Department of Metallurgical Engineering and Materials Science
Indian Institute of Technology Indore

Advertisement for Admission to Ph.D. Program

IITI/Acad/PhD Admissions/2025-26   **October 10, 2025**

IIT Indore invites applications from highly motivated and research-oriented students for admission to the Ph.D. Program in the **Department of Metallurgical Engineering and Materials Science** under the following research areas:

Materials Science	Metallurgical Engineering
• Energy Storage Materials • Energy Conversion materials • Nanomaterials Synthesis and Processing • Environmental and Functional Materials • Soft Materials • Thin Films and Electronic Devices • Electrocatalysis (HER, OER, CO_2RR) • Superconductivity • Computational Modeling and Simulations	• Mechanical Metallurgy • Physical Metallurgy • Powder Metallurgy • Corrosion and Surface Engineering • Thermodynamics and Diffusion kinetics • Recycling of Metallic Waste/ E-waste • Welding Engineering and Additive Manufacturing • Alloy Designing

Minimum Educational Qualifications (MEQs) and Qualifying Examination:

Minimum Educational Qualifications (MEQs) and Qualifying Examination (QE) for Indian applicants	Minimum Educational Qualifications (MEQs) and Qualifying Examination (QE) for International applicants
Masters' degree (M.Tech. or M.E. or MS) in *Metallurgy/ Materials Science and Engineering/ Mechanical/ Manufacturing/ Production Engineering/ Nanotechnology/ Engineering Science/ Engineering Physics/Ceramics Engineering/ Electronics/ Chemical Engineering/Energy Science and Engineering, or related discipline* (with CGPA/ CPI/ Percentage marks as elaborated below) **AND** GATE qualified. **OR** B.E./ B.Tech. degree in *Metallurgy/ Materials Science and Engineering/ Mechanical/ Manufacturing/ Production Engineering/ Nanotechnology/ Engineering Science/ Engineering Physics/Ceramics Engineering/ Electronics/ Chemical Engineering/Energy Science and Engineering, or related discipline* (with CGPA/ CPI/ Percentage marks as elaborated below) **AND** GATE qualified with valid score card. **OR**	**MEQ:** Masters' degree in the **relevant department** (with first **division as defined by the awarding Institute/ University)** **QE:** Valid TOEFL/IELTS OR equivalent qualification

Masters' degree (M.Sc.) in *Chemistry/ Physics/ Materials Science/ Electronics/ Nanoscience and Technology/Forensic Science or related discipline* (with CGPA/ CPI/ Percentage marks as elaborated below) **AND** either GATE qualified with a valid score card or valid UGC-JRF/CSIR-JRF/DST Inspire fellowship/other equivalent Fellowship or UGC-NET (LS) / CSIR-NET (LS) qualified	

GATE is not compulsory for DF / IS / CT / SW category

The minimum requirement of CGPA/ CPI/ Percentage marks in the qualifying exam is elaborated below:
For UR/EWS/OBC(NCL) category:
- A minimum of 60% marks in aggregate, OR
- A First class as specified by the university, OR
- A minimum Cumulative Grade Point Average (CGPA) / Cumulative Performance Index (CPI) of 6.0 on a scale of 0 – 10, OR
- An equivalent to 6.0 CGPA/ CPI on other corresponding proportional requirements when the scales are other than 0 – 10.

For SC/ST/PwD category:
- A minimum of 55% marks in aggregate, OR
- A First class as specified by the university, OR
- A minimum Cumulative Grade Point Average (CGPA) / Cumulative Performance Index (CPI) of 5.5 on a scale of 0 – 10, OR
- An equivalent to 5.5 CGPA/ CPI on other corresponding proportional requirements when the scales are other than 0 – 10.

Admission Categories:

TA (Teaching Assistantship): Institute Teaching Assistantship with scholarship as per MHRD guidelines.

FA (Fellowship Awardee): Fellowship Awardees from the funding agencies such as CSIR, UGC, NBHM, DST etc., OR JRF/SRF project staff (as per academic guidelines of the institute).

SW (Sponsored WITHOUT Institute scholarship): For applicants sponsored by a highly reputed R & D organization or Industry.

IS (Institute staff): Only for regular staff members of IIT Indore (on Part time basis).

DF (Defence forces): Serving defense forces personnel WITHOUT any scholarship from the institute.

CT (College teacher): Permanent Employee of the sponsoring College/Institute/University WITHOUT any scholarship from the institute.

