR, IIT MANDI



WELCOME TO IIT MANDI

Indian Institute of Technology Mandi (IIIT Mandi) welcomes you to its 7th Convocation Ceremony on 05th October 2019. On this occasion, IIT Mandi is graduating total 276 students. Of 32 research scholars, 22 are being awarded Ph.D. and 10 are awarded M.S. (by Research) degree; 60 M.Tech. including first batches of 09 M.Tech in Power Electronics and Drives; 13 M.Tech in Communications and Signal Processing; 09 M.Tech in Mechanical Engineering with specialisation in Energy Systems; 10 M.Tech in Energy Engineering with specialisation in Materials; 09 M.Tech in Electrical Engineering with specialisation in VLSI; 10 M.Tech in Biotechnology; 54 M.Sc. including first batch of 17 M.Sc. Physics; 22 M.Sc. Chemistry; 15 M.Sc. Applied Mathematics; 130 B.Tech. including the first batch of 20 B.Tech. Civil Engineering; 59 B.Tech. in Computer Science and Engineering; 26 B.Tech. in Electrical Engineering; and 25 B.Tech. in Mechanical Engineering.

IIT Mandi is nestled in the Shivalik Range of the Himalayas, away from the bustle of the metropolis. It is situated about 18 km away from the historic town of Mandi, in Kamand and Salgi near the bank of the river Uhl. Since its inception in 2009, IIT Mandi has reached commendable heights. In this very short span of time, it now has a fully residential campus with world-class academic and research facilities.



CONVOCATION PROGRAM

05th October 2019, 2:00 PM

Academic Procession

National Anthem

Felicitations of Dignitaries on Dais

Declaration of Opening of the convocation by the Chairperson

Welcome speech and report by the Director IIT Mandi

Award of Degrees and Medals

Oath administration to graduands

Convocation address by the Chief Guest

Closing of convocation ceremony

National Anthem

Retreat of Academic Procession





VISION & MISSION OF IIT MANDI

VISION

To be a leader in science and technology education, knowledge creation and innovation, in an India marching towards a just, inclusive and sustainable society.

MISSION

- To create knowledge through team effort and individually for the benefit of society
- To impart education to produce professionals capable of leading efforts towards innovative products and processes for the development of the Himalayan region in particular and our country and humanity in general.
- To inculcate a spirit of entrepreneurship and to impart the ability to devise globally recognized solutions for the problems of society and industry, particularly in the fragile eco-system of the Himalayas.
- To train teachers capable of inspiring the next generation of engineers, scientists and researchers.
- To work intensely with industry in pursuit of the above goals of education and research, leading to the development of cutting edge and commercially-viable technologies.
- To operate in an ambience marked by overriding respect for ability and merit.





सत्यमेव जयते

भारत के उपराष्ट्रपति
VICE-PRESIDENT OF INDIA

MESSAGE

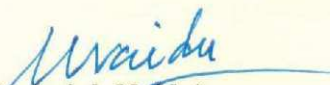
I am happy to know that the Indian Institute of Technology (IIT), Mandi, Himachal Pradesh, is organizing its Seventh Convocation on October 5, 2019.

It is impressive to note that this young Institute is progressing well and constantly justifying its motto "Scaling the Heights".

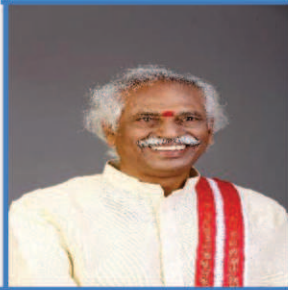
I applaud IIT, Mandi for continuously developing new academic programs with more number of students graduating every year.

I hope the Institute will continue to adhere to its strong commitment to academic excellence and will scale new heights in the years to come.

I congratulate the graduating students and extend my warm greetings to the students, teachers and the staff of the IIT, Mandi and wish the Convocation Ceremony all success.


(M. Venkaiah Naidu)

New Delhi
27th September, 2019.



Bandaru Dattatraya
Governor
Himachal Pradesh



बंडारू दत्तात्रेय
राज्यपाल
हिमाचल प्रदेश

Message

It gives me immense pleasure to know that IIT Mandi is organising its 7th Convocation ceremony on 5th October 2019. Since its inception, IIT Mandi has aimed to excel in the field of technical education and research. In these years, the Institute has grown into an institution of repute not only in India but all over the world. IIT alumni not only occupy prominent positions in India across academia, industry, and public service, but these graduates also serve leadership roles in international corporations that impact billions of people around the globe.

The people of India as well as Himachal Pradesh have high hopes from students graduating from IIT Mandi. On this joyous occasion, I wish the students a bright future ahead of them. It is expected that you will work for the betterment of the society, applying the knowledge and skills that you have acquired during your stay at the Institute.

I wish the Institute continues to evolve in prominence in India and in the world through the achievement of its students and the faculty members. I convey my heartfelt felicitation to the graduating students, their families, and the faculty and staff of IIT Mandi on this occasion. I wish the institute grows in repute every year and become a leading centre of technical education.

(Bandaru Dattatraya)

संजय धोत्रे
SANJAY DHOTRE



मानव संसाधन विकास,
संचार और इलेक्ट्रॉनिक्स और
सूचना प्रौद्योगिकी मंत्रालयों के राज्य मंत्री
भारत सरकार
MINISTER OF STATE IN THE
MINISTRIES OF HUMAN RESOURCE DEVELOPMENT,
COMMUNICATIONS AND ELECTRONICS &
INFORMATION TECHNOLOGY
GOVERNMENT OF INDIA

MESSAGE

27 SEP 2019

It gives me immense pleasure in congratulating the graduating batch from various disciplines on the occasion of 7th Convocation ceremony of Indian Institute of Technology Mandi. I also congratulate the Institute's faculty members who provided their guidance to these students and imparted education that is valuable for success, well-being and prosperity of India and its people. My heartfelt wishes to the Director and Chairman of IIT Mandi and their leadership in providing a congenial atmosphere for the growth of the Institute.

IITs harbour the best and talented youth of India and shape them professionally and ethically in different spheres of life. IITs have a legacy which is passed on to its students, and the nation looks forward at the graduating students as well as the incoming batches to maintain and take this legacy forward. Akin to other older IITs, IIT Mandi is growing fast and would continue its march in the direction of excellence in knowledge, teaching and research.

Once again, on the occasion of this auspicious Day, I wish the entire IIT Mandi family in their enduring pursuit of this noble goal.

(SANJAY DHOTRE)



JAI RAM THAKUR



**CHIEF MINISTER
HIMACHAL PRADESH
SHIMLA-171 002**

Message

It gives me immense pleasure to know that Indian Institute of Technology (IIT) Mandi is organizing its seventh convocation ceremony on 5th October, 2019 and a brochure is being brought out to mark the occasion.

IIT Mandi has emerged an excellent hub of science & technology by bringing out engineering professionals and also giving a chance to the youth of Himachal for pursuing their goals and paving their way for a bright career in several areas of engineering with their theoretical and experimental work. This institute has made significant progress in less than a decade, which is reflected by the vast growth of academic programs and higher number of graduating students.

I am sure that the excellence achieved by IIT Mandi in technical education and research will help Himachal Pradesh to grow and build its competence.

I congratulate all graduating students, staff and faculty members, and the Director of IIT Mandi and wish them all success and bright future.


(Jai Ram Thakur)



विक्रम सिंह



उद्योग, श्रम रोजगार एवं तकनीकी शिक्षा मन्त्री
हिमाचल प्रदेश
शिमला-171 002

MESSAGE

I am extremely happy to learn that Indian Institute of Technology Mandi is organising its 7th Convocation on 5th October, 2019. The opening of a valued Institute in the state of Himachal Pradesh has been highly appreciated and I am happy that IIT Mandi is fulfilling its mission, vision and shaping aspirations of the State and its people. Many of its socio-technological interventions through its research and practical oriented learning have helped people in the vicinity. The Interactive Socio-Technical Project, Major Technical Projects, and technology developments have helped the state administration in designing and implementing several policies. I look forward for more of such contributions from IIT Mandi. It is also a pleasure to learn that IIT Mandi during the past ten years has started several new programs of studies and many of the students from Himachal Pradesh have got benefitted from their association with IIT Mandi. I appreciate the initiatives of the Institute in organising several rounds of business incubation workshops and programs. It is a moment of joy and celebration that IIT Mandi is graduating more than 260 students from its various courses B. Tech., M.Sc., M. Tech. and Ph.D. scholars. As has been the tradition, I believe IIT Mandi will increase its intake and keep contributing in value education and technical knowledge.

I congratulate all students, parents and IIT Mandi staff and faculty members on this auspicious day. Once again, I wish the graduating students success and bright future.

(Bikram Singh)

Prof. Timothy A. Gonsalves,
Director,
Indian Institute of Technology,
Mandi, Kamand (H.P.)-175005

R. Subrahmanyam, IAS
Secretary



Ministry of Human Resource Development
Department of Higher Education
Government of India



MESSAGE

I am pleased to know that IIT Mandi is organizing its 7th Convocation ceremony on 5th October 2019. I take this opportunity to convey my felicitation to all the students, faculties and staff of the Institute whose untiring efforts have come to fruition today. Their hard work and dedication have made the Institute rise in prominence in both national and international circuits. After shifting to its permanent campus, IIT Mandi has developed into a sprawling campus. It is very heartening to see the Kamand campus of the Institute thrive with growing infrastructure, teachers, and student strength.

I am happy to know that, IIT Mandi is already running several B.Tech., M.Tech, and M.Sc. programs apart from the research program of M.S. and Ph.D. In addition, IIT Mandi has also started its M.A. programs on Development Studies. I am confident that the students graduating from various programs will excel in their respective fields and build the brand of the Institute in coming years.

I congratulate the graduating students for having successfully completing their studies here. I am confident that the fine ethos imparted by the Institute would have turned the graduating students into professionals capable of scaling the greatest heights. I wish the graduating batch the best for their future endeavours.

Registration

Subrahmanyam
24.09.19


R. SUBRAHMANYAM



BOARDS OF GOVERNORS

Chairperson (Nominee of the visitor)

Shri. Subodh Bhargava
Chairperson, BoG, IIT Mandi

Director (Ex-officio)

Prof. Timothy A Gonsalves
Director, IIT Mandi

Nominees of the State Government

Chief Secretary / Secretary (by designation)
Technical Education, Government of Himachal Pradesh, Shimla - 171002

Chief Secretary / Secretary (by designation)
Higher Education, Government of Jammu & Kashmir, Srinagar-190001

Nominees of the IIT Council

Dr. S. S. Sandhu
Additional Secretary (TE)/ Joint Secretary (ex-officio), MHRD

Shri Hemant Sood
Managing Director and Promotor (Financial Services Group)
Findoc Financial Services Group, Ludhiana

Shri Kishan Chandra Sharma Site Head and Senior Vice
President (Manufacturing) Lupin Pharma, Raisen (M.P.)

