

## SCOPE OF THE WORKSHOP

Thinning and ovality in pipe bends are generally introduced during the bending process. Pipe bends are made with different angles of bends. The parameters that influence the stress distribution in pipe bends are pipe diameter, pipe thickness, pipe bend radius, pipe bend-angle, internal pressure, external pressure, forces in three mutually perpendicular directions, moments about three mutually perpendicular directions, elastic modulus, Poisson's ratio, weight of the pipe bend with contents and attachments, end effects, ovality, and thinning. At present the acceptability of shape irregularities in pipe bends is based on empirical methods. The scope of workshop is to explain various pipe bending processes, stresses induced through comprehensive lectures and demonstration to teachers, participating engineers, research scholars, and postgraduate students working in this area. Important topics covered will include the following:

- Industrial pipe bending methods.
- Practical defects in pipe bends.
- Stresses in pipe bends.
- Codes for pipe bends.
- FEM in pipe bends analysis.

## REGISTRATION

### Individual

Academic institutes: Rs.1500.

Industries and Govt. organization: Rs. 2000.

Students: Rs.1000.

The registration fee includes workshop kit, lunch and refreshments for both the days.

With a view to give individual attention to the participants and to make the program more effective, the number of participants is restricted to 40.

Accommodation for the participants may be arranged in the institute guest house/ hostels on request (on chargeable basis). Normally it will be a twin shared accommodation.

### Important dates

Completed registration forms accompanied by registration fee (in the form of DD/ multicity cheque) should reach the coordinator no later than 27 June 2013.

The selected candidates will be intimated by e-mail/ phone by 1 July 2013.

## REGISTRATION FORM

A Workshop on ENGINEERING PIPE BENDS

(under the self-financed category)

Name : \_\_\_\_\_

Designation: \_\_\_\_\_

Organization: \_\_\_\_\_

Official  
address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Mobile/ Telephone No.: \_\_\_\_\_

email: \_\_\_\_\_

Accommodation required (Yes/No) \_\_\_\_\_

Payment details

DD No.: \_\_\_\_\_

Date: \_\_\_\_\_ Rs.: \_\_\_\_\_

Signature of the Applicant:

Signature of Head of the Organisation/Section  
Demand Draft should be drawn in favour of *The Director, NIT Tiruchirappalli* payable at *Tiruchirappalli*.

**Send your filled in Registration form**

To

Prof. S. Shanmugam

Coordinator

Workshop on Engineering Pipe Bends

Department of Mechanical Engineering

National Institute of Technology

Tiruchirappalli-620015

Tamil Nadu

#### **THE DEPARTMENT**

The department of Mechanical Engineering was started in the year 1964 and now it offers undergraduate programme, two postgraduate programmes viz., Thermal Power Engineering and Industrial safety Engineering, and research programmes of M.S. and Ph.D in different fields of mechanical engineering.

#### **RESOURCE PERSONS**

Faculty of the department with large number of years of experience in research, laboratory developments and teaching are the main resource persons. They also include subject experts with wide industry and research experiences drawn from reputed organizations.

#### **COORDINATORS**

Professor S. Shanmugam Ph.D &  
Associate Professor AR. Veerappan Ph.D

Department of Mechanical Engineering  
National Institute of Technology  
Tiruchirappalli-620015

Tamilnadu

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Phone: 0431-250 3404/ 3416/ 3400

A workshop

on

### **ENGINEERING PIPE BENDS**

(Under the self-financed category)

12-13 July 2013



*Organized by*

**Department of Mechanical Engineering  
National Institute of Technology  
Tiruchirappalli-620015  
Tamil Nadu**