

About the organizers

Tribology is the interdisciplinary science and technology of interacting surfaces in relative motion involving studies in the area of friction, wear and lubrication. Tribology Society of India (TSI), IndianOil Institute of Petroleum Management (IIPM), Gurgaon and Indian Oil Corporation Limited take a step so as to bring together academicians, tribologists, practicing engineers in design, operation and R&D professionals to share their knowledge and experiences in this field.

Tribology Society of India (TSI) came into existence in 1989. The society has its secretariat at IndianOil R&D Centre, Faridabad and is engaged in a variety of Training & Educational programmes. The society has over 1200 Life Members from Oil & Gas, Power, Steel, Cement, Industrial R&Ds and academia from all over the country. Besides it has about 25 members from abroad.

Indian Oil Corporation Limited (IndianOil) is India's largest commercial enterprise and the country's #1 company in Fortune's 'Global 500' listing. As India's flagship national oil company, it accounts for 47% petroleum products market share, 40.4% national refining capacity and 67% petroleum product pipeline capacity in India and a countrywide marketing network. Its world-class R&D Centre has won recognition for its pioneering work in lubricant formulations, refinery processes, pipeline transportation and alternative fuels. To seek growth beyond traditional areas of competence, IndianOil's business development efforts are now focused on vertical integration – both upwards into Oil exploration & production and downward into petrochemicals – besides diversification into gas marketing and globalization of downstream operations.

IndianOil Institute of Petroleum Management (IIPM) is a fully integrated residential campus for education and training, developed by Indian Oil Corporation Limited (IOCL) as a state-of-the-art resource for in-house programs. The academic block is equipped with classrooms and lecture halls, having latest facilities including audio-visual systems as well as a state of the

art Reference Library with more than 15000 Books and Journals. The residential block is furnished with modern living amenities and has in-house dining arrangement. The venue also offers recreational facilities for the participants including Swimming Pool [Please carry formal Swimming Costume], Gym, Walking Track etc.

Speakers for Technical Sessions

- Mr. C Mishra, Former GM, Tata Steel, Jamshedpur
- Prof. A Sethuramiah, Formerly at IIT, Delhi.
- Dr R T Mookken, GM, IOC R&D
- Prof. Satish V Kailas, IISc , Bangalore
- Mr. AK Mehta, ED TSI
- Mr. R Suresh, GM, TS, IOC Mktg Div.,
- Dr. A Prabhakaran , Tata Steel
- Mr. S Dampur , NEI , Jaipur
- Prof. S C Sharma , IIT Roorkee
- Dr S V Joshi, ARCI, Hyderabad
- Mr. Ajay Kumar, IOCL, R&D,
- Dr. MIS Shastry, IOCL R&D ,
- Dr J Bhatia, Envirotech, Mumbai.
- Dr. Barun Chakrabarti, L&T, Mumbai & Secretary, Tribology Society of India
- Dr. K P Naithani, Executive Director, IOC R&D
- Sh. Deepak Sharma, Kittiwake Proactive Technologies P Ltd.

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3rd Summer School in Tribology



20-23 June 2011
at IndianOil Institute of Petroleum
Management, Gurgaon

Organizers



Objectives

Importance of tribology for sustainable reliability cannot be over emphasized. It is reported that loss due to improper understanding and application of tribology is over 3% of GDP of the developed countries like USA. We can well imagine the state of affairs in our country, where, awareness about importance, understanding and application of science and technology of tribology is rather low. The engineers coming out of the colleges will be responsible for improving and maintaining the reliability of plants and their equipment. In industry, however, maximum emphasis is given to preventing and breakdown maintenance and tribology is neglected, even though, it is responsible for over 40% of the breakdowns.

It has also been noticed that this important subject Tribology does not get appropriate coverage in the engineering curriculum in our country. Inappropriate understanding on application of Tribology is one of the major reasons of failures in the industry.

It is with this background that the Tribology Society of India (TSI), the IndianOil Institute of Petroleum Management , Gurgaon , and IndianOil R&D Centre are jointly organising the 3rd Summer School in Tribology” from June 20-23, 2011 at IIPM, Gurgaon, to reinforce the need for continued education in Tribology - an interdisciplinary science and technology of friction, wear and lubrication.

The programme is intended to provide a National Platform for interaction between renowned tribologists of the country and senior academia and Tribology practising engineers from Indian industry as participants.

The programme will include a one day visit to IOCL R&D Centre, Faridabad.

Who should attend?

- Faculty in Mechanical Engineering/Tribology from Academia
- Practicing Engineers/Managers from Industry working in Plant Maintenance, Technical Services, Marketers of Lubricants/additives and Industrial R&D from sectors like Automotive, Railroad, Oil, Steel, Power, Cement, Engineering and Heavy Machinery etc.

Topics to be covered

- *Introduction to Tribology and its Economic Impact*
- *Basics of Friction, Wear and Lubrication*
- *Lubricating Oils and Additives*
- *Tribology Education in India*
- *Automotive Lubrication*
- *Industrial Lubrication Practices*
- *Rolling Element Bearings*
- *Fluid Film Lubrication*
- *Failure Analysis and Troubleshooting of Bearings & Gears*
- *Coatings for Wear Protection*
- *Tribo Testing*
- *Nano Tribology & Tribology in 21st Century*
- *Analytical Techniques in Modern Tribology*
- *Environmental Aspects of Lubrication*
- *Gear Lubrication*
- *Grease Technology*
- *Oil Condition Monitoring*
- *TSI - its New Initiatives*

Project Work: “Current Status of UG/PG Tribology Education and Future plans - Short Presentation by all Academia participants”

Important information

Venue IndianOil Institute of Petroleum Management
83, Institutional Area, Sector-18, Gurgaon

Date 20th – 23th June 2011

Fees For participants from Academia:

- (a) No delegate fee. Lodging and boarding would be provided free of cost. Selected academia participants will also be reimbursed to and fro travel subject to a Maximum of II AC fare.
- (b) Further, academia participants selected for the program will be required to submit a refundable cheque of Rs 2500/-, which will be returned when they report for the program. In case of non-participation without notice, this amount will be encashed by TSI to cover administrative expenses incurred

For participants from Industry (Non-IOC/ Non Sponsor):

- (a) Residential: Rs. 25,000/- per delegate
- (b) Non-residential: Rs. 19,000/- per delegate

Make cheque / DD favouring ‘Tribology Society of India’ payable at Faridabad.

Registration form

Name of Participant

Organization.....

Designation

Contact Address

.....

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Email ID.....

Telephone no.....

Mobile no.....

Brief Bio Data (Please attach file)

Signature of Sponsoring Authority / HOD.....

.....

Name.....

Designation

Make cheque / DD favouring ‘Tribology Society of India’ payable at Faridabad.

(Please see details under “Important Information” on left hand side fold)

Mail this form along with the payment at the address given below.

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