Shri Pradeep Kumar Agarwal
Scientist Research Centre
DRDO Hyderabad

Nominees of the Senate

Prof. S.C. Jain
Emeritus Professor
School of Engineering

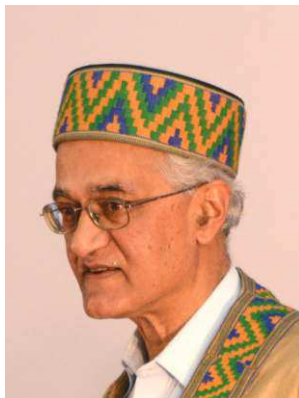
Dr. Subrata Ghosh
Associate Professor
School of Basic Sciences

Secretary

Shri K.K. Bajre
Registrar (Ex-Officio), IIT Mandi



DIRECTOR'S REPORT



PROFESSOR TIMOTHY A. GONSALVES
DIRECTOR, IIT MANDI

Shri Baba Kalyani, Chairman and Managing Director, Bharat Forge; Mr. Subodh Bhargava, Chairman of the Board of Governors; Members of the Board of Governors, IIT Mandi; Members of the Academic Senate; Faculty and Staff Members of the Institute; graduating students and their family members; and distinguished guests: I welcome you all on the occasion of the 7th Convocation of the Indian Institute of Technology Mandi. I offer my congratulations to all graduating students on successful completion of their degrees. I am sure this would be a memorable day for you and your families.

Today, we are delighted to have with us Shri Baba Kalyani as the Chief Guest of the 7th Convocation of IIT Mandi. Shri Baba Kalyani was conferred with the Padma Bhushan for his contributions in Trade and Industry and was made Commander First Class of the Royal Order of the Polar Star by the Swedish government in recognition of his contribution in furthering trade and business cooperation between Sweden and India. Other awards include Global Economy Prize, 2009 for Business by Kiel Institute; German Businessman of the Year, 2006 by Business India Magazine; Entrepreneur of the Year 2005 for Manufacturing by Ernst & Young; and CEO of the Year 2004 by the Business Standard group. In June 2018, the Government of India constituted a task force under the chairmanship of Baba Kalyani to study policies related to special economic zone (SEZ). It is an honour for us to have him visit our campus for this august occasion.

GRADUATING STUDENTS

On the occasion of 7th Convocation ceremony, 5th October 2019, IIT Mandi is graduating **276** students; B.Tech. **(130)** including the first batch of B.Tech. Civil Engineering **(20)**, B.Tech. in Computer Science and Engineering **(59)**, B.Tech. in Electrical Engineering **(26)**; and B.Tech. in Mechanical Engineering **(25)**; M.Tech. **(60)** including first batches of M.Tech. in Power Electronics and Drives **(09)** and M.Tech. in Communications and Signal Processing **(13)**, M.Tech. in Mechanical Engineering with specialisation in Energy Systems **(09)**, M.Tech. in Energy Engineering with specialisation in Materials **(10)**; M.Tech. in Electrical Engineering with specialisation in VLSI **(09)**, M.Tech. in Biotechnology **(10)**; M.Sc.**(54)** including first batch of M.Sc. Physics **(17)**, M.Sc. Chemistry **(22)**; M.Sc. Applied Mathematics **(15)**. Of the **32** research scholars, **(10)** are being awarded M.S. (by Research) degrees and **(22)** are being awarded Ph.D degrees.

The 7th Convocation is also an important day as we have crossed another milestone and total degrees awarded since its 1st Convocation is **1135** which includes **89** Ph.D. scholars; **50** M.S. (by Research); **87** M.Tech.; **121** M.Sc. and **788** B.Tech.

GRADUATING RESEARCH SCHOLARS

This year IIT Mandi is graduating **22 Ph.D.** and **10 M.S. (by Research)**. Following are the candidates that also details their thesis work:

1. **Anna Varughese (D10002)**

Guide: Dr. Prashanth Jose

Thesis title: *A Molecular Dynamics Study of Glass Transition under Phase Separation in Pure and Glass Forming Binary Lennard-Jones Liquid*

This thesis provides new insights on the nature of glass transition in phase separated models' systems suggesting local density as new order parameter to describe glass transition.

2. **Jitendra Kumar Verma (D10017)**

Guide: Dr. Pradyumna Kumar Pathak

Thesis Title: *Resonant Nonlinear Interaction of Light in Photonic Crystal Cavity-Quantum Dot Systems*

This thesis is theoretical study about multi-photon processes in quantum dots interacting in photonic crystal cavity.

3. **Anand Kumar (D11042)**

Guide: Dr. Manoj Thakur

Thesis Title: *A New ACO Framework for Optimization with Application in Power System*

Problems

This thesis developed and implemented novel optimization techniques for solving complex problems related to power systems such as Economic Load Dispatch, Power System Protection, and Model Order Reduction.

4. **Amit Kumar (D12080)**

Guide: Dr. Vishal S Chauhan: Co-guide: Dr. Rajeev Kumar

Thesis Title: *Study of Electromagnetic Radiation from Cement and Cement Based Composites Under Impact Loading*

This thesis presents a theoretical model for radiation from hydrated cement paste under impact.

5. **Somnath Acharya (D13005)**

Guide: Dr. Ajay Soni

Thesis Title: *Investigation of Physical Properties of Bulk Metal Chalcogenide Materials for Thermoelectric Applications*

This thesis studies crystalline chalcogenides for harvesting electricity from waste heat and understood the insightful mechanism for thermoelectric application.

6. **Ashish Bahuguna (D13007)**

Guide: Dr. Venkata Krishnan

Thesis Title: *Carbon Support Based Heterogeneous Catalysts for Sustainable Synthesis of Indole Alkaloids and Chromenes*

This thesis designs, develops and utilises a range of carbon support-based nanocomposites for the synthesis of several indole alkaloids and chromenes.

7. **Mohit Kumar Sharma (D13013)**

Guide: Dr. Kaustav Mukherjee

Thesis Title: *Investigation of Physical Properties of Rare Earth and Transition Metal Based Oxides and Intermetallics Showing Significant Magnetocaloric Effect*

This thesis has investigated the exotic magnetic phases exhibited by the compounds which showed significant magnetocaloric effect.

8. **Ashwani Kumar (D13017)**

Guide: Dr. Pradeep C Parameswaran

Thesis Title: *Aromatic Sulfonium Polyoxometalates as Photochromic Materials and Self-separating Catalysts*

This research work developed a new class of photochromic material and self-separating

catalysts with tunable properties.

9. Mandeep Kumar (D13019)

Guide: Dr. C.S.Yadav

Thesis Title: *Study of Electronic Transport Properties of Transition Metal Tellurides: Cu_xPdTe_2 ($x=0,0.04$), $ZrTe_3$ and $ZrTe_5$*

The thesis unravels exotic electronic properties of transition metal tellurides of contemporary interest.

10. Preeti Gulia (D15006)

Guide: Dr. Arpan Gupta

Thesis Title: *Experimental and Numerical Investigation of Sonic Crystal and Acoustic Panel*

This thesis studies sonic Crystal along with Acoustic Panels to address the problem of noise pollution, especially when it pertains to a specific frequency.

11. Mahesh Soni (D13023)

Guide: Dr. Satinder K Sharma; Co-guide: Dr. Ajay Soni

Thesis Title: *Graphene and Derivatives Based Scaled Electronic and Memory Devices for Next Generation Technology*

This thesis unravels the fabrication and characterization of flexible electronic and non-volatile flash memory devices, utilizing graphene and derivatives.

12. Mohammad Saquib (D14008)

Guide: Dr. Aditi Halder

Thesis Title: *Rational Design of Carbon Supported Noble Metal Based Electrocatalysts for Renewable Energy Applications*

This thesis investigates rational design of carbon supported noble metal based electrocatalysts for renewable energy applications.

13. Suneel Kumar (D14013)

Guide: Dr. Venkata Krishnan

Thesis Title: *Zinc Oxide Supported on Two Dimensional Materials as Heterogeneous Photocatalysts for Energy Conversion and Environmental Remediation Applications*

This thesis utilizes ZnO based nanomaterials as wide spectrum photocatalysts for energy conversion and environmental applications.

14. Davinder Singh (D14014)

Guide: Dr. Viswanath Balakrishnan

Thesis Title: *Vapour Phase Growth and Nanomechanical Behaviour of VO_2 Microcrystals*

Across Phase Transition

This thesis investigates vapour phase growth, nanomechanical behavior and actuation of VO₂ microcrystals.

15. Palvi Aggarwal (D14028)

Guide: Dr. Varun Dutt

Thesis Title: *A Behavioral Game-Theoretic Analysis of Cyber- Security Scenarios Involving Deception and Intrusion Detection Systems*

This thesis understands decisions of people performing as hackers and analysts in cyber-security games using both lab-based experiments and computational cognitive models.

16. Atendra Kumar (D14033)

Guide: Dr. Rajendra K Ray

Thesis Title: *Unsteady Flow Separation from the Surface of Solid Cylinders in Laminar Shear Flow: A Structural Bifurcation Analysis*

This thesis understands unsteady flow separation from cylinders surface in shear flows using theoretical structural bifurcation analysis.

17. Anuruddh Kumar (D14032)

Guide: Dr. Rajeev Kumar; Co-guide: Prof. S.C. Jain

Thesis Title: *Performance Enhancement of Piezoelectric Energy Harvesting*

This thesis provides a synthesis of different strategies to enhance the power output for piezoelectric energy harvesting.

18. Supriya Ghosh (D15034)

Guide: Dr. Suman K Pal

Thesis Title: *Photoinduced Processes in Organo Lead Halide Perovskite Bulk Crystals, Nanocrystals and Thin Films*

This thesis describes the interrelation between electronic structure and carrier dynamics, carrier transport, and other photophysical processes.

19. Thirumurugan C (D11045)

Guide: Dr. Ganesh Kumbhar (IIT Roorkee); Co-guide: Prof. Ramesh Oruganti

Thesis Title: *Experimental Investigations of Surface Discharge Phenomena at Solid-Liquid Interface of Power Transformer Insulation System*

This thesis studies the surface Partial Discharge (PD) patterns in various combinations of oil-Pressboard insulation materials.

20. Shivendra Sangar (D13012)

Guide: Dr. Ramna Thakur; Co-guide: Dr. Varun Dutt

Thesis Title: *Economic burden, impoverishment and coping measures related to out-of-pocket health expenditure in India: A disaggregated analysis*

This thesis investigates issues pertaining to out-of-pocket (OOP) health expenditure and its implication on households in India.

21. Khyati (D15016)

Guide: Dr. Prosenjit Mondal

Thesis Title: *Design, Synthesis and biological evaluation of small molecule agonist of the Glucagon-Like Peptide-1 receptor (GLP-1R) as an anti-diabetic agent*

This thesis designs, synthesis biological evaluation of small molecule agonist of the Glucagon-Like Peptide-1 Receptor (GLP-1R) as an anti-diabetic agent.

22. Vikas Sharma (D12090)

Guide: Dr. Tulika Srivastava

Thesis Title: *Comparative Genomics Analyses of Selected Microbes with Open Pan-genomes Highlight Their Evolutionary Dynamics at Functional Level*

This thesis aims at determining the pan-genome and exploring the phylogeny and functional evolution of the microbial taxonomic groups and their isolates using *in silico* approaches.

