**ADVERTISEMENT NO. IIT MANDI/STD/3/2022/Faculty**          **Dated: 10th October 2022**

IIT Mandi is the first IIT in the Himalayas. IIT Mandi's 530 acre campus is located on the banks of River Uhl, a tributary of the River Beas, 18 km away from the historic town of Mandi in Himachal Pradesh. Surrounded by forested hills far from the hustle and bustle of cities and highways, this scenic campus provides an excellent environment for the highest quality academic pursuits – research, teaching, and learning.

At IIT Mandi, the academic activities are carried out in 3 orthogonal but complementary structures. These are Faculty Schools, Student Degree Programmes, and Research Groups. Each of these is designed to serve a distinct purpose. The three interact in flexible ways to best achieve the academic goals of the Institute. The structure encourages interdisciplinary learning and research that evolves in step with the march of technological innovation.

IIT Mandi invites applications for Faculty positions in all disciplines. Candidates who work in interdisciplinary areas are especially encouraged to apply. IIT Mandi is looking for applicants with a passion for teaching, should be exceptionally motivated, and should have an established record of high-quality research. Successful candidates will be expected to teach undergraduate and postgraduate courses, conduct independent research in their fields of expertise, and contribute to Institute services & building.

IIT Mandi has evolved curricula at the undergraduate and postgraduate levels aimed at training engineering leaders for industry, academia and the public sector. The undergraduate curriculum has a strong design component based on realworld problems, complemented by liberal doses of basic sciences, engineering sciences and the humanities. The curriculum offers flexibility for students to tailor their studies to their interests. The Faculty at IIT Mandi belongs to broadly and loosely defined Schools. Each School provides a home base for faculty whose interests share some fundamental academic principles. At present, IIT Mandi has the following four Schools:

- **School of Mathematical & Statistical Sciences (SMSS)**

The members of the School are involved in research and teaching mainly in the areas of Mathematics; the major areas of expertise include:

Abstract differential equations, Computational fluid dynamics, Mathematical control theory, Mathematical modelling, Operator theory, Optimization, Machine learning, Soft computing ,Time series analysis,

Harmonic analysis, Wavelet analysis and Abstract algebra.

The SMSS runs vibrant PhD programs in all the areas listed above. SMSS also offers B.Tech in Data Science and Master of Science program in Applied Mathematics.

- **School of Physical Sciences**

The Faculty members of the School are involved in teaching (both undergraduate and postgraduate courses) and research in the areas of Condensed matter physics, Ultrafast spectroscopy, Quantum optics and Atomic and molecular physics, Soft matter, and Theoretical High Energy Physics.

Currently, the School runs vibrant PhD and an integrated PhD programs in all the areas listed above. It also offers B. Tech. in Engineering Physics and Master of Science (M. Sc.) in Physics.

- **School of Chemical Sciences**

The School of Chemical Sciences (SCS) at IIT Mandi fosters a perfect harmony between fundamental and applied chemistry and encourages interdisciplinary research. The SCS is home to a diverse range of research areas, which include organic chemistry, inorganic chemistry, physical chemistry, theoretical & computational chemistry, bioinorganic chemistry, spectroscopy & microscopy, medicinal chemistry, materials chemistry, functional nanomaterials, polymer chemistry, organic electronics, homogeneous & heterogeneous catalysis, renewable energy, photocatalysisetc.

SCS offers Masters (M.Sc. in Chemistry) and Ph.D. degrees in Chemistry. The school is also planning to start a BS-MS degree in Chemistry shortly. The school welcomes highly enthusiastic and talented researchers and teachers to join us in our journey to excellence.

- **School of Biosciences and Bioengineering**

School of Biosciences and Bioengineering (SBB), IIT Mandi since 2016 is focused on teaching and cutting edge research in the broad areas of Biotechnology and Bioengineering. The current academic programs being offered are BTech-MTech Dual Degree in Bioengineering, MTech in Biotechnology and PhD in Biosciences and Bioengineering. In a short span, more than 100 undergraduate and postgraduate scholars and about 65 PhD scholars benefitted from the programs. The high-quality research training and education to the next generation of scholars is successfully catering to the needs of the industries and academia eventually contributing to the Nation Building. Our Alumni started contributing in academia and industries nationally and internationally.

