# 8" International Conference on Industrial Tribology

**Theme: Tribology for Sustainable Development** 

7 – 9 December, 2012

The Westin Pune Koregaon Park, India

# **TECHNICAL PROGRAMME AT A GLANCE**



Under the Aegis of



### **Technical Programme at a Glance**

#### 7<sup>th</sup> December 2012

Inauguration (Inspire Hall)

(9.00 Hrs. to 11.00 Hrs.)

Inauguration of Exhibition / Poster Session followed by Tea

#### Tea Break

(11.00 Hrs. to 11.30 Hrs.)

#### Plenary Session I (Inspire Hall)

(11.30 Hrs. to 13.00 Hrs.)

#### Prof Satish Kailas, Professor

Indian Institute of Science, Bangalore "Sustainability: Closing the Cycle and Tribology"

#### Dr B Basu, Executive Director

Indian Oil Corporation Ltd, R&D Centre, Faridabad "Formulating Lubricants Using Artificial Neural Networks (ANN)"

#### Lunch

(13.00 Hrs. to 14.00 Hrs.)

#### Business Meet - I (Inspire Hall)

(14.00 Hrs. to 15.30 Hrs.)

STLE, Rtec, TSI

#### Tea Break

(15.30 Hrs. to 15.45 Hrs.)

#### Technical Session - I

(15.45 Hrs. to 17.45 Hrs.)

Bearing & Gear Tribology-I	Automotive Tribology I-B (Inspire 2)	Condition Based Maintenance System I-C (Inspire 3)	Contact Mechanics & Friction I-D ( Revel )
I-A (Inspire 1)	Ed Becker	Divyang Pandya	Biplab Chatterjee
Prof. Satish Chandra Sharma  Combined Influence of Surface Roughness and Micropolar Lubricant on the Performance of Constant Flow Valve Compensated Hole-Entry Hybrid Journal Bearing	Toward a Sustainable Worldwide Automotive Industry	Condition Monitoring Of High Speed Ball Bearing Using Hilbert Hung Transform	Shakedown behavior in multiple loading-unloading of an elastic- plastic spherical stick contact
Vikas M. Phalle	Dr S K Majumdar	Vishal patel	Tae-Jo Park
Influence of Wear Depth Parameter on the Performance of Four-Pocket/Six-Pocket Hybrid Conical Journal Bearing system	Impact of Tribological factors on design and development of Locomotive Engine oil	Automation, The Game Changer In Wear Debris Identification	Effect of Spinning on the EHL of Elliptical Contacts
Shipra Aggarwal	Udayan Pathak	Nimesh Patel	Vinayak .R. Malik
Combined Effects of Grooves and Dimplings on the Performance of Sector Shaped Thrust Pad Bearing	Trends in Automotive Tribological Materials: Innovations and Technology	Fault diagnosis of ball bearing using Acoustic emission technique	"A study of shear friction factor and the development of finite element model for friction stir processing"
R.K. Awasthi	Preeti Dakhole	G R P Singh	Dr.MohdKameil Abdul Hamid
An Experimental Verification of Cavitated Based Model of Fluid Film Journal Bearing System	Automotive Lubricants: OEM Perspective	Improving reliability of mill drive gear boxes at New Bar Mill, Tata Steel	Effects of External Hard Particle Size on Friction Coefficients and Grit Embedment of Brake Friction Material*.

**Cultural Program & Dinner** 

(19.00 Hrs. onwards)

### **Technical Programme at a Glance**

#### 8<sup>th</sup> December 2012

### Plenary Session II (Inspire Hall)

(9.00 Hrs. to 11.00 Hrs.)

#### Mr. Jerry Byers, Manager

Product Research & Development Cimcool Fluid Technologies LLC "Evaluation of Metalworking Fluids and Trends in the Industry"

#### Prof. Wilfried J. Bartz

Technische Akademie Esslingene. V. Germany

"Future Energy Sources for Mobility – Contribution of the Green Automobille"

#### Mr. George Plint

Phoenix Tribology Ltd, UK

"The Effects of Test Machine Dynamics on Tribological Response"

#### Tea Break

(11.00 Hrs. to 11.15 Hrs.)