M. S. (BY RESEARCH)

Following are the 10 candidates who are graduating with M.S. (by Research)

1. Sharey Deep Guleria (S16003)

Guide: Dr. Atul Dhar; Co-guide: Dr. Dhiraj V Patil

Thesis Title: *Visualization-Based Fluid Dynamics Experiments on Fluid-Particle Interactions*

This thesis is an attempt to develop a new strategy and compound as a GLP-1 R agonist for the treatment of metabolic diseases like diabetes, fatty liver, and obesity.

2. Abhay (S15004)

Guide: Dr. Deepak Swami; Co-guide: Dr. Dericks P Shukla

Thesis Title: *Solute Transport Modelling through Saturated Porous Media with Time-Dependent Dispersion*

This thesis provides numerical solution to mobile and immobile model with time dependent dispersion coupled with parameter estimation algorithm to predict and simulate solute transport through heterogeneous porous medium.

3. **Ankur Kaundal (S15008)**

Guide: Dr. Satvasheel Powar; Co-guide: Dr. Atul Dhar

Thesis Title: *Improvement in Thermal Efficiency and Emission Control of Domestic Cook Stoves*

This thesis presents efficient and clean cooking solutions for the Bottom-of-Pyramid through its advanced cook stoves.

4. **Abhilash Awasthi (S15013)**

Guide: Dr. Rajneesh Sharma; Co-guide: Dr. Rajesh Ghosh

Thesis Title: *Mechanical Characterization of Mineralized Collagen Fibril using Multiscale Asymptotic Homogenization*

This thesis has studied the influence of the nano-scale characteristics of the collagen fibril on the micro-scale mechanical properties of mineralized collagen fibril using multi-scale asymptotic homogenization approach.

5. **Gaurav Sharma (S15001)**

Guide: Prof. Ramesh Oruganti; Co-guide: Dr. Bhakti Joshi

Thesis Title: *Studies on HERIC (Highly Efficient Reliable Inverter Concept) Photovoltaic Inverter*

This work deals with improving the performance of a popular solar photo-voltaic inverter known as HERIC converter.

6. **Gaurav Sharma (S16006)**

Guide: Dr. Arpan Gupta; Co-guide: Dr. Aniruddha Chakraborty

Thesis Title: *Analytical Solution and Experiments in Wave Propagation Problems*

The thesis developed an analytical solution to wave propagation which is validated using other computational methods including experiments on impedance tube to evaluate acoustic material properties of test samples.

7. **Sivarathri Ashok Kumar (S16010)**

Guide: Dr. Vishal Singh Chauhan; Co-guide: Dr. Rajeev Kumar

Thesis Title: *Piezoelectricity Induced Electromagnetic Radiation: Probable Phenomenon for Wireless Sensing*

This thesis studies near field electromagnetic radiation from the dynamic deformation of the piezoelectric bulk samples.

8. **Ragini Sinha (S16013)**

Guide: Dr. Padmanabhan Rajan

Thesis Title: *Signal Enhancement and Source Characterization for Processing Birdcalls*

This thesis investigates approaches to process bird calls from audio recordings. It proposed methods to denoise birdcalls and also to determine if the recording had one bird calling or had multiple birds calling.

9. **Raj Kiran (S17011)**

Guide: Dr. Rahul Vaish

Thesis Title: *Poling Tuning: A plausible solution to enhance the performance of piezoelectric materials*

This thesis has reported a novel technique for improving piezoelectric materials performance

10. **Bindu (S16008)**

Guide: Dr. Tushar Jain

Thesis Title: *Actuator and Sensor Fault Diagnosis for Wind Energy Conversion Systems*

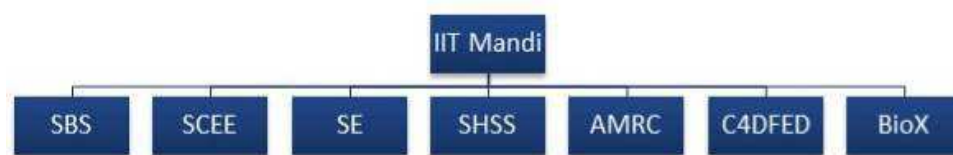
This thesis develops a novel spectral analysis-based fault diagnosis method for a 3-phase uncontrolled bridge rectifier

SCALING THE HEIGHTS – ACADEMIC USPs

The Institute has the vision: “To be a leader in science and technology education, knowledge creation and innovation, in India marching towards a just, inclusive and sustainable society”. IIT Mandi's strategy towards excellence and high impact locally and globally has been to work on major challenges of the Himalayan region and of India. Over the past 10 years, IIT Mandi has grown at all fronts, setting and crossing milestones set for each year, and further setting new goals and standards. We are proud to announce that we are moving consistently and incessantly ‘Scaling the Heights’ in all the fields of responsibilities and engagements.

IIT Mandi nurtures inter-disciplinary research environment that develops innovative technologies for widespread use. Obviously, this requires convergences between Science, Engineering and Social Sciences faculty. Driven by the needs of the region and the nation, the thrust areas have been identified and organised in four schools and multiple research centres.

1.1 Schools and Thrust-area Research Centres



The Centres are characterised by:

1. Specific goals based on regional or national needs and the achievement of the same in time-bound manner.
2. At least 10 faculties from diverse disciplines each having major research involvement is the goal of the School/Centre.
3. To assist it, the Institute contributes generously towards capacity building.

1.2 Centres

AMRC: The Advanced Materials Research Centre (AMRC) provides state-of-the-art instrumentation and ancillary equipment, and expertise with applications for materials research. All the instruments in Advanced Material Research Center are broadly divided into two categories: General Characterization Instruments and Sophisticated Instruments.

BioX: The vision of the BioX centre is to advance the frontiers of technology development and engineering towards applications in disease prevention and affordable healthcare, agricultural

practices with respect to the Himalayan region, Himalayan biodiversity, and exploration in biotechnology. The aim, consistent with the IIT Mandi motto of interdisciplinary R&D, is to bridge the gap between life sciences and engineering.

C4DFED: The Center for Design and Fabrication of Electronic Devices is a centralized state-of-the-art infrastructure facility for next generation integrated circuits (ICs)/electronic device design and fabrication and also futuristic materials research for semiconductor industries. It also aims to develop and sustain educational resources and skilled workforce for semiconductor industries through team efforts, and fosters collaboration with industries, and facilitates transfer of new technologies into products for commercial and public benefits. This is within the ambit of the Make in India Advanced Manufacturing National and State policies.

Other Centres are in the formative stages and may emerge in the next 1-3 years to focus on Energy, Machine-learning for various applications, and high-performance computing for scientific and engineering applications.

1. 3 Interdisciplinary and Project-Based Learning

In current times, when the technologies are changing so fast, we cannot limit our focus only to research. In this context, we translate interdisciplinary research into teaching, and enable students to appreciate and develop abilities beyond the horizons of specific field of study.

The B. Tech. programs have been designed from scratch considering current and future changes in society and the nature of technological requirements. Our B. Tech. program gives students a broad base, the ability to tackle real-world problems, to work in teams across disciplines and to deliver value to society. Our emphasis is also on **Project-based learning** which pervades curriculum from 1st year to 4th year.

The **Foundations** for all B.Tech. students includes a unique design and innovation sequence: *Reverse Engineering* in 1st year; *Design Practicum* in 2nd year; *Interactive Socio-Technical Practicum* in 3rd year; and *Major Technical Project* in 4th year. This imparts a good understanding of common scientific and engineering principles and methods; strong foundations in the range of engineering knowledge; and breadth of knowledge in the humanities, social sciences and management.

Deep **specialisation** is reserved for the Master's and Ph.D. level. The Master's programs also follow the project-based learning approach of the B. Tech., albeit to a lesser extent.

Further, to instill imaginative powers in engineering, communicative skills along with ethical and moral values of academics is imparted to students through intensive 5-Week Induction Program.

The data science courses in our curriculum stress on cutting-edge Python-based machine-learning for all the B.Tech. students, irrespective of their branch. The core of knowledge in the student's chosen branch is kept to the essential such that it gives freedom to explore students' interests through electives.

1. 4 A 10-year Journey

Our major activity is to contribute towards knowledge creation, knowledge dissemination and preparing graduates who contribute towards our larger goal of academics with ethics and values. As we all know, IITs are among the best institutes of technology, known globally for its graduates. IIT Mandi is now fulfilling the desires and expectations enshrined by the people, government and parents.

The **teaching** for the first batch of B. Tech. students started off at IIT Roorkee, the mentoring institute, in July 2009. From August 2010, IIT Mandi started 3 B. Tech. Programs (Computer Science and Engineering; Electrical Engineering and Mechanical Engineering) and operated from a transit campus in Mandi with 25 young faculty, 215 B.Tech. students and 25 Ph.D. and M.S. scholars. Since then, the Institute has grown by leaps and bounds, currently 125 faculty, around 275 non-teaching staff; and over 1600 students are enrolled in various programs of studies in undergraduate, postgraduate and research programmes.

The first batch **graduated** from the permanent campus in Kamand in 2013 when we awarded degrees to 94 B.Tech., 2 M.S. (by Research) and one Ph.D. scholar. In 2015, all academic activities had shifted to our permanent campus at Kamand in its vibrant fully-residential campus. Currently, IIT Mandi offers 7 B. Tech. programs; 7 M. Tech. programs; 3 M.Sc. programs; one M. A. program and one Integrated-Ph.D. program in addition to M. S. (Research) and Ph.D. programs in all disciplines. From August 2019, IIT Mandi started **3 new and unique B. Tech. programs in Data Science and Engineering; Engineering Physics; and Dual Degree in Bioengineering.**

On the **research** front, my young faculty colleagues, published 31 research papers and brought 4 research projects worth Rs. 65 lakhs in the year 2011. The collective strength has gone phenomenally up now with currently 225 projects worth more than Rs. 110 crores. In the academic year 2018-2019, we received 45 projects of value more than Rs. 15.5 crores. IIT Mandi received \$315,000 funding from Intel, USA, in 2012 for VLSI resist materials: state-of-the-art in 2012 was 22 nm; IIT Mandi achieved 20 nm in 2014, 10 nm in 2018; indigenised 11 out of 34 chemicals used in SCL Mohali's lab. **Publication** of research is the most important work for knowledge creation and dissemination. Our faculty during the past 10 years have published over 1400 research publication including several books published by internationally recognised publishers. In terms of per faculty publication, IIT

Mandi ranks higher compared to many other IITs. *Scopus Index* 2018: IIT Mandi ranked 6th among all IITs.

