

INDIAN INSTITUTE OF TECHNOLOGY INDORE

Discipline of Metallurgy Engineering and Materials Science



Organizes

TEQIP SPONSERED 5-DAYS SHORT TERM COURSE ON

Advances in Fatigue, Creep, Fracture and Failure Analysis of Materials 07th December - 11th December, 2020

Through On-line mode

ABOUT THE COURSE

This course is aimed to enhance the knowledge in the areas of failure of engineering structures, failure mechanisms, failure analysis and failure prevention. Lectures would be delivered by academic and industrial experts on various aspects of failure such as fundamental sources of failure of mechanical components, industrial engineering tools relevant to failure and failure analysis, general procedure of failure analysis, fracture basic, mode of fracture, use of fracture mechanics and fracture toughness principles in failure

Also topics related to various recent trends in failure mechanisms like fatigue, creep, wear and corrosion would be discussed in detail. Advanced tools for failure analysis like image analyzer, XRD, SEM, TEM and etc., would also be discussed in detail.

Also topics related to recent advances in fracture and fatigue of engineering materials will be discussed. Practical demonstration / experimental results related to fracture and fatigue will be shown and discussed.



Topics of discussion will include, but not limited to:

- 1. Mechanical behavior of advanced materials
- 2. Advances in fracture and fracture mechanics
- 3. Topics on fatigue, creep, wear and corrosion failures
- 4. Advances in failure analysis and prevention
- 5. Advanced materials characterization
- ❖ Faculties, Scientists and Industrial experts from renowned institutions of India will be invited for discussing on these topics.

Target Participants

• This course is tailor made for the faculty members and scientists from TEQIP institutions, who wants to gain knowledge and expertise in the field of mechanical behavior of materials, fracture, fracture mechanics, various failure

mechanisms, failure analysis, failure prevention and advanced materials characterization form any academic back ground. **Registration process**

Interested participants need to submit online form mentioned in link below

https://docs.google.com/forms/d/e/1FAIpOLSelrxdekvOKOh26XsoodMko-xUa98YKZBLL3ZnTU1E XCS3ug/ viewform?usp=pp_url

Or submit the registration form as per attached format through E-mail to jayaprakash@iiti.ac.in.

Number of participants are limited to 50 on first come first basis.

Registration Fee:

No registration fee for participants from TEQIP institutes

Participants from non-TEQIP institutes:

Rs. 3,000 (for industry personnel); Rs. 1,500 (for faculty / scientist); Rs. 500 (for student)

Mode of Payment: Through Online Payment using following link: http://www.iiti.ac.in/page/e-payments

Last date for receipt of registration: December 4, 2020

Certificate: Participants who successfully complete the course will be awarded with a certificate

COURSE CO-ORDINATOR

Dr. Jayaprakash Murugesan, Assistant Professor, Discipline of Metallurgy Engineering and Materials Science, Indian Institute of Technology Indore. Indore - 453552. Email-id: jayaprakash@iiti.ac.in, Mobile: +91-9755611891

REGISTRATION FORM



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ORGANIZED BY

Discipline of Metallurgy Engineering & Materials Science, Indian Institute of Technology Indore Indore – 453552, India.

1	Name of the applicant	
2	Name of the college/institution	
3	Address	
4	E- mail	
5	Contact Number	
6	Category	Faculty / Scientist/ Industry/Student
7	Are you from TEQIP Affiliated Institute	Yes / No
8	Are you TEQIP Faculty	Yes / No

(Please enclose copy of your Institute / organization ID Card)

Signature of the applicant with date: