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# 4 weeks Internship Opportunity at IIT Indore on MATERIALS DEVELOPMENT FOR HIGH TEMPERATURE AND HARSH ENVIRONMENT APPLICATIONS

18th June - 15th July, 2023

**Venue: IIT Indore** 

(Event under Accelerate Vigyan –Vritika Program, SERB) ORGANIZED BY

Department of Metallurgy Engineering & Materials Science, Indian Institute of Technology Indore

Indore – 453552, India.

# ABOUT THE PROGRAM

The objective of this high-end workshop is to enhance the knowledge of young researchers in the area of materials development for high temperature and harsh environment applications. To provide hands-on training in developing advanced high-temperature alloys like advanced Ti alloys, High entropy alloys, super alloys and etc., using advanced casting / processing techniques. To provide hands-on training related to the evaluation of mechanical properties of advanced alloys at high temperatures. Also, hands-on training to analyze fracture surfaces and for using advanced characterization techniques like SEM, TEM, and specimen preparation. Case studies on the development of high-temperature materials would be discussed to make the student understand the need of the development of materials for high-temperature application.

## WHO CAN APPLY ?

- Highly motivated PG / PhD students from any recognized university from India interested to enhance their knowledge in the area of advanced materials, materials development for high temperature and harsh environment, materials processing and characterization, alloy development and mechanical testing (preferably from mechanical, material, manufacturing, production, automotive / aerospace/ applied mechanics/ physics or equivalent branches of engineering and science) are eligible to apply.
- Number of participants are limited.
- There is no registration fee for the registration and participation.
- For outstation students to and fro train / bus fare (sleeper class) and accommodation will be provided at IITI hostel free of cost.

<u>How to apply:</u> Interested and eligible students can submit the online application form given in the link below.

https://docs.google.com/forms/d/1UoZsjLt9XwqPmHCcf2yfwn7EnvopdWXwHxrHrXaR3JU/edit Last date for submitting application : 20.05.2023 (seats are limited, please submit at the earliest).

<u>Course Fee:</u> The program is under Accelerate Vigyan Virtika:, supported by SERB, there is <u>no fee</u> for the participating students.

Certificate: After successful completion all the registered participants certificate will be issued

### ABOUT IIT INDORE

Indian Institute of Technology Indore (IIT Indore), is an institute of national importance established by the Government of India in 2009. IIT Indore campus, spread over an area of around 500 acre. IIT Indore is equipped with world class research infrastructure, with renewed faculty members. The department of Metallurgy Engineering and Materials Science (MEMS) is functioning full fledged from 2016. The emphasis of the department is to promote multidisciplinary research to find amicable solutions for the real- world problems and work on the cutting-edge research problems that benefits society related to materials.

### **COURSE CO-ORDINATOR**

Dr. Jayaprakash Murugesan

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