1.5 Major Achievements during 2018-19

During the last year, our faculty and students added more feathers in our cap. Few achievements are:

- Dr. Shubhajit Roy Chowdhury has been appointment as Associate Editor of the IEEE *Journal of Translational Engineering in Health and Medicine*.
- Dr. Varun Dutt has been appointed as Associate Editor of the journal *Frontiers in Cognitive Science*.
- Dr. Anil Sao and Dr. Arnav Bhavsar have developed Artificial Intelligence-powered point-of-care device to screen for cervical cancer by analyzing microscopy images with high accuracy. This project has been taken up in collaboration with Aindra Systems Pvt. Ltd., Bengaluru and the device prototypes are currently undergoing clinical testing.
- Dr. Sumit Sinha Ray was awarded the Best Presentation Award (2019) at 3rd Young Researchers' Symposium, held at IIT Delhi in May 2019.
- Dr. Bharat Singh Rajpurohit and Prof. Ravindra Arora published a textbook entitled *Fundamentals of High Voltage Engineering*, Wiley India.
- Dr. Rajeshwari Dutt published a book entitled *Maya Caciques in Early National Yucatan*, University of Oklahoma Press.
- Dr. Devika Sethi published a book entitled *War over Words: Censorship in India, 1930-0*, Cambridge University Press.
- Dr. Chayan Kanti Nandi was Chemical Research Society of India Bronze Medal 2019.
- Mr. Navneet Verma and Mr. Aditya Yadav, PhD students in SBS, received the best poster award at CRSI (Chemical Research Society of India) conference, IIT Kanpur.
- Dr. Shyamasree Dasgupta, in collaboration with IIT Guwahati and IISc, developed the first common methodological framework for vulnerability assessment. The team trains in disaster management officials in use of this framework for vulnerability assessment of all districts of the 12 Himalayan States of India.
- Ms. Supriya Ghosh, finished her PhD with Dr. Suman Kalyan Pal, received Humboldt research fellowship for postdoctoral research.
- Mr. Ankur Kumar, a Ph.D. student working with Dr. Rajanish Giri, is awarded with Fulbright

Doctoral Fellowship 2019-20.

- Mr. Navneet Kumar, a Ph.D. student working with Dr. Rajanish Giri, was awarded with Newton-Bhabha Fellowship to visit University of Leeds.
- IIT Mandi continued at the forefront of all IITs by admitting 20.1% females to the B.Tech. 2019 class.
- Mr. Nitesh Kumar won Silver Medal in BWF World Para Badminton Championship held in Basel, Switzerland, in August 2019.

1.6 New Conference Centres

IIT Mandi has created spaces for the organisation of conferences and workshops around the Village Square area of the Campus. The large auditorium can accommodate 800 people. C.V. Raman Guest House, located in the North Campus, has 88 rooms which accommodates participants attending the conferences and workshops. Similarly, 4 new conference rooms and 3 existing conference rooms are available for organising conferences and workshops. Utilising these spaces, the faculty members organised a number of conferences and workshops inviting national and international researchers and professionals to disseminate the best practices in various focus areas of IIT Mandi. Just before the last Convocation, IIT Mandi organised 3rd Himachal Pradesh Science Congress and we took off from there and organised following workshops and conferences:

1. Winter School on Cognitive Modelling, from 4-10 February 2019.
2. Workshop on Water Filtration Techniques Based on Solar Energy under National Mission for Himalayan Studies, between 11-13 February 2019.
3. International Workshop on Climate Change and Extreme Events in the Himalayan Region between 18-20 April 2019
4. International Conference on Differential Equations and Control Problems: Modelling, Analysis and Computations (ICDECP19) during 17-19 June, 2019
5. Short term course on Finite Element Method for Engineers and Researchers from 24-28 June 2019
6. Workshop on Applied Deep Learning was organised by the MANAS group, SCEE, IIT Mandi and BITS Pilani, during July 1-5, 2019.
7. Workshop on 'Learning and Control' from 22-26 July 2019 in collaboration with Control Society.

8. Workshop on *Hydrus* from 9-11 September 2019.
9. Workshop on Landslide Mitigation and Training on DPR Preparation funded by National Disaster Management Authority between 23-27 September 2019.

In the coming months, following conferences and workshops are scheduled:

10. National Workshop On Writing Reproducible Workflows for Computational Material Sciences using AiiDA between 9 - 11 October, 2019.
11. 4th International and 19th National Conference on Machines and Mechanisms between 5 - 7 December 2019.
12. 17th Annual Conference on the Indian Association for Social Sciences and Health between 8-10 December 2019.

1.7 Career and Placement

The Career and Placement Cell took significant initiatives to conduct several career sessions throughout the year to make students aware of the many options open to them. These included sessions by inspiring academicians, motivation towards startups by successful entrepreneurs, information about various competitive exams by coaching institutes, interactive session with Alumni, and corporate pre-placement talks. In the 2018-19 placement seasons, 82% of registered students got placed, and 45 companies took part in our campus placement drive. Branch-wise placement ratios for B.Tech students were 93% in CS, 61% in ME, 63% in EE and **83% students of the 1st Batch of B.Tech. Civil Engineering are placed.** Beyond B.Tech. students, the majority of the graduate students got job in good companies and in their core areas. Some of the students decided to go for higher education in institutes like KTH Royal Institute of Technology, Sweden; Aalto University, Finland; University of Basel, Switzerland; University of Pennsylvania, USA; Indian Institute of Science, Bangalore; Raman Research Institute, Bangalore; Indian Institute of Technology Madras, India; Indian Institute of Technology Bombay, India etc. The remaining students have received either employment from off-campus placement or are self-employed, and also preparing for Civil Services and other competitive examinations.

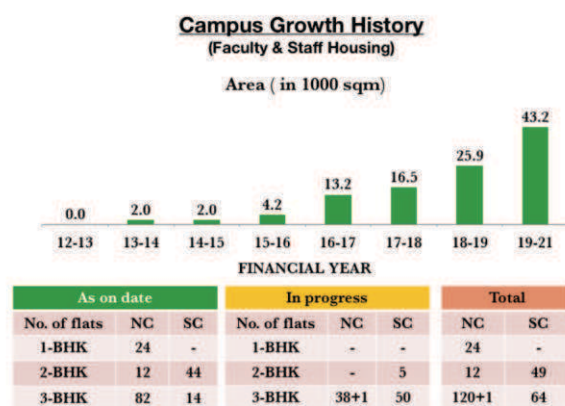
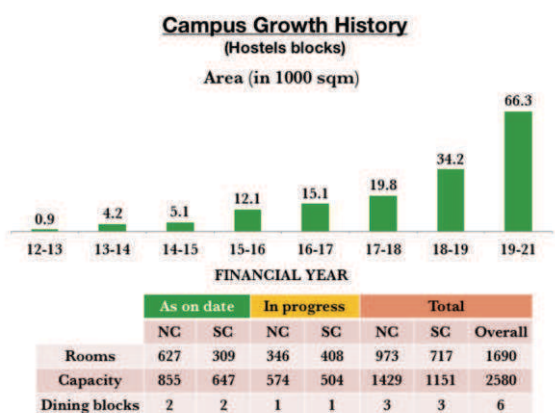
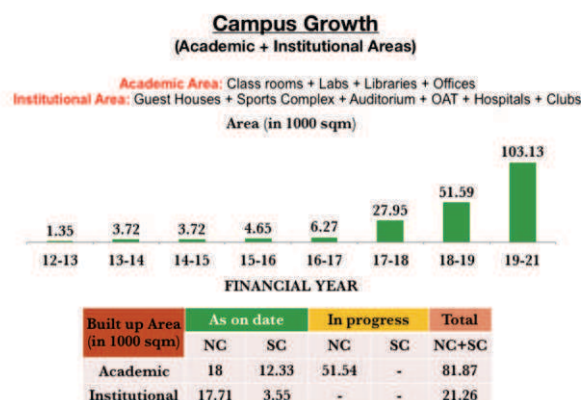
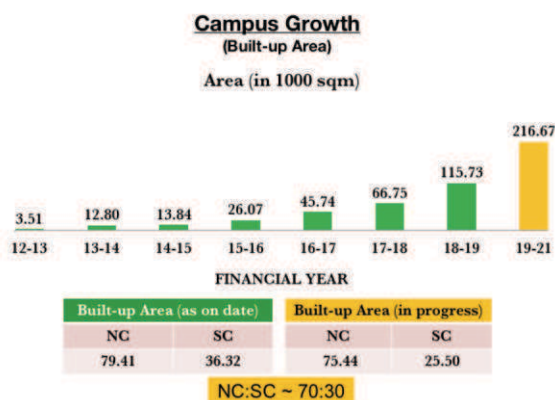
2. Green Campus with World-class Infrastructure Amenities

One of the visions of IIT Mandi is to build infrastructure that houses all the requirements and grow as a green campus without disturbing the nature and greenery around. As you may be aware, IIT Mandi has grown from a greenfield to what you could see around in this remote valley. The foundation stone of the Institute was laid on 24th February 2009 which has now been developed as an eco-friendly and sustainable infrastructure campus. Spread over 538 acres of which about 200 acres is flat land, the

permanent campus of the Institute started functioning since the beginning and has grown step-by-step during the last 10 years. This has really been an impressive journey though filled with challenges. Now, IIT Mandi in this serene and remote location is home to a buzzing community of students, academicians and staffs.

The **South Campus** is now fully developed and over 41,000 sq. mt. area stands constructed which has 58 faculty residential units with 2 and 3 bedroom apartments. The South Campus accommodates over 650 students in 3 boys hostels and 1 girls hostel. These students use dinning facility at 2 Dinning Mess. By 2020, 2 more hostels with the capacity for 500 students will be completed along with 1 Dining block and 20 units of 3-BHK flats.

During the past 5 years, the **North Campus** has grown quickly with about 84,000 sq. mt. area stands constructed. The 10 academic buildings that houses faculty offices, labs, and classrooms is constructed over 31000 sq. mt. For student residence, the North Campus has 3 boys hostel, 1 girls hostel, 45 apartments for married students. Presently in North Campus about 916 Students, 102 Faculty/Staff are residing.



IIT Mandi has almost all types of facilities available. It has 88 Rooms Guest House, 800-seater Auditorium, Mind-tree school, Sport Complex & Hospital are functional. Outdoor sports facilities having football ground, cricket ground, hockey field, tennis court, basketball court and volleyball court are currently being used.

2.1 Library

IIT Mandi has distributed facility with library buildings in the South Campus and the North Campus. The library now houses a rich collection of books and journals both in soft and print forms. Library operations are automated using RFID, KOHA LMS and digitized with DSpace OSS. The Library currently houses around 20 thousand print books; around 20 thousand e-books and provides access to more than 12 thousand e-journals and has also subscribed to e-books from several reputed publishers, such as AIAA, ASM, ASME, Cambridge University Press, Elsevier, IEEE, ICE, Pearson, SIAM, IOP, Taylor & Francis, World scientific, Tata McGraw Hill, Proquest and Wiley. It also has the access to Ebrary - ebooks database, Archive and Standards. The Library also has a very good collection of audio-video materials.

3. Sponsored Research and Industrial Consultancy

The faculty reaches out to various government departments and industrial houses and links them with the state-of-the-art researches that are beneficial for further improvements and upgradations of existing knowledge and technologies in various fields. As stated before the focus of the institute is to contribute towards new knowledge in various fields such as energy, communication, information technologies, agriculture, road and transportation, disaster management, water resources, sewage systems, environment that also helps in achieving sustainability, inclusive growth and creates livelihood for the people especially suitable for the Himalayan region.

Many of our research outputs have been translated into policy frameworks by the government e.g. a team at IIT Mandi studied issue of forest fire which was disseminated to the HP Forest Department which is now used for not only controlling forest fire but also helps entrepreneurs learn new techniques to generate livelihood. In 2018, Prof K. Vijay Raghavan, Secretary Department of Biotechnology, initiated an ambitious national project, FarmerZone. The goal of this project is to create a public repository of agricultural data and foster the use of this data to provide AI-based advisories to help small and medium farmers to make crop management decisions. This project has the potential to make farming a remunerative occupation for millions of farmers. IIT Mandi was selected by DBT to lead this project that includes a number of national and international partners.

