

## FIRST ANNOUNCEMENT- CALL FOR PAPERS

### NATIONAL TRIBOLOGY CONFERENCE

(NTC- 2016)

December 8 – 10, 2016

**Theme: Tribology for  
Sustainable Development**

Organized

By

**Department of Mechanical  
Engineering**



Varanasi, UP

Under the Aegis of



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### Tribology Society of India

**T**ribology is a multi-disciplinary subject dealing with the study of interacting surfaces in relative motion. The term, derived from the Greek word “*Tribos*” (meaning “Rubbing”), in general denotes the subject of Friction, Lubrication & Wear technology. Over the years, the subject of Tribology came to be recognized as a very important aspect in all industrial operations. The application of correct Tribological practices can protect and enhance the life of plants and machinery, improve efficiency of operations, reduce energy consumption and prevent expensive breakdowns.

To provide a common umbrella to work further in this area, **Tribology Society of India (TSI)** has been set up as a professional, not-for-profit body bringing together academicians, and industry as well as research organizations as its members. The Society is affiliated to the *International Tribology Council (ITC)* based in London, UK. The activities related to Tribology in the country started way back in 1972, when First International Conference on Tribology was organized by Indian Institute of Technology at New Delhi. Continuing with this, a series of National and International Conferences have been organized during last 44 years including successful ASIATRIB 2014, NTC 2011 and 2014. It also organizes its annual event of Summer Schools in Tribology (7<sup>th</sup> in the series organized in 2015). Currently the Society operates from its registered office at Indian Oil R&D Centre, Faridabad.

Tribology society of India invites academic institutions to organize a National conference once in every 2 years with the sole objective of providing a platform to academicians, researchers and practicing engineers to discuss the current trends in tribology practices. This is the third in this series of conferences, with the previous one organized by the Department of Mechanical Engineering, PES University, Bengaluru under the aegis of TSI in 2014. The first edition was organized by IIT Roorkee in 2011.

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### Objectives:

- To discuss the current practices and challenges in Green Tribology
- To explore Tribological Practices as a tool for sustainable development
- To discuss the emerging technologies such as Nano & Bio-Tribology
- To showcase the advancements in lubrication, coatings, bearings and wear resistant materials.
- To provide an opportunity to manufacturers to display their state of art tribo-equipments & Products and services

### Call for Papers

Papers are invited from Scientists, Academicians and Practicing Engineers in Tribology for technical sessions in the following areas:

- ❖ Green Tribology
- ❖ Tribology in sustainable development
- ❖ Environmental and societal aspects of tribology
- ❖ Condition monitoring and maintenance
- ❖ Thin film lubrication
- ❖ Bio-mimetics
- ❖ Energy conservation
- ❖ Lubricants & additives
- ❖ Surface treatment & coatings
- ❖ Contact Mechanics
- ❖ Tribological aspects in design & manufacturing
- ❖ Nano & Bio tribology
- ❖ Wear resistant materials

It is proposed to organize oral and poster sessions covering these aspects.

### Payment Details

All payments related to registration of delegates, sponsorship, advertisements, technical exhibition and , manufacturer’s presentation etc. can be made through crossed demand draft drawn in favor of “**NTC 2016**” payable at **State Bank of India, Institute of Technology, BHU Branch**, OR By NEFT Bank Transfer.

Name of the Bank: State Bank of India

Beneficiary Name: ‘NTC 2016’

Beneficiary A/c No. 35718742348

Branch Name : IT Branch, Varanasi – 221005

Bank Address: Institute of Technology

Branch, IIT (BHU) Varanasi 221005

IFSC Code: SBIN0011445

MICR Code: 221002036

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### Mechanical Engineering Department

**T**he department is equipped with state of the art infrastructure to carry out research in the area of Coatings, Metal matrix composites, Friction & Wear assessment, Galling, bio-tribology, Lubricants testing. The department has executed several research projects related to the above domain areas from funding agencies such as BRNS, DST, AICTE, DRDO etc. Faculty members have collaborations with some leading Universities /Laboratories/Institutes around the globe.

