

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

Advertisement for Admission to Ph.D. Program

IITI/Acad/PhD Admissions/2023-24

October 05, 2023

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:

<ul style="list-style-type: none"> • Energy Storage Materials • Energy Conversion materials • Nanomaterials Synthesis and Processing • Environmental and Functional Materials • Soft Materials • Thin Films and Electronic Devices 	<ul style="list-style-type: none"> • Mechanical Metallurgy • Physical Metallurgy • Powder Metallurgy • Corrosion and Surface Science • Computational Metallurgy and Materials • Recycling of Metallic Waste/ E-waste
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Minimum Educational Qualifications (MEQs) and Qualifying Examination (QE) for Indian applicants	Minimum Educational Qualifications (MEQs) and Qualifying Examination (QE) for International applicants
<p><u>Masters' degree</u> (M.Tech. or M.E. or MS) in <i>Metallurgy/ Materials Science and Engineering/ Mechanical/ Manufacturing/ Production Engineering/ Nanotechnology/ Engineering Science/ Engineering Physics/Ceramics Engineering/ Electronics/ Chemical Engineering/Energy Science and Engineering</i> (with first division as defined by the awarding Institute/ University) AND GATE qualified OR</p> <p><u>B.E./ B.Tech. degree</u> in <i>Metallurgy/ Materials Science and Engineering/ Mechanical/ Manufacturing/ Production Engineering/ Nanotechnology/ Engineering Science/ Engineering Physics/Ceramics Engineering/ Electronics/ Chemical Engineering/Energy Science and Engineering</i> (with first division as defined by the awarding Institute/ University) AND GATE qualified with a valid score card OR</p> <p><u>Master degree</u> (M.Sc.) in <i>Chemistry/ Physics/ Materials Science/ Electronics/ Nanoscience and Technology/Forensic Science</i> (with first division as defined by the awarding Institute/ University) AND GATE qualified with a valid score card OR valid UGC-JRF/CSIR-JRF/DST Inspire fellowship/other equivalent Fellowship</p>	<p>MEQ: Masters' degree in the relevant Department (with first division as defined by the awarding Institute/ University)</p> <p>QE: Valid TOEFL/IELTS OR equivalent qualification</p>
GATE is not compulsory for DF / IS / CT / SW category	

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 from a highly reputed R & D organization or Industry.

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

DF (Defense forces): Serving personnel of defense forces 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 31, 2023
Tentative date written test and interview (in-person)	3rd week of November (preferably first working day)

(Please refer to the main page on our academic portal Link-<https://academic.iiti.ac.in/phdadvt.php> for more details)

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 emphasis of the department is to promote multidisciplinary research for finding sustainable solutions to the real-world problem through its cutting-edge research on all the frontiers of materials science and engineering. At present, there are four academic programs 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. There are following identified research domains in the department of MEMS 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

Several sophisticated instruments, including state of art facilities are available in the department to cater the research need our students. Fifty-three (53) PhD students have been awarded PhD degree from the department with average time period of completion of 4 to 5 years. There are more than 100

research papers per year in the department of MEMS. At present, there are 27 ongoing research projects of worth approx. 6 Cr running in the department.

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 faculty details using following links.

Faculty	Google Scholar Link/Webpage
Dr. Abhijit Ghosh	https://scholar.google.co.in/citations?user=P9nZOBsAAAAJ&hl=en
Dr. Ajay Kumar Kushwaha	https://iiti.ac.in/people/~ajaykk/
Dr. Chandan Halder	https://scholar.google.com/citations?user=Jc4fgVQAAAAJ&hl=en&oi=sra
Dr. Dharendra K. Rai	http://people.iiti.ac.in/~dkr/
Dr. Dudekula Altaf Basha	https://scholar.google.com/citations?user=KQosI6YAAAAJ&hl=en
Dr. Eswara P. Korrimilli	https://sites.google.com/view/eswarprasad/home
Dr. Hemant Borkar	https://iiti.irins.org/profile/93801
Dr. Jayaprakash Murugesan	https://scholar.google.com/citations?user=OpLQQqsAAAAJ&hl=en&oi=sra
Dr. Mrigendra Dubey	https://drdubey.wixsite.com/iiti
Dr. Nisheeth Prasad	https://sites.google.com/iiti.ac.in/nisheeth/about-me?pli=1
Prof. Parasharam M. Shirage	https://iiti.ac.in/people/~pmsirage/
Dr. Ram Sajeevan Maurya	https://scholar.google.com/citations?hl=en&user=6f8zrTcAAAAJ&view_op=list_works&sortby=pubdate
Dr. Rupesh Shivaji Devan	https://rupesh76.wixsite.com/rupesh
Dr. Santosh S. Hosmani	https://sites.google.com/site/santoshhosa/
Dr. Sunil Kumar	https://iiti.ac.in/people/~sunil/
Dr. Sumanta Samal	https://iiti.ac.in/people/~sumanta/index.html
Dr. K. V. Vamsi	https://kvvamsi20.wixsite.com/vamsi
Dr. Vinod Kumar	https://www.iiti.ac.in/people/~vkt/

Instructions

- All eligible candidates, fulfilling the minimum eligibility criteria, must apply online through the website (<http://academic.iiti.ac.in:8080/nregistration.jsp>).
- After applying online, the applicants should take a printout of the application form and sign the same. The scan copy of the signed application form along with the supporting documents should be sent by the applicants to dpgcmems@iiti.ac.in latest by **one day before the date of interview**.
 - Original documents will be verified at the time of admission as per Institute rule.
 - For SW candidates - No Objection Certificate, Experience Certificate, Salary slips of last three months and Employer's PAN card must be submitted.
 - 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 interview**.
 - Application Fee: Please, refer to main page on our academic portal link- <https://academic.iiti.ac.in/phdadvt.php>
- Please don't send any form or documents by post.**
- Interview call letter will be shared only to the shortlisted candidates.
- No emails or communication, in any form, regarding change of interview date, time etc. will be entertained.
- FA candidates are encouraged to apply.
- Mere fulfillment of the minimum eligibility criterion does not entitle anyone for selection into the PhD program.