4. Academic Outreach Programs and International Collaborations

IIT Mandi is part of an international academic community, and working towards increasing both the scope as well as depth of its international collaborations. As mentioned earlier, international students are pursuing graduate full-time degree programs at IIT Mandi. Bachelor's, Master's and Ph.D. students affiliated to institutes in other countries also spend up to a year at IIT Mandi under existing student exchange programmes with academic credit transfer.

During the past year, IIT Mandi hosted many international students for visits and for semester-exchange. In addition to 25 undergraduate students from WPI, USA, who stayed on campus for seven weeks to work on joint Interactive Socio-Technical Projects with 3rd year B.Tech. students; Four students joined IIT Mandi in February 2019 for full Masters and Ph. D Programs; 8 Students joined IIT Mandi for full time Ph.D. and Masters programs from Nepal and Bangladesh during last one year. IIT Mandi faculty delegation visited Bhutan and Kenya for attracting bright students at the graduate level. A total of 41 students applied for the M. Tech., M. S., and Ph.D. admissions at IIT Mandi in 2019. After interviewing candidates, IIT Mandi made 12 offers of admissions to students from Bangladesh, Nepal, Bhutan and Kenya.

In the last year, several IIT Mandi students visited different university partners abroad for semester-exchange. These include 4 students who visited TU Munich, Germany, and 1 student visited RWTH Aachen, Germany.

A large number of IIT Mandi faculty also visited institutions in UK, US, Australia, South Asia, Japan, Africa, Germany, Singapore, Russia, Italy, Switzerland, UAE, Bangkok, Belgium, Mozambique, Sweden, Shenzhen, Poland, Spain, France, Bhutan, Kenya, Ireland, China, Greece and Jerusalem in 2018-19 for attending conferences and for industry and academic collaborations. IIT Mandi faculty members also visited TU9 institutions in Germany in 2018 and 2019.

Besides the international students, more than 40 international faculty members visited IIT Mandi for teaching, research, and for presenting their research at different workshops and conference events held at IIT Mandi campus. There were several meetings and events held at IIT Mandi campus involving visitors from universities abroad. The Interactive Socio-Technical Practicum course (ISTP) 2018 had 10 projects involving 38 IIT Mandi students, 22 WPI (Worcester Polytechnic Institute, USA) students, 2 WPI faculty mentors and 16 IIT Mandi faculty mentors. The winning project titled 'Developing Drowsy Driving Mitigation Strategies in Himachal Pradesh' created prototypes including a portable and comfortable seat cover, a facial recognition device to detect drowsiness, a blue-light system to inhibit melatonin production in drivers, and two taffy favors to keep drivers awake. The team's recommendations included suggestions for policy to prevent the overworking of drivers.

5. Incubation and Entrepreneurial Development

In May 2016, IIT Mandi began its Technology Business incubation centre named **IIT Mandi Catalyst** which is the leading incubator in the state, and among more active incubation centres in India. There is a significant and increasing contribution of faculty and a motivated execution team which helped Catalyst raise total fund of INR 19.37 Cr from various sources. The Catalyst organises mentoring sessions through speakers, mentors, investors and hosted about 60 sessions for 4 batches of startups involving over 30 startups. Of these, 32 have been organised in calendar year 2019 along with 2 major events viz. Himalayan Innovation Challenge in May 2019 and Himalayan Startup Trek in Sep 2019. From this month, and more precisely from 7th October 2019, Catalyst will host the fifth batch of startups that will have over 20 startups making it the largest batch so far. Employment for over 60 individuals has been created and over 10 national and international awards have been won by these startup teams. 3 startup teams supported by Catalyst have been able to raise further funding totalling up to INR 4 Cr.

In yet another outreach program, **EWOK: Enabling Women of Kamand**, the business incubator for rural women develops links with the women around the villages, hone their skills, add new technical and business acumen and help them start skill-based businesses. As a responsibility towards the society, our students, staffs and faculties organise classes for children of migrant labourers, prepare and help them get admitted in formal schools.

6. Life at IIT Mandi

Often it is thought outside the IIT campuses that our students are only engaged in academics. However, I would like to draw attention towards multiple talents that our students possess. IIT Mandi has a full-fledged Student Gymkhana composed of various societies and clubs ranging from academic, technical, cultural and sports. More importantly, these clubs induct freshers, maintain the club activities through the guidance of faculty members, organise festivals involving teams from other colleges and institutes, organise various types of competitions within the Institute, and participate in other inter-college festivals and competitions.

A few of the major achievements of IIT Mandi in its journey towards *Scaling the Heights* are listed here.

- Mr. Nitesh Kumar, B. Tech. (EE) student of IIT Mandi won Bronze medals in 2nd National Para Badminton Championship 2018.
- Mr. Pradeep Seervi, B. Tech. (EE): 1rank in GATE(EE), 2015.
- Mr. Aathar Aamir Khan, B. Tech. (CSE): 2 rank in Civil Services, 2015.

- IIT Mandi hosted the 4th Inter-IIT Technical meet in January 2016.

The Space Technology and Astronomy Cell of IIT Mandi organised a two day, inter - college Astro-meet event, **AstraX'19**, which featured a panel of national and international speakers, on 30th and 31st March 2019.

Rann Neeti, the annual inter-collegiate sporting event organised by the students of IIT Mandi, saw its 6th edition last weekend (28-29 Sept 2019) where around 1000 students from around 100 colleges came to participate in various sporting events. Similarly, our students participate in Inter-IIT Sporting meet every year.

Exodia, the annual inter-collegiate technical and cultural festival, was organised in its 8th edition on 12-14 April 2019. It is one of the biggest and the most magnificent technical and cultural fest of the Himalayas.

These events, completely organised and managed by our students, display the abilities of students who live a life larger than the life itself.

Towards the end, I am happy to say that we are living and working beyond the expectations and responsibilities thrust on IIT Mandi. We are moving in a direction that would further contribute towards the inclusive and sustainable development. In this report, I have focused on our achievements in the recent past and I do hope this will inspire all of you to set the bar even higher next year. This occasion- the Convocation, is a perfect time to celebrate our achievements. I must thank Shri. Baba Kalyani for visiting and honouring us with his gracious presence on this occasion. I hope we would receive further guidance and support from Shri Subodh Bhargava in achieving our goals. On this solemn occasion, I congratulate all the graduating students and would urge them to carry the legacy of academic, ethical and moral values and contribute towards the larger goals that we have instilled in you.



SCHOOLS

Currently, IIT Mandi has four schools. The institute encourages multi- and inter-disciplinary research for a balanced growth of its students and scholars. Hence, the labs and other resources of the schools are mixed and shared with each other. Subject specialist faculties are proactively dedicated to improve the schools continuously. IIT Mandi has national and international linkages and practices collaborations with leading and developing institutes and industries.

School of Computing and Electrical Engineering

This School brings together faculty involved in the key technologies of the Information Age. These include computer science, communication, VLSI and microelectronics, and electrical energy. The underlying fundamental principles are information theory, theory of computation, communication theory, quantum mechanics and the laws of electromagnetism.

Faculty members and their specialization

Dr. Bharat Singh Rajpurohit; Chairperson; Associate Professor (Specialisation: Power Electronics Application to Power Systems)

Dr. Ankush Bag; Assistant Professor (Specialisation: Semiconductor Devices, Epitaxy and Compound Semiconductors)

Dr. Adarsh Patel; Assistant Professor (Specialisation: Statistical Signal Processing, Wireless Communications)

Dr. Aditya Nigam; Assistant Professor (Specialisation: Biometrics, Computer Vision, Image Processing)

Dr. Amit Kumar Singha; Assistant Professor (Specialisation: Control System, DC-DC Converter)

Dr. Anil Kumar Sao; Associate Professor (Specialisation: Image processing)

Dr. Arnav Bhavsar; Associate Professor (Specialisation: Image analysis, Computer vision)

Dr. Arti Kashyap; Associate Professor (Specialisation: Magnetism and magnetic materials)

Dr. Astrid Kiehn; Visiting Associate Professor (Specialisation: Distributed Algorithms, Verification, Theoretical Computer Science)

Prof. B. D. Chaudhary; Emeritus Professor (Specialisation: Software Technology)

Prof. Deepak Khemani; Mentor Professor (Specialisation: Artificial Intelligence)





Dr. Dileep A. D; Assistant Professor (Specialisation: Pattern Recognition, Kernel Methods for Pattern Analysis, Machine Learning, Speech Technology, Computer Vision)

Prof. Enakshi Bhattacharya; Mentor Professor (Specialisation: MEMS processing and sensors)

Dr. Gopi Shrikanth Reddy; Assistant Professor (Specialisation: Communications: Antennas and Wave Propagation, RF and Microwave Passive component Design)

Dr. Himanshu Misra; Assistant Professor (Specialisation: Electrical Drives, DFIG systems, Electric Vehicle, Renewable Energy, Power Converters)

Dr. Hitesh Shrimali; Associate Professor (Specialisation: Analog and Mixed signal VLSI design, analog-to-digital converters and design of radiation hard circuits (space application))

Dr. Kunal Ghosh; Assistant Professor (Specialisation: Solar Photovoltaics)

Mr. Manas Thakur; Teaching Fellow (Specialisation: Program analysis, compilers, programming languages)

Dr. Moumita Das; Assistant Professor (Specialisation: Power Electronics)

Prof. Narendra Karmarkar; Visiting Distinguished Professor

Dr. Narsa Reddy Tummuru; Assistant Professor (Specialisation: Hybrid Energy Storage Applications in Future Microgrids, Efficient Power Electronic Interfaces in Renewable Energy Applications and Smartgrid Communication Networks)

Dr. Padmanabhan Rajan; Assistant Professor (Specialisation: Speech processing, speaker recognition)

Dr. Rahul Shrestha; Assistant Professor (Specialisation: VLSI Design and Circuits & Systems for Signal Processing and Wireless Communication)

Dr. Rajan Kapu; Adjunct Professor (Specialisation: Renewable Energy, Industrial Electronics, Head Mounted Displays)

Prof. Ramesh Oruganti; Adjunct Professor (Specialisation: Power Electronics, Solar photovoltaic energy systems)

Dr. Rameshwar Pratap; Assistant Professor (Specialisation: Algorithms in Data Science and Machine Learning, Theoretical Computer Science)

Prof. Ravindra Arora; Visitor Professor (Specialisation: High Voltage)

Dr. Renu M. Rameshan; Assistant Professor (Specialisation: Image Processing)

Dr. Samar; Assistant Professor (Specialisation: Information Theory, Wireless Communications)





Dr. Satinder Sharma; Associate Professor (Specialisation: Nanoelectronics, Sensors, Photovoltaic & self-assembly)

Dr. Satyajit Thakor; Assistant Professor (Specialisation: Communication Theory, Information Theory, Network Coding)

Dr. Shubhajit Roy Chowdhury; Associate Professor (Specialisation: Biomedical Embedded Systems, Non invasive diagnostic systems, Near Infrared Spectroscopy, VLSI Architectures)

Dr. Siddhartha Sarma; Assistant Professor (Specialisation: Resource allocation in Wireless Networks, Wireless Energy Harvesting and Crowd sensing)

Dr. Sreelakshmi Manjunath; Assistant Professor (Specialisation: Communication Networks, Vehicular Networks, Control Systems, Non-linear Dynamics, Time-delayed Systems, Non-linear Controller Design)

Dr. Srikant Srinivasan; Associate Professor (Specialisation: Big-Data acquisition and analysis, Nanoelectronics, Spintronics)

Dr. Srinivasu Bodapati; Assistant Professor (Specialisation: VLSI Design, Nanoelectronics, Hardware security, Cryptography and FPGA based system design)

Dr. Sriram Kailasam; Assistant Professor (Specialisation: Distributed Systems (Cloud Computing))

Dr. Swapnil Bhuktare; Assistant Professor (Specialisation: Nanoelectronics, Spintronics)

Prof. Timothy A Gonsalves; Professor / Director (Specialisation: Computer networks and distributed software systems)

Dr. Tushar Jain; Assistant Professor (Specialisation: Control theory, fault tolerant control, industrial process control)

Dr. Varun Dutt; Associate Professor (Specialisation: Artificial Intelligence, Human-Computer Interaction, Judgment and Decision Making, Environmental Decision Making)

Prof. Yvonne Dittrich; Adjunct Professor (Specialization: Software Engineering)





School of Basic Sciences

This School includes Mathematics, Physics, Chemistry and Life-Sciences. While some faculty may work in pure research, others work on applied research in collaboration with colleagues in the Engineering Schools.

