



ICIT2010

7th International Conference on
Industrial Tribology

Theme
Tribology for Steel & Mining Industries

December 2-4, 2010

Venue : Ispat Bhawan, Ranchi, India

Organised by



Steel Authority of India Limited
R & D Centre for Iron and Steel
Ranchi

In Association with



Steel Authority of India Limited
Centre for Engineering & Technology
Ranchi

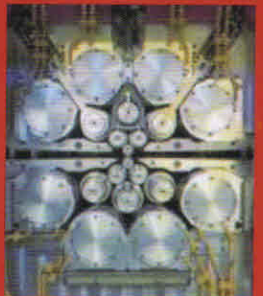


Central Coalfields Limited
Ranchi

Under the Aegis of



Tribology Society of India



Introduction

Tribology, the science and technology of interacting surfaces in relative motion, has been established worldwide as a major enabler for progress of industrialised economies. Realising the far-reaching influence of this subject, Tribology Society of India (TSI) was formed in the year 1989. As a premier professional society, the TSI has a vision to spread awareness and practice of Tribology all across India. To fulfil this mission, the Society has been organising International Conference on Industrial Tribology (ICIT) biennially in different regions of the country. The 7th ICIT is being organised in the eastern part of India, in the nature's adorable city of Ranchi, during December 2-4, 2010.

The mineral rich eastern India is the hub of a large network of steel, mining and allied industries. These industries are working under tremendous load of heat, dust and severity. These conditions pose big challenge to Tribology. There is need to develop and apply advanced tribological concepts for improving equipment reliability, reducing energy consumption, and providing healthy working environment to the operating personnel and other habitants. Theme of the ICIT 2010 has therefore been chosen as "Tribology for Steel and Mining Industries".

About the Organiser

ICIT 2010 shall be organised by R&D Centre for Iron and Steel (RDCIS) in its beautiful premises at Ranchi. RDCIS is the corporate R&D Centre of Steel Authority of India Ltd. (SAIL), the largest steel producer in India. It employs more than 250 scientists and engineers and is a premier research organisation in the field of ferrous metallurgy. The Centre is equipped with state-of-the-art diagnostic and testing facilities including pilot scale laboratories. The major efforts of RDCIS are directed towards process innovations, product development, cost reduction, quality improvement in different SAIL plants. The Centre pursues a number of collaborative research programmes with leading institutions in India and abroad. RDCIS also offers consultancy, specialised testing services, contract research and training assistance to various external organisations.

RDCIS has a dedicated group of Tribologists who are undertaking valuable research projects for improving equipment performance in steel plants. Scientific research is carried out in various areas of Tribology such as wear characterisation, CBMS, testing & analysis of lubricants and rust preventives, development & evaluation of hot and cold rolling oils, design & engineering of lubricant application system, development & application of wear resistant materials and coatings, etc.



Scope of ICIT 2010

ICIT 2010 will be dealing with various innovations in Tribology for enhancing the performance of Steel and Mining Industries. In addition to this, deliberations will be made on some other topics of fundamental nature and of general interests. Some of the broad areas to be covered in technical sessions are:

- ❖ Tribology in excavation and crushing of minerals
- ❖ Tribology in iron and steel making
- ❖ Tribology in rolling and other metalworking processes
- ❖ Wear of ceramic (refractory), polymeric, composite materials
- ❖ Wear resistant steel and other materials
- ❖ Surface treatments and coatings
- ❖ Reliability of machinery and earth moving equipment
- ❖ Condition monitoring and maintenance
- ❖ Lubricating oils, greases and additives
- ❖ Hydraulic system and fire resistant hydraulic oil
- ❖ Bearing and gear lubrication
- ❖ Corrosion and rust prevention
- ❖ Micro/Nano tribology and simulation
- ❖ Bio-tribology
- ❖ Tribo-testing
- ❖ Fundamental aspects of friction, wear and lubrication
- ❖ Any other area related to Tribology

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 submit abstract of their paper in about 250 words to the Organising Secretary latest by May 31, 2010. Abstracts of the papers can also be submitted online through TSI website www.tribologyindia.org. Contributors of the selected papers would be required to submit manuscript of the full paper latest by August 31, 2010. Format of the paper shall be intimated to the authors separately. It may also be downloaded from the TSI website.

ICIT-2010 will endeavour to give preference to papers, which deal with new advancements and developments in aforesaid areas including case studies. All papers submitted for presentation in the Conference must be original and should not have been presented, published, or under consideration for publication / presentation in identical or substantially similar format. All papers shall be subjected to review by a Technical Committee and the decisions will be conveyed to the authors accordingly.