The strength of SBB is its incredibly talented faculty carrying independent research, teaching, designing academic curriculum and imparting hands-on project based learning to scholars. SBB faculty achieved Early Career Research Awards, carried projects of high impact in fundamental and translational research areas,

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widely published and filed patents. Few faculty also achieved INSA Young Scientists Award, Innovative Young Biotechnologist Award, SERB-STAR Award, and Welcome Trust-DBT India Alliance Intermediate Fellowship. SBB faculty serves as Associate editors, editorial board members and founding members of various scientific journals and academic societies. Our faculty contributed to projects of national and international relevance such as Indo-UK, Indo-US, Indo-German, Indo-Russia, Indo-Danish, IMPRINT Health and Energy, Farmer Zone etc.

We are constantly looking to hire passionate faculty candidates with excellence in research and education who can establish an independent group and contribute to the growth of the School of Biosciences at IIT Mandi.

- ### School of Computing and  Electrical Engineering (SCEE)

The SCEE encompasses the disciplines of Computer Science and Electrical Engineering. The members of the School are involved in research and teaching mainly in the areas of theoretical computer science, systems engineering, intelligent systems, communication engineering, signal processing, control systems and robotics, power systems, power electronics, and electrical machines and drives; IoT, bio-medical systems, microelectronics, and VLSI design and fabrication.

Currently, the School offers the B.Tech., M.Tech., M.S. by research and Ph.D. programs. The B.Tech. Program is offered in Computer Science & Engineering and Electrical Engineering. The M.Tech. Program is offered in Communication & Signal Processing (CSP), Power Electronics & Drives (PED), and VLSI.

- ### School of Mechanical & Material Engineering (SMME)

The School of Mechanical and Materials Engineering encompasses the research and teaching mainly in the areas of advance materials, manufacturing processes, biomechanics, computational mechanics, composite materials, acoustics, structural health monitoring, smart systems, heat transfer, fluid mechanics, energy systems, mechatronics, robotics etc.

Currently, the School offers B.Tech in Mechanical Engineering. M.Tech. degrees are offered in Mechanical Engineering with Specializations in Energy Systems (MES), Materials and Energy Engineering (MEE) and Fluid and Thermal Engineering (FTE). Research based programmes on M.Tech. by Research M.Tech (R) and Doctoral degrees (Ph.D.) are offered in all research fields related with mechanical and materials engineering.

- ### School of Civil and Environmental Engineering (SCENE)

The School of Civil and Environmental Engineering is a vast domain that serves research and teaching in different applied, computational, experimental and numerical works mainly in the areas of structural engineering, earthquake engineering, structural health monitoring, geotechnical engineering, pile foundation, water resource engineering, geoinformatics, computational mechanics, composite materials, air pollution, natural hazards, landslides, floods, glaciers, micro plastics, contaminant flow in porous media etc.

Currently, the School offers B.Tech in Civil Engineering. M.Tech. in Structural Engineering. Research based programmes on M.Tech. by Research M.Tech (R) and Doctoral degrees (Ph.D.) are offered in all research fields based on the expertise of the faculty members.

## • **Centre for Artificial Intelligence and Robotics (CAIR)**

The members of the Centre are involved in research and teaching mainly in the areas of Aerospace/Aeronautical Engineering with specialization in Avionics, Guidance, Navigation, and Control, Probabilistic Robotics, Robotic Vision, Legged Robotics, Medical Robotics, and Soft Robotics. Currently, the Centre offers M.Tech. in Robotics. Research based programs on M.Tech. By Research (M.Tech (R)) and Doctoral degrees (Ph.D.) are offered in all research fields based on the expertise of the faculty members.

## • **Indian Knowledge System and Mental Health Applications (IKSMHA) Centre**

The continuous proliferation of mental health problems and the cyclical link between mental health and poverty have motivated the development of a research centre focussed on finding low-cost Indian knowledge system grounded solutions to mental health problems. At IIT Mandi, the IKSMHA Centre primarily aims to find solutions derived from the Indian knowledge system (IKS). The IKS has strong foundations in history, philosophy, society, arts, languages, science and technology, and life sciences. The members at IKSMHA Centre actively participate in research on mind, brain, and consciousness with applications from consciousness studies, yoga, meditation, Ayurveda, traditional Indian medicineresearch, and other Indian performing arts (like dance, music, Indian languages, etc.). The Centre offers Doctor of Philosophy and Master of Technology (by Research) programs. The IKSMHA Centre is actively seeking faculty passionate about teaching and research in the Centre's research areas. For more information, please visit: https://iksmha.iitmandi.ac.in

## • **School of Humanities and  Social Sciences (SHSS)**
The SHSS encompasses the disciplines of Humanities and Social Sciences. The members of the School are involved in teaching and research, primarily in the areas of Economics, Development Studies, History, Language (mainly in English and German at present), Literature and Translation Studies, Philosophy, Psychology and Sociology. Currently, the School offers the Ph.D. programs and M.A in Development Studies.

