

Announcement and invitation of
WORKSHOP ON
SPRAYS AND COMBUSTION DIAGNOSTICS

at
IIT Indore

27th – 30th June, 2019

Under the aegis of
Scheme for Promotion of Academic Research and Collaboration (SPARC)



Sponsored by
MHRD, Government of India.

Course Coordinator(s)

Dr. Devendra Deshmukh Dr. Yogeshwar Nath Mishra
Indian Institute of Technology Indore University of Erlangen-Nuremberg, Germany

Venue

Discipline of Mechanical Engineering
INDIAN INSTITUTE OF TECHNOLOGY INDORE
Khandwa Road, Simrol,
Indore, 453 552

For Correspondence:
Dr. Devendra Deshmukh

Associate Professor, Discipline of Mechanical Engineering
INDIAN INSTITUTE OF TECHNOLOGY-INDORE
Khandwa Road, Simrol, Indore, 453 552
Phone: (07324) 306 507 (Office), Fax: (07324) 240761
Email: dldeshmukh@iiti.ac.in, Mobile: +91 - 9407156827

Preamble:

Atomizing sprays and combustion devices are central to several energy, power and propulsion areas. The analytical and experimental knowledge in these areas have significantly advanced. Because of their non-intrusiveness, laser diagnostics techniques have become essential tool to investigate various processes and characteristics of sprays and combustion. Since there are no formal syllabi related to laser diagnostics in the undergraduate and post graduate curriculum of several institutions, this workshop is meant to provide flare of basic and advanced measurement techniques in a formal way. In this, basic principles and experimental strategies for laser-based diagnostics would be covered in detail. The efforts would be made to arrange demonstrations and provide hands on experience to develop diagnostic systems in the laboratory. This course would be useful to those who have interest in pursuing systematic learning and research in sprays and combustion related areas. The participants on attending this course are expected to generate adequate confidence, hands-on experience and ideas to initiate and pursue combustion research at their respective organizations and undertake projects of significance on their topics of interest.

The **objectives** of this workshop are:

- To provide basic to advanced knowledge in diagnostics to potential users and researchers.
- To train participants about the application of laser diagnostics suitable for their research.

Course Content

Lectures will cover Spray and combustion characteristics, Laser diagnostics tools, Fundamentals of Imaging, Shadowgraphy, Schlieren, PDA, ILIDS, Challenges for optical measurements in sprays, SLIPI-based techniques, Spray characterization using SLIPI, Laser Diagnostics in Combustion, Structured Illumination in Flames, trends in sprays and combustion diagnostics.

Laboratory experiments will be conducted for the relevant laser diagnostics techniques.

Who should attend?

The students and faculty members from academic and research institutions and young professionals from industries who either work or have interest in analysis and measurements relating to spray and combustion should benefit from this workshop.

Registration

The participants can fill the attached registration form with proper nomination and send to the course coordinator. The registration form can also be accessed online from <http://www.iiti.ac.in> or "**Registration Form**". The participants are requested to fill in the prescribed **Registration Form** online or send a scanned copy of the duly filled in form on email to dldeshmukh@iiti.ac.in at the earliest but not later than **June 20, 2019**.

Registration fee for participants is given below:

- Rs. 1,500* (for students)
- Rs. 2,000* (for faculty members)
- Rs. 3,000* (for industry personnel)

*Including service tax @ 18%

MODE OF PAYMENT: Through demand draft drawn in favor of Registrar, IIT Indore or through online payment/ bank transfer.

Bank Name: Canara bank
Branch: IIT Indore, Khandwa Road, Simrol, Indore
Account number: 1476101027440
IFS Code: CNRB0006223

The course fee includes study material, breakfast, lunch, and tea for the entire course duration.

Accommodation

Accommodation can be arranged, if required, in hostel@Rs.250 per day subject to the availability. Limited seats are available. Participants will be selected on first-come-first serve basis. Please send request for hostel accommodation to the course coordinator

WORKSHOP ON
SPRAYS AND COMBUSTION DIAGNOSTICS

INDIAN INSTITUTE OF TECHNOLOGY INDORE

27 – 30 June, 2019

Registration Form

Name: _____

Designation: _____

Qualification: _____

Mailing Address: _____

(Office Address)

Phone: _____

Fax: _____

Mobile: _____

Email*: _____

(* required for intimating selection)

Accommodation Required: Yes / No

Payment details: Cheque / Demand Draft no. _____ Dated _____

Bank _____ Amount in Rs. _____ Drawn at _____

Date: _____ Signature of the Applicant _____

For Correspondence:

Dr. Devendra Deshmukh

Associate Professor, Discipline of Mechanical Engineering

INDIAN INSTITUTE OF TECHNOLOGY-INDORE

Khandwa Road, Simrol, Indore, 453 552

Phone: (07324) 306 507 (Office), Fax: (07324) 240761

Email: dldeshmukh@iiti.ac.in, Mobile: +91 - 9407156827