### About Varanasi

The holy city Varanasi is the oldest living city in the world which is also known as the capital of the spiritualistic world. The city has a great historical and cultural importance. This religious and cultural capital of India is situated at the bank of the holy river Ganges and is famous for temples of Lord Shiva, Buddha (at Sarnath) and Sankat Mochan etc. Varanasi is the premiere most place of oriental learning also. Simultaneously it is keeping pace with modern advanced knowledge. The city is reputed for silk fabrics, perfumes, artistic brass and copper wares and a variety of handicrafts. This vibrant city with multiple dimensions of knowledge and liberation has a magnetic attraction for people all over the world.



### How to reach

The city a/of Varanasi is well connected by road, rail and air with all the important cities of India. Regular flights are there from Varanasi to Delhi, Mumbai, Chennai, Hyderabad, Bengaluru, Kolkata, Khajuraho and Lucknow. The IIT (BHU) campus is about 10 Km from Varanasi Cantt and 20Km from Mughalsarai railway station and 35 Km from the Babatpur (Varanasi) airport.

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## Conference Sponsorship

Reputed companies and organizations are invited to join this National event as sponsors of the Conference Proceedings, Souvenir and other facilities. Details regarding various categories of sponsorship are given below.

### Category Indian Overseas

<b>Diamond</b>	<b>Rs. 3.00 Lacs</b>	<b>US \$5000</b>
<b>Platinum</b>	<b>Rs. 2.00 Lacs</b>	<b>US \$4000</b>
<b>Gold</b>	<b>Rs. 1.00 Lac</b>	<b>US \$2000</b>
<b>Silver</b>	<b>Rs. 0.5 Lac</b>	<b>US \$1000</b>

The Sponsored company logos will be displayed on all conference materials. Diamond and Platinum Sponsors will be entitled to one free Stall in Technical Exhibition and a full page Colour Advertisement in Souvenir. Besides this, Diamond Sponsors will be provided a free slot in Business Presentations.

### Conference Registration

Professionals, researchers, business entrepreneurs and all other practitioners of Tribology from across India & abroad are invited to attend the Conference. Registration in the Conference can be made by paying fee and applicable service tax as per the details given below:

Student Delegate	Rs.2,000
Academic and R&D Institute	Rs.5,000
Industry Delegates	Rs.10,000
Accompanying Spouse	Rs2000
Foreign Delegates	US\$ 400
Foreign Delegates (Students)	US\$ 150
TSI Members Discount	20% (Academic /Industry on applicable rates)

Fee mentioned above is excluding service tax.

**Please Note :** All presenting authors are also required to register for the conference.

Diamond, Platinum, Gold and silver sponsors will have the privilege of registering 4, 3, 2 and 1 delegate(s) respectively, without paying registration fee. The registration fee for the Conference will cover participation in Technical Sessions, Conference Proceedings, Printed Materials, Conference Kit, Lunch, Tea/Coffee, Conference dinner, etc.

**Early bird registration by 31<sup>st</sup> October 2016 with 20 % Discount on registration fee for all categories of participant.**

### Submission of Abstract.

An abstract in word file not exceeding 250 words can be submitted latest by 31<sup>st</sup> July 2016 by email on [ntc2016iitbhu@gmail.com](mailto:ntc2016iitbhu@gmail.com) or [www.tribologyindia.org](http://www.tribologyindia.org) at the link provided. Upon review, acceptance of abstract will be

sent and a manuscript not exceeding 5(five)A4 pages with Key words and Introduction, Experimental / Methodology, Results & Discussions, Conclusions and Relevant references will have to be submitted. All authors will have to register to be able to present their papers. Template can be sent upon request.