#### **Business Meet - II (Inspire Hall)**

(11.15 Hrs. to 12.45 Hrs.)

SKF, BASF, MECPL

#### Lunch

(12.45 Hrs. to 13.30 Hrs.)

#### Technical Session - II

(13.30 Hrs. to 15.30 Hrs.)

Bearing & Gear Tribology-II	Lubricants & Additives-I II-B (Inspire 2)	Wear Mechanisms-I	Tribotesting-l II-D (Inspire 3)
II-A (Inspire 1)	Prof. Wilfried Bartz	Dr. Rolf Waesche	Dr.S S V Ramakumar
Ram Turaga  On the performance of One- Dimensional Hydrodynamic Bearings with Surface Textures	"Definition and Characterization of Environmentally Acceptable Lubricants – The Eco Label	Aiming at zero wear - where are we right now	Development of Experimental Screening Test Method for Assessing the Tribo-Performance of Marine Cylinder Lubricants using Actual Cylinder Liner and Piston Ring Material
Tae - Jo Park	Jagadeesh K M	Rajesh Kumar	L Deinhofer
Hydrodynamic LubricationAnalysis of Micro-Dimpled Sliding Bearings	Tribological Evaluation of Transesterified Products of Few Indian Vegetable Oils	Realistic modeling of chemical wear and its importance	The ROF + principal for grease life testing
T. Nagaraju	Tomohiko Obata	MUKUND DUTT SHARMA	Rajendra Mahapatra
Surface Roughness and Non- Newtonian Lubricant Effects on Transient Performance of Journal Bearing Under Sinusoidal Loading	Effects of Homogeneity of Urea Grease on Friction and Oil Separation under EHL Condition	Effect of heat treatment on the tribological properties of Titanium alloy (Ti-6Al-4V)	Effect of Speed on Performance of Metal Working Fluid in Tapping Torque Test Rig
Smitirupa P	Ray Gomes	Manoj Nimbalkar	U.Sudeep
Experimental Study of Hydrodynamically Lubricated Sliding Contacts with Surface Textures	A Long Term Study of Using Balanced Charge Agglomeration for Oil Purification on GE 7FA Turbines	Dry Erosion Behavior of Thermal Spray Coatings of Carbide (WC-Co & Cr3C2-NiCr) and Ceramic (Al2O3 & Cr2O3) Materials	Experimental Studies for Role of Surface Textures on Friction and Vibration of Lubricated Concentrated Rolling/Sliding Point Contacts
			Ram Deshpande
			High Performance Engine Bearings

Tea Break

(15.30 Hrs. to 15.45 Hrs.)

### **Technical Programme at a Glance**

#### **Technical Session - III**

(15.45 Hrs. to 17.45 Hrs.)

Bearing & Gear Tribology-III	Surface Treatment & Coatings	Tribology in Manufacturing III-C ( Revel )	Wear Mechanisms-II III-D ( Inspire 3)
III-A (Inspire 1) Chippa Shriniwas	Mukesh Kumar	S Dutta	Huichen Zhang
Elastohydrodynamic Lubrication of Finite Line contacts using Couple- stress fluid	Effect of ceramic-reinforcements on the fade-recovery performance of hybrid friction composite materials in friction braking	Improvement in the Tribological condition of Hot Saw Blad to increse Life of the Balde at SAIL Rolling Mills	Influence of surface wettability of Al- Mg alloy on its tribological properties under water lubrication
Arivind Kumar Rajput	Kaushik Kumar	R B Choudhary	Dr. D. P. Mondal
A Study of Orifice Compensated 4- Pocket Conical Hydrostatic Journal	Optimization of Surface Roughness	Enhancing the performance of lubrication systems in converters of steel melting shop – 2 of Bokaro Steel Plant	Dry Sliding Wear Behaviour of Alumino-silicate Short Fibre Reinforced AA2014-Al Alloy Matrix composites
NATHI RAM	Dr. 5 K Ghosh	Dr.S.R.Jayaram	Gujjala Raghavendraa
Effect of Couple Stress Lubricant on the Performance of Symmetric and Asymmetric Hole-Entry Hybrid Journal Bearing	Behavior of Electrodeposited CoW Alloys and CoW-WC Nanocomposites under Dry and Wet Sliding	Evaluation of Deep drawing of AA 5083 sheets using Green lubricants Pongammia pinnata and Jatropha curcass	Tribology of Eco-friendly Alternative to Wood based Particulate Composite
Jagjit Singh	H.M. Ghasemi	Dr P V Joseph	Neelima Khare
An Experimental Study of a Misaligned Fluid Film Journal Bearing System	Effect of sand concentration on erosion-corrosion behavior of AA5052 aluminium alloy in 3.5 wt. % NaCl solution'	Laboratory and Field Evaluation of Cutting Oil for Gear Shaving	Wear and Friction of PEEK Composites in Water Lubrication
Abhijeet Marathe		COM - CTCI	
Automotive Diesel Engine Tribological Simulation and analysis of Piston,Piston Rings & Hydrodynamic Bearings	GBM of TSI (18.00 Hrs. onwards)		

