

Application Form for Workshop on

Advances in Surface Finishing Technologies with Special Reference to Abrasive Flow Machining

Department of Mechanical and Industrial Engineering, IIT Roorkee

February 19, 2012

(You may get this form photocopied or may download from www.iitr.ernet.in)

After completion, please mail to:
Dr. Vinod Kumar
Coordinator
Q.I.P. Centre, IIT Roorkee
Roorkee-247667 (Uttarakhand)
Phone: (01332) 285241 & 284341
Fax: (01332) 273560
Email: qip@iitr.ernet.in

Affix
Passport Size
Photograph

1. Name of applicant (in block letters): Ms./Mr.
2. Designation
3. Age (Years)
- 4a. Residential address with pin code

Tel:
Mobile:
4b. Official address with pin code
Phone (Off.)
Fax:
Email:

Fax:
Email:

- 4c. Name of the Institute where employed
- 4d. Name of the Department
5. Highest Academic Qualification
6. Branch of Specialization
7. Teaching Experience in Years
8. Only limited funds are available for payment of TA to selected participants. However, you may arrange your T.A. from your sponsoring institute. Please state if you can arrange T.A. expenses, if you are selected for the workshop: **Yes/No**

Date:

Signature of applicant

Note:

- (i) Application should reach QIP Office at the above address latest by **10th February, 2012**. Scanned copy may be sent by e-mail
- (ii) Please come to Roorkee to attend the workshop, only if you have received intimation.

SPONSORSHIP CERTIFICATE

- (a) The applicant will be permitted to participate in the above Workshop, if selected. Further, I have personally talked to the applicant and he/she seemed to be sure to attend it, in case the admission is offered to him/her.
- (b) Certified that this institute is recognized by AICTE.

Date:

Signature of Sponsoring Authority
(Principal/Director)

Seal of the Institution

QIP Workshop on

February 19, 2012

ADVANCES IN SURFACE FINISHING TECHNOLOGIES WITH SPECIAL REFERENCE TO ABRASIVE FLOW MACHINING

Being organized at and by
DEPARTMENT OF MECHANICAL AND INDUSTRIAL ENGINEERING

In association with

Q.I.P. CENTRE



INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
Roorkee – 247667, INDIA

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OBJECTIVE & SCOPE OF THE WORKSHOP

Finishing of a machined surface to meet its designed requirement has been one of the important activities in the manufacturing process. Finishing is a costly value addition phase in terms of sophistication required in the process and processing time required. With the increasing level of finish requirements in the sub-micron and nanometer specifications and increasing part complexities, the task of meeting the finishing standards has been continuously challenging. There have been several techniques to produce surfaces of required quality. The Abrasive Flow Machining (AFM) technology was conceived and developed basically to address the finishing problems associated with internal and external surfaces of objects having intricate geometries and easily inaccessible areas. Other common applications of AFM included – deburring, radiussing, removal of recast layers etc.

Over the years, the AFM process has undergone many developments in terms of tooling, media, and variants in order to enhance the performance of the process as well as to make the process more effective and competitive. The Mechanical and Industrial Engineering Department (MIED) of IIT Roorkee could also contribute significantly in the process of this development with the addition of few new variants of the basic AFM process through its sustained research endeavor. Thus, it was strongly felt that the experience and expertise gained in the area could be shared with the researchers and teachers in the field. Further, the industries involved in the area of material processing could certainly gain by exploring the state-of-the-art of the technologies through their participation in the Workshop.

COURSE CONTENTS:

1. Advances in Surface Finishing Technologies,
2. Abrasive Flow Machining (AFM) as an effective Technique for Surface Finishing,
3. Recent Developments in Different AFM Techniques for Precision Finishing of Surfaces,
4. Laboratory Demonstration of Surface Finishing through various modes of AFM.

ABOUT IIT ROORKEE

IIT Roorkee became the seventh IIT of the country when 21st September 2001 the prestigious University of Roorkee was converted into an IIT. Founded as Thomason College of Civil Engineering in 1847, this temple of learning, the oldest engineering institution in Asia and the first one in the then British Empire, is now 160 years old. The Institute offers 11 undergraduate courses in Engineering and Architecture and 51 postgraduate courses in different disciplines of Engineering, Architecture, Management and Sciences alongwith 5 Integrated Dual Degree, 3 Integrated M.Tech. and 3 Integrated M.Sc. programs. Ph.D. programs are conducted in all disciplines.

IIT Roorkee possesses a unique environment congenial for research and development activities and the faculty has expertise in almost all the major fields of engineering and sciences. The Institute has 18 academic departments, one academic center and 3 centers of excellence. Modern centralized facilities exist at the Institute, including a Computer Center, Information Super-Highway Center and Instrumentation Center. The Institute's Central Library and the libraries of several national institutes located at Roorkee provide priceless technical literature, seldom available at any other engineering center in the country.

ABOUT ROORKEE

Roorkee is a part of the State of Uttarakhand and is located at the foothills of Himalayas. Roorkee Railway Station is on the main line of Northern Railways having direct links to Delhi, Mumbai, Calcutta, Amritsar, Jodhpur and Shri Ganganagar. The place is also within easy reach by road from Delhi (200 km) and Chandigarh (180 km). It is located on Delhi – Haridwar and Delhi – Dehradun bus routes. Roorkee is ideally located near several tourist places, like Dehradun (70 km), Mussorie (100 km), Haridwar (32 km) and Rishikesh (50 km).

Roorkee is very pleasant in the second half of the February and, therefore, the participants are requested to come with light woolen clothes.