IIT Mandi strongly encourages its faculty to collaborate and address  significant interdisciplinary problems, especially with real world applications.  Collaboration could be within the Institute, with other institutions and industry. The Institute actively encourages research in the thrust areas below (however, not limited to):

- **AMRC**: Advanced Materials Research Centre (AMRC) is a multidisciplinary hub with a vision to promote excellence in advanced materials science and technology via cross disciplinary collaboration with internal and external users of the center. AMRC represents materials focused research in the areas of energy, environment, electronics, magnetism, organic displays, solar cells, drug delivery, nanotechnology etc. with participation of faculty members from physics, chemistry, biology and engineering disciplines. The Centre houses over 30 crores worth of instruments to support various research and development activities.

- **BioX Centre**: The broad vision of this Centre is to perform cutting edge research in the focus areas of Systems and Synthetic Biology with applications in Health care, Agriculture, and Environment. The Centre envisions to push the frontiers of technology development and engineering toward advancements in disease prevention & affordable health care, agricultural practices with respect to the Himalayan region & Himalayan Biodiversity, and exploration for biotechnological applications by bridging the gap between life sciences, physical sciences, and engineering.

- **C4DFED**: The Centre for Design & Fabrication of Electronic Devices (C4DFED) is a unique institute facility for multidisciplinary research of electronic device design and fabrication. The Centre has Class 100, Class 1000 & Class 10000 laboratories where high end sophisticated electronic device fabrication and characterization tools are housed. This Centre is capable of handling research projects like integrated circuits (IC's) design and fabrication for Nanoelectronics, NanoMicro (NEMS & MEMS) systems and also development of Extreme Ultraviolet Lithography (EUVL) resists materials for the Next Generation Semiconductor industry down to 10 nm technology node.

Also, with its location in the Himalayas, IIT Mandi provides unique opportunities for research on sociallyrelevant technologies for the Himalayan region.

**Posts under Consideration:**
**ASSISTANT PROFESSOR Grade I & Grade II**
Applicants for Assistant Professor will be considered for either GradeI or GradeII or both depending on the eligibility and suitability.

**Essential Qualifications:**

Ph.D. in a relevant area with first class or equivalent at the preceding degree in appropriate branch/discipline with consistently good academic record throughout.

Definition of "First Class" for the purpose of faculty selection:
IIT Mandi takes first class for faculty selection to mean 60% or equivalent of the range of grade points or marks.

**Experience:**

**Assistant Professor GradeI:** At least 3 years relevant industrial/research/teaching experience excluding however, the experience gained while pursing Ph.D.

**Assistant Professor GradeII:** Candidates with less than 3 years of experience may be considered for the position of Assistant Professor Grade-II with appropriate starting pay.

**Age:** Should preferably be below 35 years of age.

**Associate Professor:** A minimum of 6 years teaching/research/professional experience of which at least three years should be at the level of Assistant Professor in an academic institution or Senior Scientific Officer/ Senior Design Engineer or equivalent position in a research organization or industry as on the date of application. The candidate should have demonstrated adequate experience of independent research in terms of guidance of M. Tech. and Ph.D students, strong record of publications in journals of high impact factor, patents, laboratory/course development and/or other recognized relevant professional activities. Candidates who do not fulfill such minimum experience requirement may be offered appointment at the Assistant Professor GradeI or Assistant Professor Grade II level, depending upon the academic credentials.

**Professor**: A minimum of 10 years' teaching / research / industrial experience of which at least 4 years should be at the level of Associate Professor in IITs, IISc Bangalore, IIMs, NITIE Mumbai and IISERs or at an equivalent level in any such other Indian or foreign Institution(s) of comparable standards. The candidate should have demonstrated adequate experience of independent research in terms of guidance of PhD students, strong research record, including publications in highly reputed peer reviewed journals, patents, laboratory/course development, sponsored research projects and/or other recognized relevant professional activities.