Important Deadlines

Receipt of abstract	: May 31, 2010
Acceptance of abstract	: June 30, 2010
Submission of full manuscript	: August 31, 2010

Awards

Best papers and technical exhibit shall be selected by an Award Committee and shall be awarded in the Concluding Session of the Conference. The award will be given in the following categories among the papers presented during the Conference:

- TSI Best Oral Paper (Academic Research)
- TSI Best Oral Paper (Applied Research)
- TSI Best Poster Paper (Academic Research)
- TSI Best Poster Paper (Applied Research)
- TSI Best Exhibit

Each award will carry a cash prize besides a certificate of commendation.

Education Course

On the eve of ICIT 2010, two parallel education courses will be organised on Dec 1, 2010, one each on "Condition based maintenance system" and "Advances in wear resistant materials and coatings". During the courses, theory and case studies shall be discussed by eminent faculties drawn from Industries, R&D Institutions and Academia. For each course, a nominal fee of Rs 3000/- shall be charged from TSI Members and Rs 4000/- from Non-TSI Members. College students shall be encouraged to attend the course at a subsidised fee of Rs 1000/- only.

Technical Exhibition

With a view to highlight the advancements made in the area of Tribology, it is planned to organise a Technical Exhibition along with the Conference. Lubricant & Additive Suppliers, Equipment Manufacturers, Tribological Specialists and Service Providers, Technical Book Publishers, etc. are hereby invited to participate in the Technical Exhibition to highlight their products and services. Exhibition space of about 3 m x 2.5 m shall be provided to each exhibitor. A nominal fee of Rs 50,000/- (US \$ 1500) shall be charged for each exhibition stall, which will be provided with adequate furnishing and basic illumination facilities.

Manufacturer's Presentation

Manufacturers/suppliers of equipments, lubricants, additives and service providers related to Tribology are invited to the Conference to project their products/services/innovations through multimedia presentation in the special sessions on Manufacturer's Presentation. A nominal fee of Rs 50,000/- (US \$ 1500) shall be charged for each presentation of 25 minutes duration.

Souvenir & Advertisements

A Souvenir, containing Conference details and informative articles shall be released during the Conference, and will be provided to each registered delegate. Advertisements for the Souvenir can be booked at the following rates:

Back Cover (Colour)	: Rs 40,000/- (US \$ 1000)
Front/Back Inside Cover Page (Colour)	: Rs 30,000/- (US \$ 750)
Colour Full Page	: Rs 20,000/- (US \$ 500)
B & W Full Page	: Rs 15,000/- (US \$ 350)
B & W Half Page	: Rs 10,000/- (US \$ 250)

The advertisement material is to be provided in hard copy / transparency or on CD by September 30, 2010.

Conference Sponsorship

The Conferences organised by TSI have been supported by a good number of sponsors in the past. They include practically every industry like Petroleum, Steel, Mining, Power, Engineering and Allied Industries. These sponsors have been National as well as Multinational Companies of India and abroad. The sponsors get wide publicity in the Conference through display of banners, mention in the Conference proceedings and Souvenir and other facilities.

Reputed Companies, Organisations and Trade Associations are invited to join this International Event as sponsors of the Conference. The details regarding various categories of sponsorship are given below:

CATEGORY	CHARGES		FACILITIES				
	Indian (Rs in Lakhs)	Overseas (US \$)	Free Delegates	Company Logo on all Conf. Materials	Free Colour Ad in Souvenir	Free Stall in TE*	Free Slot in MP**
Platinum	5.00	12000	6	✓	✓	✓	✓
Gold	3.50	9000	4	✓	✓	✓	x
Silver	2.00	6000	2	✓	✓	x	x

* Technical Exhibition ** Manufacturer's Presentation

Conference Registration Fee

Category of Delegate	TSI Member	Non-Member
Industry	Rs 6,500/-	Rs 8,000/-
R&D/Academia	Rs 3,500/-	Rs 5,000/-
Retired person/Student	Rs 2,000/-	Rs 2,000/-
Overseas Delegate	US \$ 200	US \$ 250
Discount for Group Registration (for 4 delegates)	15%	20%
Discount for early registration (before September 30, 2010)	15%	20%

The registration fee for the Conference will cover participation in Technical Sessions, Conference Proceedings in CD-ROM, Printed materials, Conference kit, Lunch, Tea/coffee, Conference Banquet, Local transport, etc.

