

New #22/

4th

INTERNATIONAL CONFERENCE ON INDUSTRIAL TRIBOLOGY



Theme:
Tribology for
Equipment Reliability

15-18 December, 2004

Organised By:

Indian Oil Corporation Ltd.
Bharat Petroleum Corporation Ltd.
Hindustan Petroleum Corporation Ltd.
Larsen & Toubro Ltd.

under the aegis of Tribology Society of India

TRIBOLOGY SOCIETY OF INDIA (TSI)

Tribology Society of India (TSI) was set up as a professional, non profit body of academicians, industry professionals as well as researchers in Tribology to bring them on a common platform for better interactions between them. Its origin in the present form was in June 1989 with the headquarters at the Bharat Heavy Electricals Limited (BHEL), Corporate R&D at Hyderabad. The society executive committee has wide representation from different sectors of Industry and from Academic and Research Institutions. It has presently about 570 life members and 20 institutional members. The society is affiliated to the International Tribology Council based in London, UK along with 36 other national Tribology societies spread all over the world. The society has seven local chapters responsible for organizing a number of activities like seminars, invited lecture series and workshops to increase interactions between the members of the society. The society has a regular quarterly newsletter and a journal "Indian Journal of Tribology" which are circulated among the life members of the society.

4th INTERNATIONAL CONFERENCE ON INDUSTRIAL TRIBOLOGY (ICIT'04)

Indian Oil Corporation Ltd. jointly along with Bharat Petroleum Corporation Ltd, Hindustan Petroleum Corporation Ltd and Larsen & Toubro Limited under the aegis of the Tribology Society of India are pleased to announce the Fourth International Conference on Industrial Tribology (4th ICIT) to be held at Mumbai from the 15th to 18th December 2004.

This will be the fourth in a series of International conferences organized biennially by the society in the country. Earlier a series of nine National conferences were organized in the country, the first in the series being "First World Tribology Conference" on "Industrial Tribology" held at New Delhi in 1972 with a focus on the development of the discipline of Tribology in India. Thereafter a series of national conferences have been organized on a regular basis with an objective of providing a forum for the sharing of the experiences of tribologists from Industry and Academic/Research Institutions. The first in a series of International Conferences (ICIT) began with the one in Calcutta in December 1997 with a theme of "War against Wear" to commemorate 25 years of the Indian contributions in the advancement of the Science of Tribology. The Second International Conference was organized by BHEL Corporate R&D at Hyderabad with the theme "Tribology in 2000 and beyond" which focused on the achievements of Tribology and future advancement of this discipline in the 21st Century. The third International Conference was organized by Tata Steel with a theme of "Emerging Trends in Tribology".

The theme of the 4th International Conference being organized at Mumbai jointly by IOCL, BPCL, HPCL and L&T will be "Tribology for Equipment Reliability".

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The theme "Tribology for Equipment Reliability" is proposed to cover the aspects related to applications of the principles of tribology for improving the functional reliability of equipments in various sectors of Industry. A technical committee under the chairmanship of Dr AK Bhatnagar, Professor, IIT Delhi has identified the following sessions and their respective technical director for convening and organizing the session.

- A. Tribology in Equipments Reliability —
- Mr C Mishra, Tata Steel, Jamshedpur
- **B** Lubrication of Equipments
- Mr Sandeep Sen, Lincoln Helios, Bangalore
- C Lubricants & Additives
- Mr D R Teredesai, Lubrizol India, Mumbai



- E Maintenance Tribology & **Condition Monitoring**
- F Tribology & Energy Conservation
- G Emerging Trends in Automotive Lubrication
- H Tribology of Rotating Machinery
- 1. Tribotesting & Analytical **Techniques**
- J. Materials for Tribological **Applications**

- Prof S K Biswas, Indian Institute of Science. Bangalore
- Mr M T Rane, Larsen & Toubro Limited, Mumbai
- Dr Har Prashad, Bharat Heavy Electricals Limited, Hyderabad.
- Dr G K Sharma, Indian Oil Corporation R&D Centre, Faridabad
- Dr B S Prabhu, Manipal Institute of Technology, Manipal
- Mr A K Mehta, Indian Oil Corporation R&D Centre, Faridabad
- Dr Rupa Dasgupta, Regional Research Laboratory, Bhopal.

PLENARY SESSION AND THEME PAPERS

Special Sessions/Symposium

Call for Papers:

Engineers, Scientists, Academicians and Practitioners in Tribology are invited to present papers in line with the theme of the conference. Prospective contributors are requested to forward 3 copies of the abstracts of their papers (of about 300 words) in double spacing latest by 31st August 2004 to the Organizing Secretary. They also have the option of submitting the same online on the TSI Website www.tribologyindia.org.

Instructions for Authors

All papers prepared for presentation at the conference must be original and should not have been presented, published, accepted or under consideration for publication/presentation in identical or substantially similar format. All abstracts/papers will be subjected to review by peers and the decisions will be communicated to the authors accordingly.

Content of Papers

ICIT'04 will endeavour to give preference to papers, which deal with new advancements, developments in the respective field of study, case studies involving new tribological applications, energy conservation, optimization etc. Presentations and papers describing attributes of commercial /branded products for the purpose of advertising/promotion will not be considered for the conference. A few invited talks by eminent speakers covering state of the art products and technological review will be included. Preference will be given to papers particularly to those related to the theme of the conference. The list of sessions is not exhaustive, and gives only broad guidelines to the areas proposed to be convered in the conference.