Faculty members and their specialization

Dr. Syed Abbas; Chairperson; Associate Professor (Specialisation: Difference equations, stochastic control)

Dr. Aditi Halder; Associate Professor (Specialisation: Design and development of new functional nanomaterials for the application of renewable energy, nano-electronics and sensor)

Dr. Ajay Soni; Associate Professor (Specialisation: Nanomaterials and Experimental Condense Matter Physics)

Dr. Amit Jaiswal; Assistant Professor (Specialisation: Nanobiotechnology)

Dr. Amit Prasad; Assistant Professor (Specialisation: Immunology/Microbiology)

Dr. Aniruddha Chakraborty; Associate Professor (Specialisation: Theoretical Chemistry)

Dr. Bindu Radhamany; Associate Professor (Specialisation: X-ray spectroscopy)

Dr. C. S. Yadav; Associate Professor (Specialisation: Low Temperature Physics)

Dr. Chayan K. Nandi; Associate Professor (Specialisation: Physical Chemistry)

Dr. Hari Varma; Associate Professor (Specialisation: Atomic and Molecular physics)

Dr. Kalpesh Haria; Assistant Professor (Specialisation: Operator Theory)

Dr. Kaustav Mukherjee; Associate Professor (Specialisation: Experimental Condensed Matter Physics)

Prof. Ken Gonsalves; Visiting Distinguished Professor (Specialisation: Materials Synthesis)

Dr. Manoj Thakur; Associate Professor (Specialisation: Optimization, Soft Computing, Machine Learning & its Application to Computational Finance)

Dr. Muslim Malik; Assistant Professor (Specialisation: Differential Equations)

Dr. Nitu Kumari; Assistant Professor (Specialisation: Differential Equations, Dynamical Systems, Nonlinear Dynamics)

Dr. Pradeep Kumar; Assistant Professor (Specialisation: Raman and Infrared Spectroscopy)





Dr. Pradeep Parameswaran; Associate Professor (Specialisation: Inorganic/Materials/Nano-Chemistry)

Dr. Pradyuman K Pathak; Associate Professor (Specialisation: Quantum Optics, Quantum Information and Nanophotonics)

Dr. Prasanth P. Jose; Assistant Professor (Specialisation: Soft condensed matter physics)

Dr. Prem Felix Siril; Associate Professor (Specialisation: Chemistry of Nanomaterials)

Dr. Prosenjit Mondal; Associate Professor (Specialisation: Molecular Endocrinology and Metabolism)

Dr. Qaiser Jahan; Assistant Professor (Specialisation: Harmonic and Wavelet Analysis)

Dr. Rajanish Giri; Assistant Professor (Specialisation: Biophysics and protein folding, Intrinsically Disordered Proteins, T Cell Engineering, Protein Engineering)

Dr. Rajendra Ray; Associate Professor (Specialisation: Computational Fluid Dynamics, Numerical Methods for PDEs)

Dr. Sarita Azad; Assistant Professor (Specialisation: Statistical Time Series Analysis)

Dr. Shyam Kumar Masakapalli; Associate Professor (Specialisation: Metabolic Systems Biology (Fluxomics and metabolomics), Plant and microbial metabolism, NMR and GC-MS)

Dr. Subrata Ghosh; Associate Professor (Specialisation: Organic Chemistry)

Dr. Suman Kalyan Pal; Associate Professor (Specialisation: Fast and Ultrafast Laser Spectroscopy)

Dr. Tulika Srivastava; Associate Professor (Specialisation: Bioinformatics, Systems Biology, Metagenomics, Comparative Genomics, Protein Function and Structural analysis)

Dr. Venkata Krishnan; Associate Professor (Specialisation: Materials Chemistry, X-ray Science)

Dr. Ketaki Ghosh; Teaching Fellow (Specialisation: Synthetic Organic Chemistry)

Dr. Neha Garg; Ramanujan Faculty Fellow (Specialisation: Cancer Biology, Stem Cells)

Dr. Shweta Tripathi; Ramalingaswami Faculty Fellow (Specialisation: Virology, Innate Immunity, Cancer Biology)





School of Engineering

This School covers tangible physical structures and artifacts such as transport vehicles, transport systems, machines, materials, manufacturing, designs etc. The underlying principles are classical mechanics, atomic physics, and thermodynamics. Many faculties from the traditional departments of Mechanical, Civil, Aerospace, and Metallurgy Engineering are a part of this School.

Faculty members and their specialization

Dr. Viswanath Balakrishnan; Chairperson; Associate Professor (Specialisation: Nanomaterials for electronics, Sensor and Supercapacitor applications)

Dr. Atul Dhar; Assistant Professor (Specialisation: Alternative Fuels, IC Engines, Emissions Control)

Dr. Arpan Gupta; Assistant Professor (Specialisation: Acoustics, Vibration, Bio-mechanics)

Prof. Ajit P. Annachhatre; Visiting Professor (Specialisation: Environmental Engineering)

Prof. Ing. Balthasar Novák; Adjunct Professor (Specialisation: Civil Engineering)

Dr. Deepak Swami; Assistant Professor (Specialisation: Groundwater and Water Resources)

Dr. Dericks P Shukla; Assistant Professor (Specialisation: Remote Sensing, GIS, Environmental-Hydro-geochemistry)

Dr. Gaurav Bhutani; Assistant Professor (Specialisation: Fluid and thermal sciences)

Dr. Himanshu Pathak; Assistant Professor (Specialisation: Computational Solid Mechanics, Fracture Mechanics, Functionally Graded Materials)

Dr. Jaspreet Kaur Randhawa; Assistant Professor (Specialisation: Drug Delivery System)

Dr. P. Anil Kishan; Assistant Professor (Specialisation: Thermal Science)

Dr. Maheshreddy Gade; Assistant Professor (Specialisation: Earthquake Engineering and Engineering Seismology)

Dr. Mousumi Mukherjee; Assistant Professor (Specialisation: Geotechnical Engineering)

Dr. Parmod Kumar; Assistant Professor (Specialisation: Thermal Engineering)

Dr. Pradeep Kumar; Assistant Professor (Specialisation: Fluid & Thermal Science)

Dr. Rahul Vaish; Associate Professor (Specialisation: Materials Engineering)





Dr. Rajeev Kumar; Associate Professor (Specialisation: Machine Design, Vibration)

Dr. Rajesh Ghosh; Assistant Professor (Specialisation: Solid Mechanics, Biomechanics)

Dr. Rajneesh Sharma; Assistant Professor (Specialisation: Structures, Mechanics and Design)

Dr. Rik Rani Koner; Assistant Professor (Specialisation: Hybrid Materials)

Dr. Sandip Saha; Assistant Professor (Specialisation: Earthquake Engineering)

Prof. Satish Chandra Jain; Emeritus Professor (Specialisation: Vibration, Noise, Tribology and Computer Aided Design)

Dr. Satvasheel Powar; Assistant Professor (Specialisation: Solar Energy)

Dr. Subrata Ray; Distinguished Visiting Professor (Specialisation: Physical metallurgy, Composites and Tribology)

Dr. Sunil R. Kale; Mentor Professor (Specialisation: Heat Transfer, Fluid Mechanics)

Dr. Kaustav Sarkar; Assistant Professor (Specialisation: Structural Engineering)

Dr. Subhamoy Sen; Assistant Professor (Specialisation: Structural Engineering)

Dr. Sudhir Kumar Pandey; Assistant Professor (Specialisation: Condensed Matter Physics and Materials Science)

Dr. Sumit Sinha Ray; Assistant Professor (Specialisation: Filtration and Separation, Energy Storage Materials, Nonwoven Methodologies)

Dr. Sunny Zafar; Assistant Professor (Specialisation: Manufacturing Engineering)

Dr. Swati Sharma; Assistant Professor (Specialisation: Materials and Manufacturing)

Dr. Mohammad Talha; Assistant Professor (Specialisation: Computational Solid Mechanics, High Technology Materials and Structures)

Prof. Tarun Kant; Visiting Distinguish Professor (Specialization: Computational Mechanics and Structural Engineering).

