



One-day Workshop on Experimental methods in Stress Analysis and Fatigue failures

August 22, 2015

**Venue: Department of Mech. Engg.,
NIT Rourkela**

Concepts of stress analysis have been drastically changing day-by-day. Various techniques including non-destructive methods are coming into practice. Earlier UTM-based tests are augmented with other techniques like by using strain-gauges, photoelastic circular polariscope-based tests, brittle coatings, moiré films as well as holographic methods. These are grouped under two headings: whole field methods and local measurement methods. In whole field methods, entire object stress/strain data is obtained in one shot. Experimental stress analysis in general experimental methods are to be encouraged in graduate and post-graduate levels so that every student can perform at least one experiment on equipment in different manner for specific application. This one-day workshop has planned for this reason to give awareness of utilizing the equipment available at stress analysis laboratories. Further, fatigue and impact loads are the major causes of failure in several engineering components including heavy-duty rotors, structures and bridges. Causes of fatigue failure and their prevention is another important objective of this event. It is planned to arrange two guest lectures with one keynote speech on this day. Nevertheless, we cannot ignore such subjects in curriculum rather they should be improvised with modern contents. There will be a lab demonstration during the event, making the teachers to establish the lab from scratch.

Call for Posters

Students and research scholars may present posters relating to the failure of components and stress analysis related issues during the conference. The best posters will be given prizes.

Interested participants can send the filled-in details including name, address, contact e-mail, etc to:

The Convener,

Workshop on Experimental methods in Stress analysis and Fatigue failures

Dept. of Mechanical Engg.,

NIT Rourkela

Rourkela-769008

Email: srin07@yahoo.co.in

Accommodation

Accommodation (sharing type) for outstation participants can be arranged in NIT guest house on payment basis.

Registration

Spot registrations are allowed by paying nominal fee of Rs.500/- .

Important Dates

Last Date of receipt of posters: Aug-20, 2015

Intimation of Acceptance: Aug-21, 2015

Patron

Prof.S.K.Sarangi, Director, NIT Rourkela

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