### Manuscript preparation guidelines

Please adopt Times New Roman fonts, 2"left margin and 1" margins on all the other sides of A4 sheet. Manuscript Title 14pt bold, Centered, to be followed by the authors name 12pt and affiliation 10pt. Headings and subheadings 12pt bold. References to be in standard format as per SCI journals. Maintain a spacing of 1.5 with single Colum text though out the manuscript and font size 11pt for the body text. Use high clarity figures with captions (centered, 10 font). Papers can be selected for publishing in TSI journal "Indian Journal of Tribology"

### Awards

Tribology Society of India has instituted the following awards which will be selected by an Award Committee.

- 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. Each of these awards can be sponsored by any organization on payment of Rs 25,000/- The award shall be named after the sponsoring organization.

### Important Dates

- 31 July 2016 Abstract submission
- 15 Sept 2016 Reviewers Notification
- 10 Nov 2016 Last date for Submission of revised manuscript

### Business Presentation

Manufacturers/suppliers of equipment, lubricants, additives and service provider related to Tribology would be invited to Conference to project their products /services/innovations through multimedia presentation in the special sessions in Manufacturer's Presentation. A nominal fee of Rs. 25,000/- would be charged for each presentation of 20 minutes duration with one delegate free for business presentation.. One slot free of charge will be provided to all diamond sponsors.

### Technical Exhibition

With a view to showcase the advancements in products and services in Tribology, a Technical Exhibition is being organized along with the Conference.

Lubricant & additive suppliers, Equipment manufacturers, Tribological specialists and Service Providers, Technical Book Publishers, etc. are invited to participate in the Technical Exhibition to highlight their products and services. Well-furnished and illuminated exhibition stall of about 2.5 m x 3.0 m size will be provided to each exhibitor at a fee of Rs. 40,000 with two delegates free for stall. The technical exhibition will be organized close to the halls where the technical sessions will be in progress.

### 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 following rates:

Front/Back inside	: Rs. 50,000
Cover page (Colour)	: Rs. 30,000
Colour Full Page	: Rs. 20,000
Colour Half Page	: Rs. 15,000
B/W Full Page	: Rs. 15,000
B/W Half Page	: Rs. 10,000

All sponsors will be provided one page for advertisement free of charge. The advertisement material is to be provided in print ready formats latest by November 10, 2016.

### Organizing Committee

- Convener : **A. P. Harsha**
- Org. Secretary : **Rajesh Tyagi**
- Treasurer : **Rakesh K. Gautam**

### Members

- Sandeep Kumar S. K. Sinha
- Rajesh Kumar S. K. Shah
- P. Bhardwaj M Z Khan
- M Vashishtha Amit Tyagi
- U S Rao P C Mani

### Technical Committee

- Rajesh Kumar IIT (BHU) (Chair)
- Sandeep Kumar IIT (BHU)
- Sunil Mohan IIT (BHU)
- R.B. Rastogi IIT (BHU)
- Satish V Kailas IISc Bengaluru
- S C Sharma IIT Roorkee
- Anita Mohan IIT (BHU)
- P C Mani IIT (BHU)
- Mayank Tiwari IIT Patna
- Barun Chakrabarti L&T, Mumbai
- Ajay Kumar Indian Oil R&D, Faridabad
- Buta Singh PTU, Jullandhar
- Vinayak Ranjan ISM Dhanbad

## National Tribology Conference

Venue: Swantrata Bhawan, BHU

**(NTC-2016)**  
**Dec 8-10, 2016**

### REGISTRATION FORM

(Please print this on a separate sheet)

NTC 2016 participation as (PI Tick)

Exhibitor  Author

Delegate  Sponsor

Name.....

Designation.....

Affiliation: .....

Mailing Address:.....

.....

Paper Title.....

Mobile No:.....

Phone No:.....

E-mail:.....

Address of Sponsoring Authority ...

.....

DD No: .....Date .....

Name & Branch of Bank .....

Payment details by Bank Transfer:.....

Signature of participant

Signature & seal of the sponsoring authority