Dr. Kala Venkata Uday; Assistant Profesor (Specialisation: Geotechnical Engineering)

Dr. Vishal S Chauhan; Associate Professor (Specialisation: Mechanical Engineering)





School of Humanities and Social Sciences

Modern engineers work in teams to create, improve and apply technology for the good of society. A good understanding of language, culture, sociology, economics, management, ecology, etc. is essential for the well-rounded engineer and development of technologies, products and processes that will see widespread use. This School is thus an important part of IIT Mandi. **Faculty members and their specialization are:**

Dr. Rajeshwari Dutt; Chairperson; Assistant Professor (Specialisation: Latin America, Social and Cultural History, Indigenous studies)

Dr. Aruna Bommareddi; Assistant Professor (Specialisation: Comparative Literature, Indian Literatures in English)

Dr. Balasundaram Subramanian; Adjunct Professor (Specialisation: German Studies and Political Philosophy)

Dr. Devika Sethi; Assistant Professor (Specialisation: Modern Indian History, Colonialism and Decolonization, Free Speech and Censorship)

Mr. Gokul Somasekharan; Teaching Fellow (Specialisation: German Literature)

Dr. Ingrid Shockey; Adjunct Associate Professor (Specialisation: Environmental Sociology)

Dr. Manu V. Devadevan; Assistant Professor (Specialisation: Literary practices in South Asia, Political and economic processes in pre-modern South Asia & South Asian Epigraphy)

Ms. Neha Kaushik; Teaching Fellow (Specialisation: Translation Studies, Women's Writing, Comparative Linguistics, German Studies)

Dr. Nilamber Chhetri; Assistant Professor (Specialisation: Ethnic Studies, Sociology of Ethnicity)

Dr. Puran Singh; Assistant Professor (Specialisation: Corporate Finance, Microfinance)

Dr. Ramna Thakur; Assistant Professor (Specialisation: Development Economics)

Dr. Saumya Dixit; Assistant Professor (Specialisation: Post consumption consumer behaviour, e-waste management,

Dr. Shyamasree Dasgupta; Assistant Professor (Specialisation: Energy and Environmental Economics)

Dr. Suman; Assistant Professor (Specialisation: Colonialism, Post-colonialism, Imperialism, and Romance Literature)

Dr. Surya Prakash Upadhyay; Assistant Professor (Specialisation: Sociology of Religion, Urban Sociology, Post-Reform India)

Prof. V. Ranganathan; Visiting Distinguished Professor (Energy Economics, and Climate change)





Medals and Prizes

PRESIDENT OF INDIA GOLD MEDAL



Mr. Akash Sharma

B15206

Computer Science and Engineering

DIRECTOR'S GOLD MEDAL



Mr. Abhishek

B15103

Computer Science and Engineering





INSTITUTE SILVER MEDALS



Mr. Akash Sharma

B15206

Computer Science and Engineering



Mr. Sumit Patidar

B15237

Electrical Engineering



Ms. Preeti Kannanpan

B15327

Mechanical Engineering



Mr. Tushar Aggarwal

B15423

Civil Engineering





RANI GONSALVES MEMORIAL MEDAL



Ms. Preeti Kannanpan

B15327

INSTITUTE SILVER MEDAL IN CHEMISTRY



Ms. Gayatri Batra

V 17001
M.Sc. Chemistry





OUTSTANDING AWARDS

M.Sc. and M.Tech.



Mr. Ravi Kumar Sharma
V17085
M.Sc. Physics



Mr. Rakesh Kumar
V 17048
M.Sc. Applied Mathematics



Ms. Sucheta Ghosh
T17074
M.Tech. Biotechnology



Vatrika Sengar
T17133
M.Tech. (Communication and Signal Processing)



Aayush Trivedi
T 17021
M.Tech. Energy Engineering



DETAILS OF GRADUATING STUDENTS

22 Ph.D., 10 M.S. (by Research), 60 M.Tech., 54 M.Sc. and 130 B.Tech. Students fulfill all the academic requirements for the award of the degree. The summary information with regard to the various degrees is as under:

Doctor of Philosophy (Ph.D.)

The following eighteen Ph.D. scholars have completed all the requirements for the award of the degree of “Doctor of Philosophy” including submission of the final approved thesis.

Sl. No	Name & Roll No.
1	ANNA VARUGHESE (D10002)
2	JITENDRA KUMAR VERMA (D10017)
3	ANAND KUMAR (D11042)
4	AMIT KUMAR (D12080)
5	SOMNATH ACHARYA (D13005)
6	ASHISH BAHUGUNA (D13007)
7	MOHIT KUMAR SHARMA (D13013)
8	ASHWANI KUMAR (D13017)
9	MANDEEP KUMAR (D13019)
10	MAHESH SONI (D13023)
11	MOHAMMAD SAQUIB (D14008)
12	SUNEEL KUMAR (D14013)
13	DAVINDER SINGH (D14014)
14	PALVI AGGARWAL (D14028)
15	ANURUDDH KUMAR (D14032)
16	ATENDRA KUMAR (D14033)
17	SUPRIYA GHOSH (D15034)
18	PREETI GULIA (D15006)
19	THIRUMURUGAN C (D11045)
20	SHIVENDRA SANGAR (D13012)
21	KHYATI (D15016)
22	VIKAS SHARMA (D12090)

Master of Science (M.S.) (by Research)

The following eight M.S. scholars have completed all the requirements for the award of the degree of Master of Science (M.S. (by Research)) including submission of the final approved thesis.

Sl. No	Name & Roll No.
1	GAURAV SHARMA (S15001)
2	ABHAY (S15004)
3	ANKUR KAUNDAL (S15008)
4	ABHILASH AWASTHI (S15013)
5	SHAREY DEEP GULERIA (S16003)
6	GAURAV SHARMA (S16006)
7	SIVARATHRI ASHOK KUMAR (S16010)
8	RAGINI SINHA (S16013)
9	RAJ KIRAN (S17011)
10	BINDU (S16008)

Master of Science (M.Sc.) in Chemistry

Sl. No.	Roll No.	Name
1	V17001	GAYATRI BATRA
2	V17002	NEERAJ SONI
3	V17003	MEENU UPADHYAY
4	V17004	SAKSHI TYAGI
5	V17005	ANKIT KASHYAP
6	V17006	MAHENDER SINGH
7	V17007	MUKESH KUMAR
8	V17008	NISHKANT MALKOTI
9	V17009	PANKAJ KUMAR
10	V17010	ABHAY SHARMA
11	V17011	AKASH KUMAR
12	V17012	VISHAL THAKUR
13	V17013	CHETAN SAINI
14	V17014	RENUKA SHARMA
15	V17015	JYOTI ROHILLA
16	V17016	VEDASREE MOUTAM
17	V17017	RITU
18	V17018	SHWETA KAUSHAL
19	V17019	SOMESH CHAMOLI
20	V17020	SWARNIM PANDEY
21	V17021	ANJU
22	V17022	SOURABH KUMAR

Master of Science (M.Sc.) in Applied Mathematics

Sl. No.	Roll No.	Student Name
1	V17041	KULDEEP SINGH
2	V17042	DEEPAK KUMAR
3	V17044	RISHABH SAXENA
4	V17045	ANIL KUMAR
5	V17046	SNEH
6	V17047	JASVANT SINGH
7	V17048	RAKESH KUMAR
8	V17049	RAJNEESH KUMAR
9	V17050	ASHWANI
10	V17051	ARCHANA RANI
11	V17052	AFIFA FATMA
12	V17053	VIVEK KUMAR YADAV
13	V17054	ABHISHEK GARG
14	V17055	KM AYUSHI CHAUHAN
15	V17056	VISHNU PRATAP SINGH PARIHAR

Master of Science (M.Sc.) in Physics

Sl. No.	Roll No.	Student Name
1	V17081	PRIYA YADAV
2	V17082	ATMIKA BHARDWAJ
3	V17083	RAJKUMAR JANGID
4	V17084	AMIT KUMAR SHARMA
5	V17085	RAVI KUMAR SHARMA
6	V17086	HARIOM SAINI
7	V17087	SUMIT KANT
8	V17089	SURAJ SINGH
9	V17090	RADHIKA
10	V17091	MAYANK VASHISTHA
11	V17092	RAHUL MITTAL
12	V17093	KOUSHAL KISHOR GANGWAL
13	V17094	AYUSH RASTOGI
14	V17095	VAIBHAV RAJ SINGH PARMAR
15	V17096	MUKESH KUMAR
16	V17097	DEEKSHA KANTI
17	DI1606	MOHIT KHANNA

Master of Technology (M.Tech.) in Energy Engineering with specialisation in Materials (EEM)

Sl. No.	Roll No.	Student Name
1	T17003	SAUMYA PANDEY
2	T17009	TARUN KUMAR
3	T17012	ASHUTOSH CHAUHAN
4	T17013	KARANVEER SINGH
5	T17015	GOURAV SARASWAT
6	T17016	NIKHIL TANAJI DOIPHODE
7	T17017	HANI CHAUDHARY
8	T17018	MINHAJ
9	T17019	SANDEEP YADAV
10	T17021	AAYUSH TRIVEDI

Master of Technology (M.Tech.) in Mechanical Engineering with specialization in Energy System (MES)

Sl. No.	Roll No.	Student Name
1	T17001	DIVESH BHARTI
2	T17002	ANAND SINGH
3	T17004	PRINCE KAKRAN
4	T17005	VIKAS HOODA
5	T17006	DIKSHITA JOSHI
6	T17007	APAKRITA VINAYAK TAYADE
7	T17008	DIWAKAR SINGH
8	T17011	ROSHAN LAL
9	T17020	SHASHANK PRABHAKAR

Master of Technology (M.Tech.) in Electrical Engineering with specialization in VLSI

Sl. No.	Roll No.	Student Name
1	T17041	SHUBHAM SANJAY TELGOTE
2	T17043	MOHAMMED SUHAIL ILLIKKAL
3	T17045	MUNEEB SULTHAN P P
4	T17046	SHIV KUMAR
5	T17047	KARUNANIDHAN PANDEY
6	T17048	VARTIKA VERMA
7	T17049	RUPAL JAIN
8	T17050	RAHUL PANWAR
9	T16048	ALVENDRA SINGH

Master of Technology (M.Tech.) in Power Electronics and Drives

Sl. No.	Roll No.	Student Name
1	T17101	ZEN BICHAKSHYANA MOHANTY
2	T17102	RITU RAI
3	T17103	VIRENDRA SINGH
4	T17104	PRIYANKA TIWARI
5	T17105	GAURAV GAUTAM
6	T17107	GITIKA PANDEY
7	T17108	DEVENDRA KUMAR
8	T17109	MOINUDEEN
9	T17110	GADDALA RAVI KUMAR

Master of Technology (M.Tech.) in Communications and Signal Processing

Sl. No.	Roll No.	Student Name
1	T17131	OM KARWAL
2	T17132	RAGHAV SHARMA
3	T17133	VARTIKA SENGAR
4	T17134	VIPUL AGGARWAL
5	T17135	AKSHAY TIWARI
6	T17136	ANUSHA ASWATH
7	T17137	ANIL TIWARI
8	T17138	MUHAMMAD UBADAH
9	T17139	SARATHPRASAD K V
10	T17140	CHANDRAKANT SONAWANE
11	T17141	SHELADIYA NIRALI DHANJIBHAI
12	T17143	SURBHI JAIN
13	T17144	HITIKA TIWARI

Master of Technology (M.Tech.) in Biotechnology

Sl. No.	Roll No.	Student Name
1	T17071	ANUMA SINGH
2	T17072	PRIYA SINGH
3	T17073	SWACHHATO A GHOSH
4	T17074	SUCHETA GHOSH
5	T17075	BHOOMIKA PATEL
6	T17076	SURBHI MISHRA
7	T17077	PAWAN KUMAR PANDEY
8	T17078	URVASHI SINGH
9	T17079	SANDESH KUMAR PATEL
10	T17080	SHAHIDA SIDDIQUI

Bachelor of Technology (B.Tech.) in Computer Science and Engineering

Sl. No.	Roll No.	Student Name
1	B15101	AAYUSH MISHRA
2	B15102	ABHIJEET SHARMA
3	B15103	ABHISHEK
4	B15104	ABHISHEK POONIA
5	B15105	AKASH YADAV
6	B15106	AKSH GAUTAM
7	B15107	ANKIT AMRIT RAJ
8	B15108	ANSHU PURI
9	B15109	AVNISH KUMAR
10	B15110	BARPATI AVINASH KUMAR
11	B15111	CHEBATHINI SONITH
12	B15112	DHAIRYA VERMA
13	B15113	GAINGAMSIN PAMEI
14	B15114	GURMEET SINGH
15	B15116	JONTY PURBIA
16	B15117	MAMTA RAJU BHAGIA
17	B15118	MOHIT SHARMA
18	B15120	PARINAYA CHATURVEDI
19	B15121	PRAMOD JONWAL
20	B15122	PULKIT KUMAR SHARMA
21	B15123	PULKIT SAPRA
22	B15124	PUNEET YADAV
23	B15125	RAHUL KUMAR RAJPOOT
24	B15126	RAJANISH KUMAR UPADHYAY
25	B15129	SAHIL SINGLA