Time Schedule of PhD admission:

Cut-off date of online application through https://academic.iiti.ac.in:8443/nregistration.jsp (for both National and International applicants)	**October 30, 2025**
Tentative date written test and interview (in-person)	**November 12 and 13, 2025**

About the Department of Metallurgical Engineering and Materials Science (MEMS):

The Department of MEMS has been functioning as a full-fledged department since 2016. The department's emphasis is to promote multidisciplinary research to find sustainable solutions to real-world problems through its cutting-edge research on all materials science and engineering frontiers. Currently, four academic programs are running in the department, namely, B.Tech. in MEMS, M.Tech. in Materials Science and Engineering, & M.Tech. in Metallurgical Engineering, and PhD. The department is actively engaged in the forefront areas of materials research and metallurgy to contribute toward new technological developments. The following are the main research domains in the department for PhD students:

- Alloy design, development and deformation
- Electronic and Photonic Materials
- Energy and Environmental Materials
- Materials Degradation & Surface Engineering
- Nanomaterials & Soft Materials
- Strategic Materials

To support the above research activity, the Department of MEMS houses several state-of-the-art processing and characterization facilities (for details, please visit the department webpage: https://mems.iiti.ac.in/resources).

Candidates are advised to visit http://mems.iiti.ac.in/Faculty.html to learn more about the research areas of the faculty members. Candidates can also search for faculty details using the following links.

Faculty	Google Scholar Link/Webpage
Prof. Abhijit Ghosh	https://scholar.google.co.in/citations?user=P9nZOBsAAAAJ&hl=en
Prof. Ajay Kumar Kushwaha	https://iiti.ac.in/people/~ajaykk/
Prof. Chandan Halder	https://scholar.google.com/citations?user=Jc4fgVQAAAAJ&hl=en&oi=sra
Prof. Dhirendra K. Rai	http://people.iiti.ac.in/~dkr/
Prof. Dudekula Altaf Basha	https://scholar.google.com/citations?user=KQosI6YAAAAJ&hl=en
Prof. Eswara P. Korrimilli	https://sites.google.com/view/eswarprasad/home
Prof. Hemant Borkar	https://iiti.irins.org/profile/93801
Prof. Jayaprakash Murugesan	https://scholar.google.com/citations?user=QpLQQqsAAAAJ&hl=en&oi=sra
Prof. Khushubo Devi	https://scholar.google.com/citations?user=sCL9Zl4AAAAJ&hl=en
Prof. Mrigendra Dubey	https://drdubey.wixsite.com/iiti

Prof. Nisheeth Prasad	https://sites.google.com/iiti.ac.in/nisheeth/about-me?pli=1
Prof. Parasharam M. Shirage	https://iiti.ac.in/people/~pmshirage/
Prof. Ram Sajeevan Maurya	https://scholar.google.com/citations?hl=en&user=6f8zrTcAAAAJ&view_op=list_works&sortby=pubdate
Prof. Ranjith Kumar Poobalan	https://scholar.google.co.in/citations?user=iTe5x74AAAAJ&hl=en
Prof. Rupesh Shivaji Devan	https://rupesh76.wixsite.com/rupesh
Prof. Santosh S. Hosmani	https://sites.google.com/site/santoshhosa/
Prof. Sunil Kumar	https://iiti.ac.in/people/~sunil/
Prof. Sumanta Samal	https://iiti.ac.in/people/~sumanta/index.html
Prof. K. V. Vamsi	https://kvvamsi20.wixsite.com/vamsi
Prof. Vinod Kumar	https://www.iiti.ac.in/people/~vkt/
Prof. Vivek Verma	https://scholar.google.com/citations?user=ElT_W2YAAAAJ&hl=en&oi=sra

Instructions

1. All eligible candidates, fulfilling the minimum eligibility criteria, must apply online through the website (http://academic.iiti.ac.in:8080/nregistration.jsp).

2. After applying online, the applicants should take a printout of the application form and sign the same. The scanned copy of the signed application form and the supporting documents should be sent to Convener, DPGC, at e-mail id: dpgcmems@iiti.ac.in as a single pdf file attachment, at the latest by **one day before the interview date**.

a) Original documents will be verified at the time of admission as per Institute rules.

b) Candidates must arrange recommendation letters from at least two referees. Referees shall e-mail the reference letters directly to dpgcmems@iiti.ac.in **one day before the date of the interview.**

c) Application Fee: Please refer to the main page on our academic portal link- https://academic.iiti.ac.in/phdadvt.php

3. **Please don't send any form or documents by post.**

4. The interview call letter will be shared only with the shortlisted candidates.

5. No e-mail or communication, in any form, regarding the change of interview date, time, etc., will be entertained.

6. FA candidates are encouraged to apply.

7. Mere fulfillment of the minimum eligibility criterion does not entitle anyone to get selected in PhD program.