

Short term online course on
LASER MICRO MANUFACTURING, SURFACE & MATERIAL PROCESSING
15th-17th July 2020



For Faculties, Engineers, Scientist and Students

Coordinators

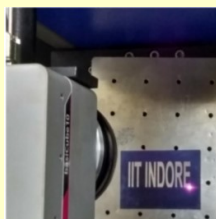
Dr. Yuvraj K Madhukar & Dr. I.A. Palani

Objective of this course

Laser based surface Micro- and Nano- fabrication is considered to be a route toward next-generation mass production for various applications ranging from consumer electronics to wide variety of bio-medical devices. Conventional Laser's are well known for their extensive application in industries, to carry out marking, drilling, annealing, and surface modification etc. However owing to the demand in fabricating feature size devices down to submicron

Course contents:

- ◆ Fundamentals of light sources & the Lasers
- ◆ Laser material interaction with metal, semiconductor and insulator
- ◆ Ultra-short laser pulse interaction
- ◆ Laser Additive Manufacturing
- ◆ Laser Assisted micro manufacturing
- ◆ Laser assisted surface processing
- ◆ Laser Annealing
- ◆ Laser Texturing
- ◆ Laser Nitriding
- ◆ Laser Shock peening



Resource experts

Lectures will be handled by the following experts

Dr. Yuvraj Madhukar

Assistant Professor, Mechanical Engineering Discipline, IIT Indore

Expertise: Laser Material Processing, Additive Manufacturing, Manufacturing automation and control



Dr. I. A. Palani,

Associate Professor, Mechanical Engineering Discipline, IIT Indore

Expertise: Laser Micro-Manufacturing and surface processing.



Dr. C.P. Paul

Head, Laser Additive manufacturing lab,

Raja Ramanna Centre for Advance Technology (RRCAT)

Under Department of Atomic Energy

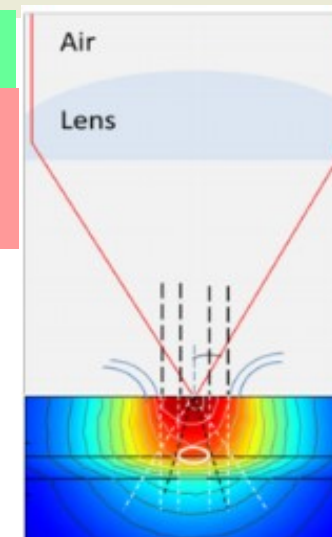
Expertise: Laser Additive Manufacturing



Dr. M, Gopinath

Assistant Professor, Department of Mechanical and Aerospace Engineering

Expertise: Laser welding and Additive Manufacturing



Simulation Model



Course Fee & Details

RS 750 (STUDENTS)

RS 1250 (ACADEMIC INSTITUTIONS)

RS 2000 (INDUSTRY & RESEARCH ORGANIZATION)

The Registration fee is merely for the participation, interaction with the experts and a participation certificate.

An email with online transfer receipt should be mailed to the coordinator by 10th July 2020.

(yuvrajmadhukar@iiti.ac.in / palaniia@iiti.ac.in)(e certificate will be provided)

MODE OF PAYMENT:

Name of the Beneficiary : Registrar, Indian Institute of Technology Indore

Name of Bank : Canara Bank

Branch Code : IIT Indore, Simrol Campus

Account No. : 1476101027440

Bank MICR Code : 452015003

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