#### 9th December 2012

#### Plenary Session III (Inspire Hall)

(9.00 Hrs. to 10.30 Hrs.)

#### Prof. Koshi Adachi

Head of Laboratory of Nanointerface Engineering, Tohoku University, Japan "Creation of Nanointerface for Super-low Friction"

#### **Dr. Georges Limbert**

CEng MIMechE National Centre for Advanced Tribology at Southamption (nCATS), UK "When Tribology Meets Biology"

#### Tea Break

(10.30 Hrs. to 11.00 Hrs.)

#### **Technical Session - IV**

(11.00 Hrs. to 13.00 Hrs.)

Lubricants & Additives-II	Tribotesting-II	Wear Mechanisms-III IV-C (Inspire 3)	Special topics in Tribology IV-D ( Revel )
Mehdi Fathi-Najafi	Dr. Peter M Lee	Lijesh	V Martin
Characterization of highly viscous base oils by combining Rheology and Tribology	Tribotesting – Ensuring you are testing what you intended, not the conditions you inadvertently created	Performance Enhancement of Hybrid Bearing using Butyl Rubber	Use of Tracers and Thin Layer Activation as Modern Techniques for Measurement of Engine Oil consumption, Fuel Dilution, Component Wear and Fouling of After Treatment Systems
Takaya Kato	Dr. T Singh	Supriyo Roy	Dr. Samik Hait
Friction Characteristics of Sliding Guide Way Lubricated with Semi- Fluid Urea Grease Containing Additives	Extreme Pressure Activity Assessment of Polyurea Greases	Wear performance optimization of electroless Ni-P-W coating parameters using the Taguchi method	Study of thermal properties of nanofluids.docx
Anjeeve George	Sudhir M Patil	Vaidehi Patwardhan	Anant Kulkarni
Energy Efficiency in Hydraulics	Effect of Variable loading frequency on Wear of PTFE Under Dry Sliding Condition Using Novel "Variable Loading Wear And Friction Monitor (VIwafm) Pin-On-Disk Sliding Tribometer"	Hard Facing of Production Manifold's Inlet Nozzles in Oil and Gas application	Current experimental trends in tribological testing of hip prosthesis materials and proposed novel method for Experimental testing
Rashi Gusain	G. D. Thakre	Dr.M.Ramachandra	Sheeja Divakaran
Copper Oxide Nanorods as Potential Additive for Reduction in Friction and Wear	Study of lubricant performance in Elastohydrodynamic lubricated contacts.	Evaluation of wearproperty of Al- Fly ash metal matrix composite synthesized using squeeze casting	An Overview of Tribological Issues in Hard Disk Drives

# 8" International Conference on Industrial Tribology

(ICIT - 2012)

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# The Next Asian Tribology Conference ASIATRIB-2014

will be organised from 27-30<sup>th</sup> January 2014 at New Delhi, India

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info@tribologyindia.org
or visit www.asiatrib2014.org
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