# A Short Term Course under Continuing Education Programme (CEP)

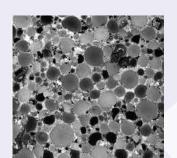
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Recent Trends in Friction Stir Processing Technique (RTFSP201)

December 18 to December 20, 2019

## Target Audience:

The course is suitable for UG/PG/Ph.D. students, Scientists in RLD organizations, Faculty Members, and Industries professionals and those who are interested in the area of processing of advanced materials, development of smart materials/structures and solid state processing based hybrid additive (3D printing) manufacturing.

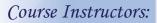


Source: ASM handbook Aluminum Science and Technology, Volume 2A

Development of Smart Structures/Materials Hybrid additive manufacturing

> Physics based modeling

Course registration for RTFSP2019 will close at 5 PM on October 19





Imam et. al., 2017 (IJAMT)

Imam et al., 2019

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Organized by

Department of Mechanical Engineering

Indian Institute of Technology Patna

https://www.iitp.ac.in/

#### About IIT Patna

IIT Patna is an institute of National importance by an Act of the Indian Parliament in 2008. It is ranked 108 among BRICS nations by the QS World University Rankings of 2018. It is ranked 22 among engineering colleges in India by the National Institutional Ranking Framework in 2019. IIT Patna's campus is located at Bihta, 35 km from Patna and 20 km from Ara, at a 501 acres site. The nearest railway station is Bihta, 2 km from the campus. IIT Patna has good road connectivity to and from Patna and Ara. Regular bus services have been provided by the Govt. of Bihar from Gandhi Maidan, Patna to IIT Patna campus. The nearest airport to reach IIT Patna campus is Jai Prakash Narayan Domestic Airport, Patna, which is located 5 km southwest of Patna.

### Course Highlights

- Introduction to Friction stir processing technique
- Theory of plasticity in deformed metallic materials
- Structure-property correlation of deformed materials
- Innovation in smart structures/materials
- Electron backscattered diffraction technique
- Finite element modeling approaches
- Multiphase modeling in dissimilar materials

Note a maximum of 60 participants (excluding Faculty) on the basis of first registered will be allowed to attend the course (40 from students + 20 from RLD labs/Industries)

### For IIT Patna students:

Course registration is mandatory at the registration fees of 700 INR for Phd students and 400 INR for UG/PG students.

### How to apply

Please make the payment first and then fill up the course registration form and then emailed the scanned copy of the registration form to indrajeet@iitp.ac.in and cc to murshid@iitp.ac.in

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Course	Registr	aiion

A Short Term Cours on

Recent Trends in Friction Stir Processing Technique (RTFSP2019)

December 18 -to December 20, 2018

Date of Birth (DD/MM/YYYY):
Sex (M/F):
Designation:
Organization:
Address for Correspondence:
Email:
Phone/Mobile:
Highest Academic Qualification:
Specialization:
Reserach Interests:
Accomodation Required (Y/N):
Payment Details: (Reference No., date of payment, amount, etc.,)
Date:
Place: Signature

Registration Fees

Name:

Industries sponrship use the below bank details

Faculty: 5000 INR

UG/PG students: 2000 INR

PhD students: 3000 INR

RSD labs/Industries: 7500 INR

The Participation fees for the Programmes will be accepted only through Demand Draft drawn in favour of "Indian Institute of Technology Patna" or e-transfer /RTGS/NEFT. Personal cheque will not be accepted in any case. Details for Online Payments through RTGS/NEFT or e-transfer: Bank Account No.: 30957551934

Bank Address: First Floor, Administrative

Building, IIT Patna, Amhara, Kanpa Road, PO-Bihta, Patna -801106

MICR Code: 801002005

Beneficiary: Indian Institute of Technology Patna

Bank Telephone: 0612-3028062

IFSC Code: SBIN0017164 Account Type: Savings A/c The Registration fees includes registration kits, entry to any sessions all day, course material and accomodation.



#### **A Short Term Course**

#### Under

### **Continuing Education Programme (CEP)**



On

Recent Trends in Friction Stir Processing Technique (RTFSP2019)

December 18 to December 20, 2019

Processing and Fabrication of Advanced Materials Research Group Welcome You.....

Course registration for RTFSP2019 will close at 5 PM on October 19

#### **Course Instructors**



Presently, Dr. Murshid Imam is working as an assistant professor in the department of mechanical engineering at IIT Patna. He obtained his Ph.D. from IIT Kharagpur. Before joining IIT Patna, he worked as a postdoctoral researcher (July 2014-April 2017) in the Joining and Welding Research Institute of Osaka University, Japan. Recently, he became the editor of the Journal High Temperature Materials and Processes (SCI Journal). His research collaboration includes the groups from the University of Manchester, UK & University of Surrey, UK (MHRD funded project under SPARC), Joining and Welding Research Institute (Osaka University, Japan), School of Materials Science and Engineering (Zhengzhou University, Zhengzhou, China), IIT BHU, and IIT Hyderabad, India. His research interests are in areas of Additive Manufacturing, Superplasticity, Friction stir processing/welding, and Finite Element Modeling of welding processes. For more details please visit the below link

 $\frac{https://www.iitp.ac.in/index.php?option=com\ content\&view=article\&id=2482\%3Adr-murshid-imam\&catid=25\&Itemid=99}{}$ 



Presently, Dr. Vikranth Racherla is working as an Associate Professor in the department of Mechanical Engineering at IIT Kharagpur. He obtained his Ph.D. from University of Pennsylvania, United States. His

Research interests are Friction Stir Welding and Processing, Optimization & Modeling of Manufacturing Processes, Mechanics of Composites, and Computational Weld Mechanics & Welding Technology. For more details please visit the below link

http://www.iitkgp.ac.in/department/ME/faculty/me-vikranth.racherla



Dr. Chinthapenta R Viswanath is an Assistant professor in the Department of Mechanical and Aerospace Engineering at IIT Hyderabad. He obtained his Ph.D. from Brown University and Postdoctoral from (ABAQUS-DSS) Dassault Simulia System, Providence-RI and IISc Bangalore. His research interest is in areas computational solid mechanics like void growth modeling, thermomechanical simulations of additive manufacturing processes, etc. For more details please visit the below link

https://www.iith.ac.in/~viswanath/ Organized by Department of Mechanical Engineering