Higher qualifications and experience may be used in each area based on need. In view of the interdisciplinary nature of IIT Mandi, although posts may be advertised against one School, the selected candidate may be offered the same post in another School if the Selection Committee finds this to be more suitable.

**Scales of Pay:**

| Post | Per 7th CPC | Starting Basic Pay as per 7th CPC* |
|---|---|---|
| Professor | Level 14A, Cell 1 | Rs.1,59,100/ |
| Associate Professor | Level 13A2, Cell 1 | Rs. 1,39,600/- |
| Assistant Professor Grade I | Level 12, Cell 1 | Rs. 1,01,500/ |
| Assistant Professor Grade II | Level 10, Cell 14 | Rs. 84,700/ |
| | Level 11, Cell 10 | Rs. 89,900/ |
| | Level 11, Cell 11 | Rs. 92,600/ |

**\*Note:**

- The posts carry allowances such as D.A., H.R.A. and transport allowance as per rules of the Institute   which at present correspond to those admissible to Central Government employees stationed at Mandi.

- Depending upon the qualifications and experience, higher starting salary may be offered in deserving cases.

## Additional Information:

- Permanent faculty positions are open to Indian Nationals.  Appointment of persons of Indian Origin (PIO),
 Overseas citizens of India (OCI) and foreign nationals for fixed periods on contract basis is permissible.

- Clearance from the Ministries of External Affairs and Home Affairs is necessary for foreign nationals.

**Rolling Recruitment Process:** Applications are accepted throughout the year. Candidates may apply at any time. Based on the needs of the Institute in a particular area, from time to time shortlisting and interviews will be conducted among the available applicants in that area.

## Application Form and  Additional Information on Current Openings:
Please see the webpage https://iitmandi.ac.in/administration/recruitment.php for the list of openings that are currently being advertised and  for additional information on current openings. The Institute may consider exceptional candidates even if areas of specialization lie outside those being advertised. Candidates fulfilling the eligibility criteria must apply online at http://www.iitmandi.ac.in/oaf_standing

## Instructions for Completing the Online Application Form:
- Indicate the Thrust Area(s)  and other research areas in which you have experience.
- Write a short statement of purpose, in the box provided, that explains your plans with reference to IIT Mandi's vision and goals. Please visit the IIT Mandi website http://www.iitmandi/ac/in/ before you do this.
- Please enclose a detailed Academic Profile including the following information:

➢ Details of publications/conference  papers  presented  in  chronological  order, listing:
  - Names of authors, title of the paper, name of the journal/conference, volume/proceeding, pages (fromto) year, etc. (Group the above separately as Refereed National Journals, Refereed International Journals,  Non refereed Journals, presented at National Conferences, presented at International Conferences etc.)

➢ Awards, Patents, Prizes etc. indicating:
  - Nature, name of prize/award, awarded by, awarded  for and year of award
  - Name of the Patent, year and details about the patent, etc.

➢ Research guidance (Ph.D. /M.S. /M.Tech. only those already awarded) listing:
  - Research degree, name of the scholar, title of thesis, year of award, coguide (if any) etc.

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- ➢ Role in and details of research/consultancy projects carried out, listing:
  - ▪ Title of the project, duration, sponsor, value, coinvestigators, if any, etc.
- ➢ Other Activities like:
  - ▪ Textbooks and Monographs written, with details.
  - ▪ Continuing education programs/conferences organized (as on organizer or coorganizer) etc.
- • Any other relevant but brief information on your academic standing.
- • Enclose reprints of three best papers published.
- • Please provide the names and contact information of the referees whom we can contact for the letter of reference. We will contact your referees and request them to send the letters of reference.
- • If you are employed in a Government or SemiGovernment Organizations, Public Undertakings, University and Educational Institutions, you must upload a No Objection Certificate from your present employer.