Best Paper Award

From the papers presented during the conference, two papers will be selected by a panel of eminent judges with best paper awards in the following two categories

PAPER ON BASIC RESEARCH PAPER ON APPLIED RESEARCH



EDUCATION COURSES

There will be two education courses on 15th December 2004 on the eve of ICIT'04 on the following topics

Basics of Tribology : Coordinator Mr A K Mehta/Dr M R Tyagi

Automotive Lubrication : Coordinator Mr Mukesh Gupta/Dr G K Sharma

The course will consist of one day theory course followed by one day visit to an industry in Mumbai. The course fee will be Rs 3000/- if paid before 31st October and Rs 4000/- if paid after that. Availability of the course will be on a first come first served basis.

EXHIBITION, BUSINESS MEET AND SPONSORSHIP

ICIT'04 shall offer an unique opportunity for the organizations to hold an exhibition of Equipment, Instruments, Products and Services related to Tribology at the Conference venue during the conference.

A Souvenir to be brought out on the occasion would also offer opportunities for advertisements. Interested organizations may contact the Organizing Secretary for further details.

Exhibition

A unit exhibition space of about 3m x 3m along with basic infrastructural facilities is being offered to the exhibitors. Also one representative of the participating organization in the exhibition will be entitled to be registered as a conference delegate without payment of the delegation fee. A list of exhibitors will be published and given prominent coverage during the conference. The registration fees for the exhibition is as follows:

(a) Indian Companies: Rs 35,000/-

(b) Foreign Companies: US \$1000/-

Souvenir Advertisement

Souvenir to be published on the occasion would also offer opportunities for advertisements:

a) Back Cover full page (multi color) Rs 30000/- (US \$ 1000)

b) Back Inside Cover (multi color) Rs 20000/- (US \$ 800)

c) Front Inside full page Rs 20000/-(US \$800)

d) Full page inside (multi color) Rs 15000/-(US \$500)

e) Half Page (multi color) Rs 8000/- (US \$ 300)

Advertisement requests must reach the organizing secretary by 31st October 2004 at the latest accompanied by the matter to be published and the Demand Drafts drawn in favour of TSI-ICIT'04 payable at Mumbai, India.

Sponsorship

Industries and institutions are invited to support the ICIT'04 in form of sponsorships. Due recognition/publicity will given for all such support. The types of Sponsorship available along with concessions given are listed below:

(1) Platinum Rs 3.0 lakhs — 6 free delegates

(2) Gold Rs 2.0 lakhs — 4 free delegates

(3) Silver Rs 1.0 lakh — 2 free delegates

REGISTRATION FEES

The registration fees for the conference will cover:

- Participation in technical sessions
- Copy of the conference proceedings
- Conference Kit
- Lunch and Tea during the conference
- Conference Banquets and Cultural Programmes
- Local Transport arrangements for any arranged visits

Registration Fee Structure

		TSI Members	Non Members
	Industry delegates	Rs 4000/-	Rs 5000/-
	Delegates from R&D/academic Institutions	Rs 2000/-	Rs 2500/-
-	Bonafide Students	Rs 500/-	
-	Overseas Delegates	US \$400	

Non-Members, subject to eligibility will be entitled to free life membership of Tribology Society of India.

IMPORTANT DEADLINES

31st August 2004	Receipt of Abstracts
15 th October 2004	First Manuscript
15th November 2004	Final Manuscript

CONFERENCE VENUE

The conference will be held at the following venue during 15-18 December 2004.

HYATT REGENCY, MUMBAI

Sahar Airport Road MUMBAI 400099 INDIA

Phone: +91 22 5696 1234 Direct: +91 22 5696 1419 Fax: +91 22 5696 1235

http://www.mumbai.regency.hyatt.com

ACCOMMODATION AND SOCIAL PROGRAM

Mumbai is the commercial capital of India and offers a range of accommodation to suit every budget. If desired by the participant in advance, hotel accommodation can be arranged. Hotel rooms under a special package are presently available at Hyatt Regency Mumbai, the venue for the conference as per the details given below on a first come first served basis:

Room Category	Single Occupancy per room per Night	Double Occupancy per room per night
Hyatt Guest Room	INR 3500/ US \$70	INR 4000 / US \$80
Regency Club Room	INR 5500/US \$110	INR 6000/US\$ 120

Inclusive of daily buffet breakfast and airport pick up and drop

Mumbai is well connected by air nationally and internationally and by train and road to various cities of the country. It is a multicultural city and offers a variety of tourist attractions such as the Gateway of India, Prince of Wales Museum, Elephanta Caves etc. The weather is generally very pleasant during the month of December. The temperature range during the daytime in December will be in the range of 30 Deg C and that during the night will be around 20 deg C. The humidity ranges from 50-80 % RH owing to its proximity to the sea.

For further information, please contact the following:

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IMPORTANT: Registration fees and other payments should be made by Demand Draft/Pay Order/Cheque drawn in favour of TSI ICIT'04 payable at Mumbai, India. In case of outstation cheques, please add Rs 35 towards bank charges.