Payment Details

All payments related to registration of delegates, sponsorship, advertisements, technical exhibition, manufacturer's presentation, participation in educational course, etc. are to be made through crossed demand draft / cheque payable at par, drawn in favour of "ICIT-2010" payable at Ranchi. Money can also be transferred directly to the Conference Account as given below:

A/c Name	:	ICIT-2010
A/c No.	:	480102010870093
IFSC Code	:	UBIN0548014
SWIFT Code	:	UBININBBJAM
MICR No.	:	834026007
Bank's Name & Address	:	Union Bank of India, Shyamali Colony Branch, P.O.-Doranda Ranchi-834002, Jharkhand, India

About Ranchi

Ranchi is the capital of state of Jharkhand, which is endowed with rich iron ore and coal deposits. With its rich mineral resources and industrial base, Ranchi is rapidly developing into an important industrial sector in India. The city is surrounded by thick forests and beautiful natural waterfalls and still unspoilt by modern commercialism. Ranchi is located in eastern part of India, around 400 km from Kolkata. It has very pleasant and moderate climate and the temperature in December may vary from +8°C and +20°C.

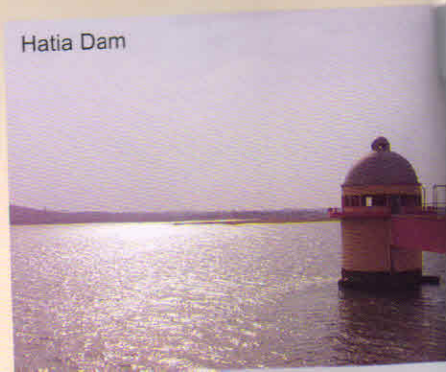


Dasam Fall



Ranchi Lake

4/8



Hatia Dam

Travel

Domestic airlines operate between Ranchi and other major cities of India such as New Delhi, Mumbai, Kolkata, Raipur and Patna. Ranchi is also well connected by rail and road with all major cities of the country, namely Bangalore, Bhubaneshwar, Chennai, Jamshedpur, Jaipur, Kolkata, Mumbai, Nagpur, New Delhi, Patna, Raipur, Vishakhapatnam, etc. A Travel Desk shall be available at the Conference Venue for arranging return tickets for the delegates.

Accommodation

Ranchi offers a range of accommodation to suit every budget. Both economy and luxury class hotels are located within 5 km from the Conference Venue. Delegates are requested to book the accommodation in advance to get preferred choice. For assistance in advance booking, Conference Secretariat may be approached.

A list of prominent hotels in Ranchi is given below:

HOTELS (Distance from Conference Venue)	Tel No. +91 651-	Fax +91 651-	E-mail	Tariff (Rs)**	
				AC Single	AC Double
Capitol Hill* (3.0 km)	2331330	2330206	reservation@hotelcapitolhill.com	4000-4500/-	4500-5000/-
Ranchi Ashok* (1.5 km)	2480759	2480768	info@hotelranchiashok.com	3500-4500/-	4000-4500/-
Yuvraj Palace* (2.0 km)	2480326	2480328	info@hotelyuvrajpalace.com	3500-4500/-	4000-4500/-
Green Acres (2.0 km)	2252240	2252246	contactus@hotelgreenacre.com	2200-2800/-	2600-2800/-
Green Horizon (3.0 km)	2462100	2462552	contactus@hotelgreenhorizon.com	2400-2800/-	2800-3200/-
Capitol Residency (3.0 km)	2212030	2212038	credidency@gmail.com	2000-3200/-	2500-3500/-
Quality Inns (4.0 km)	2460128	2460783	rahul@hotelqualityinn.com	2175/-	2450/-
Chanakya BNR (4.0 km)	2461489	2460584	chanakyabnrranchi@hotmail.com	1450/-	1700/-
Hindustan (4.0 km)	2206032	2205565		1400-1600/-	1700-2000/-
Chinar (4.0 km)	2207780	2214327	hotelchinar@ymail.com	1600-2800/-	1900-2300/-
Yuvraj (2.0 km)	2482842	2480853	info@hotelyuvrajpalace.com	1800-2400/-	2250-2700/-
Landmark	2560051	2560057		3000/-	3500/-

* Deluxe Rooms & Suits are available in these hotels.

** Tariff indicated is tentative and are subject to change. Taxes are extra.

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