**Support for Professional Advancement of Faculty Members:**

- • For candidates joining the Institute from abroad, a relocation allowance of Rs.2,00,000/ (Rupees Two Lakh Only) is admissible for self and family on production of tickets for travel by economy airfare by the shortest route booked by *the three Authorized Travel Agents. viz* (i) M/s Balmer Lawrie & Company Limited (BLCL), (ii) M/s Ashok Travels & Tours (ATT), (iii) Indian Railways Catering and Tourism Corporation Ltd. (IRCTC) subject to the condition that they serve the Institute for a minimum period of 3 years.
- • For candidates joining the Institute within India, a relocation allowance of Rs.1,00,000/ (Rupees One Lakh Only) is admissible for self and family on production of tickets for travel by economy airfare by the shortest route booked by *the three Authorized Travel Agents* subject to the condition that they serve the Institute for a minimum period of 3 years.
- • A grant of Rs 1 lakh is provided for equipping office upon joining.
- • A Startup Grant of up to Rs. 10 lakhs for carrying out a research project of 3 years duration, based on a research proposal is provided.

- • A Cumulative Professional Development Allowance (CPDA) of Rs. 3 lakhs for every block period of 3 years (Rupees One lakh per year) is made available to every member of the faculty to meet the expenses for participation in national and international conferences, payment of membership fee of professional bodies, contingent expenses, etc.
- • Access to additional funds from the School or the Institute.
- • No limit on the attendance at International Conferences without Institute financial assistance.
- • Applying for research funding from the external sources including government and industry.
- • The Institute encourages interaction of the faculty with industry, other research and professional institutions.

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- Supervising PhD and MS research scholars, and MTech/BTech/M. Sc/MA projects.
- Professional visits can be undertaken during vacation period for carrying out research and for academic development.
- Sabbatical of up to one year may be granted after completion of six years of continuous service at the institute.
- Facilities for Research and Development activities are being established in all areas.
- Faculty can define the choice of facilities. Good library and computing facilities are available and are being constantly enhanced.
- **Accommodation:** On arrival, the appointed faculty may stay in the Institute Guest House for up to three months for free of Cost and allotment of single bedroom quarters on spot allotment basis subject to the availability.
- **Medical facility:** Faculty members are entitled to medical attendance and treatment including reimbursement of medical expenses incurred on self and dependants as provided for in the Statutes/Medical Attendance Rules of IIT Mandi.
- **Contributory Pension Scheme:** The "New Pension System" will be applicable.

**Reservation:** Without any compromise on qualification, experience and competence, reservation as per Government of India (GoI) rules will be applicable. ***Necessary certificate must be enclosed with the application form.***

**Miscellaneous:**
- Candidates employed in Government and Semi Government Organizations, Public Undertakings, University and Educational Institutions must apply through their present employers. If they anticipate unavoidable delay in their applications being forwarded through proper channel, they may submit advance copies of their applications directly to the Registrar, IIT Mandi.
- The Institute reserves the right to fill or not fill any or all the posts advertised.
- The Institute reserves the right to restrict the number of candidates for interview to a reasonable limit on the basic of qualifications and experience higher than the minimum prescribed in the advertisement and other academic achievements.
- The invitation to candidates for interview merely indicates that it is felt that he/she with others may be suitable for the post and conveys no assurance whatsoever that he/she will be recommended or selected or his/her conditions specified in the application will be accepted.
- The Institute reserves the right to screen and call only such candidates as are found primefacie suitable for being considered by the selection committee. Thus, just fulfilling the prescribed conditions would not entitle one to be called for interview.
- No correspondence whatsoever will be entertained from candidate regarding reason for not being called for interview/outcome of interview.
- The Institute may consider candidates whose areas of specialization lie outside those stated herein, provided; these persons have an outstanding record.
- Candidates who are interviewed for one post but not found suitable may be offered a lower

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post if found suitable for that.

- Outstation candidates called for personal interview will be paid economy airfare by the shortest route booked by **the three Authorized Travel Agents.**
- Candidates abroad (and candidates in India for exceptional reasons) who are unable to attend in person will be interviewed by electronic means/videoconference, etc. In such cases, the Institute may decide to offer a contract position initially.
- The candidate is responsible for the correctness of the information provided in the application. If it is found at a later date that any information given in the application is incorrect/false the candidature/appointment is liable to be cancelled/terminated.
- Hard copy submission is not required, until and unless specifically demanded.

All posts are tenable at Kamand, District Mandi, Himachal Pradesh, India. For any queries, please contact:

**Faculty Recruitment**

Indian Institute of Technology Mandi Kamand 175075, Himachal
Pradesh, India Email: facultyrecruit@iitmandi.ac.in

For queries related to technical issue, kindly e-mail at techhelp@iitmandi.ac.in