

**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

August 21, 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:

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| <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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ONLY FOR FELLOWSHIP AWARDEE (UGC/CSIR-JRF qualification, DST Inspire **OR** Equivalent Fellowship)

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 |
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| <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)</p> <p>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)</p> <p>OR</p> <p>Masters' degree (M.Sc.) in <i>Chemistry/ Physics/ Materials Science/ Electronics/ Nanoscience and Technology</i> (with first division as defined by the awarding Institute/ University)</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> |
| AND | |
| UGC/CSIR-JRF qualification, DST Inspire OR Equivalent Fellowship. | |

Time Schedule of PhD admission:

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| Cut-off date of online application through https://academic.iiti.ac.in:8443/nregistration.jsp (for both National and International applicants) | September 03, 2023 |
| Date of offline (in-person) written test and interview (for both National and International applicants) | September 13, 2023 |

(Please refer to the main page on our academic portal [Link-https://academic.iiti.ac.in/phdadvt.php](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
- Strategic Materials
- Energy and Environmental Materials
- Electronic and Photonic Materials
- Nanomaterials & Soft Materials
- Materials degradation & Surface Engineering

Several sophisticated instruments, including state of art facilities are available in the department to cater the research need our students. Forty-four (44) 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://kushwaha09.wixsite.com/ajay |
| 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 |

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| Dr. Jayaprakash Murugesan | https://scholar.google.com/citations?user=QpLQQqsAAAAJ&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/~pmshirage/ |
| 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://sites.google.com/view/kvvamsi/home |
| Dr. Vinod Kumar | https://www.iiti.ac.in/people/~vkt/ |

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 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**.
 - a) Original documents will be verified at the time of admission as per Institute rule.
 - 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 interview**.
 - c) Application Fee: Please, refer to 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. Interview call letter will be shared only to the shortlisted candidates.
5. No emails or communication, in any form, regarding 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 for selection into the PhD program.