26	B15130	SAHIL YADAV
27	B15131	SAI TARUN REDDY PALLA
28	B15132	SANDESH JOSHI
29	B15134	SHREYAK KUMAR
30	B15136	SONAM KAG
31	B15137	SWAPNIL SHARMA
32	B15138	UTKRISHT DHANKAR
33	B15139	VAIBHAV AGARWAL
34	B15201	AAKASH DAGAR
35	B15206	AKASH SHARMA
36	B15207	AMAN SINGH
37	B15211	AVINAV SANYAL
38	B15217	KHANDAGALE SUJAY SANJAY
39	B15219	KISLAYA MISHRA
40	B15225	PANKAJ KUMAR SHEORAN
41	B15227	PRANAV GUPTA
42	B15228	RAHUL JAIN
43	B15232	RAMCHANDANI HITESH BHARAT
44	B15233	SAGAR GUPTA
45	B15234	SANIDHYA
46	B15238	ABHISHEK TIWARI
47	B15302	ADNAAN NAZIR
48	B15303	AKASH AGRAWAL
49	B15305	AKHIL SINGHAL
50	B15311	DEEPANSHU TYAGI
51	B15312	DEEPESH GOEL
52	B15317	INDRESH KUMAR GUPTA

53	B15319	KUSHAGRA SINGHAL
54	B15321	MEHUL RAJ KUMAWAT
55	B15322	NIJASURE ATHARVA
56	B15329	RIYANSH GOYAL
57	B15331	SAKHILE NAGA KOTI REDDY
58	B15405	ARCHIT KUMAR
59	B13122	KUMARI SHUBHANGI

Bachelor of Technology (B.Tech.) in Electrical Engineering

SL NO.	ROLL NO.	STUDENT NAME
1	B15202	AAYUSH SHARMA
2	B15203	ABHISHEK PAL
3	B15204	ABHISHEK SONAL
4	B15205	ADITI MANN
5	B15208	AMIT GHANGHAS
6	B15209	ANUKSHA JAIN
7	B15210	ASHUTOSH KUMAR
8	B15212	DHRUV PATEL
9	B15213	GOURAV BHATT
10	B15214	HIMANSHU KUMAR
11	B15215	HIMANSHU MEWARA
12	B15216	J RAGHUNATH
13	B15218	KISHORE KUMAR SINGH
14	B15220	LOKESH BAIRWA
15	B15222	MUKESH KUMAWAT
16	B15223	MUNISH
17	B15224	NEMANI SRI HARI
18	B15226	PIYUSH ANAND
19	B15230	RAHUL MEENA

20	B15337	UDIT SONI
21	B15338	UTKARSH KUNWAR
22	B15339	V SAI SUBBA RAO
23	B15341	VISHVAJEET PATEL
24	B15342	WASIM SALIH.T
25	B15403	AMIT KUMAR

Bachelor of Technology (B.Tech.) in Civil Engineering

SL NO.	ROLL NO.	STUDENT NAME
1	B15401	ABHAY SINGH CHAUHAN
2	B15402	AKSHIT KAUSHIK DEVGUN
3	B15404	ANKIT DAHIYA
4	B15407	BIPIN SHARMA
5	B15408	CHIRAG MAHAWAR
6	B15409	DEVESHI SONI
7	B15410	GANTAVYA GUPTA
8	B15411	GAURAV PUROHIT
9	B15412	LOKESH TUNGARIYA
10	B15414	MAYURESH GUPTA
11	B15415	NAVYA AGARWAL
12	B15416	NIKHIL KUMAR
13	B15417	PRASHANT SINGH
14	B15418	PRIYANSHU MEENA
15	B15419	RAHUL KUMAR CHAUDHARY
16	B15420	RAKESH KUMAR MEENA
17	B15423	TUSHAR AGGARWAL
18	B15424	VIKAS
19	B15314	DHEERAJ KUMAR MEENA
20	B15340	VIJAY SHANKAR MEENA

20	B15231	RAHUL SINGH
21	B15235	SHRAWAN KUMAR
22	B15236	SHUBHAM KUMAR SINGH
23	B15237	SUMIT PATIDAR
24	B15239	VIPIN TOLIA
25	B15323	PANKAJ UPADHYAY
26	B14220	MOHIT JAIN

Bachelor of Technology (B.Tech.) in Mechanical Engineering

SL NO.	ROLL NO.	STUDENT NAME
1	B15301	ADITYA SHARMA
2	B15304	AKASH MARMAT
3	B15306	AMAN CHOUDHARY
4	B15307	ANAND MOHAN TIWARI
5	B15308	ATUL YADAV
6	B15309	AVINASH KUMAR
7	B15310	BANWARI LAL AIRWAL
8	B15313	DEVENDRA BAIRWA
9	B15315	DIVYA RANJAN
10	B15316	DIVYANSH VERMA
11	B15318	KANIKARAM SAI SANDEEP
12	B15320	MANOJ KUMAR JANGID
13	B15326	PRADEEP KUMAR
14	B15327	PREETI M KANNAPAN
15	B15328	REVVU SRI HARSHA
16	B15330	RUSHIL SINGHAL
17	B15332	SANJAY NETRIWAL
18	B15333	SHEKHAR SHUBHAM
19	B15334	SHOBHIT OLA



CONVOCATION DRESS



The festive character of a convocation is emphasized by the convocation dress.

IIT Mandi's convocation attire references to its location in the Himalayan region. It consists of a cape and a Himachali cap. On both, cape and cap, a patti [woven border] is applied specially designed for IIT Mandi. The patti refers to the colors of the IIT Mandi logo; orange, blue and green. The green parts of the patti symbolize vegetation and mountains, the blue parts rivers and limitless sky, and the orange parts, paths and energy. The zig-zag pattern is typical for the region.

The base colors of the gowns represent the following categories: in the convocation ceremony. Gold: dignitaries; Blue: faculty; Orange: Ph.D. students; Green: M.S. and M.Tech. students; Dark Blue: M.Sc. students; Black: Btech. students.

The gown has been designed by the Convocation Gown Committee of IIT Mandi and been produced with the help of local weavers, tailors and vendors.





IIT MANDI GRADUATES' PLEDGE

We, the graduates and post-graduates of the Indian Institute of Technology Mandi, hereby pledge
That we will be scrupulously honest in all our activities and act with integrity at all times to uphold the honour and dignity of our profession and of our Institute; That we will actively protect and promote the well-being of our environment; That we will uphold and promote the unity and secular ideals of our country; That we will utilize our knowledge in the service of our country in its march towards a just, inclusive, and sustainable society.





CONVOCATION DATA

COURSE/ CONVOCATION	Ph.D.	M.S.	M.Tech.	M.Sc.	B.Tech.	Total
1 st 2013	1	2	-	-	94	97
2 nd 2015	3	8	-	-	116	127
3 rd 2015	3	7	-	-	105	115
4 th 2016	7	5	3	10	115	140
5 th 2017	24	7	4	18	116	169
6 th 2018	29	11	20	39	112	211
7 th 2019	22	10	60	54	130	276
Total	89	50	87	121	788	1135



CONVOCATION COMMITTEE

Dr. Hitesh Shrimali	Mr. Anoop Kumar
Dr. Surya Prakash Upadhyay	Ms. Shelika
Dr. Rahul Shrestha	Ms. Monika Kashyap
Dr. Vishal Singh Chauhan	Mr. Prakash
Dr. Manoj Thakur	Mr. Ashish Srivastava
Dr. Hari Varma	Mr. Pavin Samuel
Dr. Pradeep Kumar (SBS)	Mr. Rakesh Bhatt
Dr. Rajnish Giri	Mr. Hardeep Singh, (S.O.)
Dr. Himanshu Pathak	Mr. Ankush
Dr. Gopi Srikanth Reddy	Mr. Ashok Pathania
Dr. Gokul Somasekharan	Mr. C.L. Sharma
Dr. Qaiser Jahan	Mr. Ashish Srivastava
Dr. Devika Sethi	Mr. N. S. Bhandari
Dr. Arnav Bhavsar Vinayak	Mr. Amit Sharma
Dr. Padmanabhan Rajan	Mr. Prateek Pathania
Dr. Siddhartha Sarma	Mr. Pavin Samuel
Dr. Shubamoy Sen	Mr. Akshay Kapoor
Dr. Neha Kaushik	Mr. Sumeet Azad
Dr. Nilamber Chhetri	Mr. Dinesh Thakur
Dr. Aditi Halder	Ms. Suruchi Devi
Dr. Amit Kumar Singha	Ms. Stuti Sharma
Dr. Sunny Zafar	Ms. Mamta
Dr. Subrata Ghosh	Mr. Vivek Tiwari
Dr. Amit Jaiswal	Ms. Sushma Patial
Dr. Srikant Srinivasan	Mr. Kuldeep Sharma
Dr. Kalpesh Haria	Mr. Vishal Parmar
Dr. Kunal Ghosh	Ms. Sonia Gupta
Dr. A.D. Dileep	Er. Sunil Kapoor
Dr. Mahesh Reddy Gade	Er. Amar Singh
Dr. Suman Kalyan Pal,	Er. Puneet Sharma
Dr. Aniruddha Chakraborty	Er. Deendayal
Dr. Manu Devadevan	Er. Navish
Dr. Ankush Bag	Mr. Munna
Dr. Arpan Gupta	Mr. Vinod
Dr. Aditya Nigam	Mr. Abhijeet Tiwari
Dr. M. Talha	Mr. Anoop Kumar
Dr. Astrid Kiehn	Ms. Chandan Sharma
Dr. Ramna Thakur	Mr. Nishant
Dr. Shyamasree Dasgupta	Mr. Ramesh
Dr. Pradhumn Pathak	Mr. Sunil
Dr. Rahul Vaish	Mr. Chaman Lal
Dr. Pradeep Parmeswaran,	Dr. Sriram Kailasam
Dr. Anil K. Sao	Mr. Lalit Thakur
Dr. Ajay Soni	Ms. Debashrita Roy Chowdhury
Dr. Suman	Mr. Gopal Sharma
Dr. Kaustav Sarkar	Mr. Hardeep Singh
Dr. Varun Dutt	Mr. Pavin Samuel
Dr. Chander Singh	Dr. Milan Behl
Dr. Dericks P. Shukla	Mr. Vijay Kumar
Mr. B. R. Thakur	Ms. Bhavneshwari
Mr. C. L. Sharma	Ms. Kamlesh Saklani
Mr. Suresh Rohilla	
Ms. Merlin Sunder	

Contact Us

Mr. K.K. Bajre

Registrar

Indian Institute of Technology Mandi

Kamand Campus, VPO Kamand

Distt. Mandi - 175005

Himachal Pradesh

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