



International Workshop on  
**Industrial  
Tribology**

15 - 19, January 2019

Sponsored by



Savitribai Phule Pune University, Pune

In association with



**Tribology Society of India**

(Affiliated to the International Tribology Council, UK)

Institution of  
**MECHANICAL  
ENGINEERS**

Technology Partners



Organized by



**Department of Mechanical Engineering**

Amrutvahini Sheti & Shikshan Vikas Sanstha's

**Amrutvahini College of Engineering**

Amrutnagar, (Sangamner S.K.), Tal : Sangamner, Dist : Ahmednagar, 422 608, Maharashtra, India

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## Advisory Committee

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## Speakers



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**Dr. Zahrul Fuadi,**  
Syiah Kuala University,  
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**Dr. Abdul Khaliq Rasheed,**  
Research Fellow  
Sunway University, Malaysia.



**Dr. Satish C. Sharma**  
Prof. IIT ROORKEE



**Dr. TVVLN Rao,**  
Research Associate Professor,  
SRM University



**Dr. Vijay Kumar Sukhwani**  
H.O.D. Mech. Engg.  
Govt. Engineering College, Ujjain



**Dr. Bharat M. Sutaria**  
Associate Professor  
SVNIT, Surat



**Dr. Sandeep Soni,**  
Assistant Professor,  
SVNIT, Surat



**Dr. Dinesh Singh Thakur**  
Associate Professor  
DIAT Girinagar, Pune



**Dr. Vikas M. Phalle**  
Associate Professor  
V.J.T.I. , Mumbai



**Dr. Pranab Samanta,**  
Scientist  
CMERI, Durgapur, India



**Dr. R.S.Jahagirdar**  
K G Reddy College of Engineering  
and Technology, Hyderabad.



**Dr. Debdutt Patro**  
Product Specialist  
DUCOM Instruments Pvt. Ltd



**Dr. N. Ch. Kaushik**  
Assistant Professor  
BML Munjal University, Hariyana

## Course objectives / Scope

Tribology is a multi-disciplinary subject dealing with the study of interacting surfaces in relative motion. 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, improves efficiency of operations, reduce energy consumption and prevent expensive breakdowns.

The main motive of this workshop is to provide a common platform to researchers from industry, R & D organization and academic institutes, who are working on different mechanical systems to reduce friction and wear. The workshop shall bring together the tribology fraternity to explore, disseminate and strengthen initiatives in the area of improvements in tribology. It will make the researchers, academicians and post graduate students aware about the challenges in the field of Industrial Tribology. The participants of this 5-days International workshop will be able to learn the recent advancements and research avenues in the field of tribology. This workshop will be a great opportunity for networking with eminent personalities and researchers in the field of tribology.

## Course Content

### Theory and Research Aspects Related Sessions :

- Importance of tribology in Engine Lubrication.
- Tribology Components and their Lubrication.
- Nano Tribology, Bio Tribology.
- Nano Additives and Environmental aspects of lubrication.
- Surface Tribology, Fluid Film Lubrication, Journal Bearing Lubrication.
- Role of tribology in metal cutting.
- Mathematical Modeling and Optimization in tribology.
- Reliability and Condition Monitoring.

### Hands-on Experience Sessions :

Hands on practice on different tribotesters like four ball tester, pin-on-disc, journal bearing testrig by DUCOM experts. Exposure to the tests like wear measurements, Anti Wear Test & Extreme Pressure test for Lubricants as per ASTM standards and Procedures.

### Who should attend

Design, Development and Manufacturing Engineers and practitioners  
Industries and Research Organizations  
PG and Research Scholars  
Faculties of Engineering/Polytechnic who are pursuing or planning to pursue research in tribology related technologies.

### Important Dates :

Last Date of Registration  
31 December 2018

Confirmation of the selection  
to the candidate by an e-mail :  
2 January 2019

**Register** ▶▶

<https://goo.gl/forms/H4pHMOaxUx3atB953>



### Bank Details :

A/C Name :  
Principal,  
Amrutvahini College of Engineering  
A/C No.: 322501010033387  
IFSC Code : UBIN0532258

### DELEGATE FEE

| Category                      | Per Delegate Fee |
|-------------------------------|------------------|
| U.G./ P.G. / Research Scholar | INR 700          |
| Faculty                       | INR 1000         |
| R & D Industry                | INR 2000         |
| Foreign Delegate              | US \$ 100        |

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## Welcome to Ahmednagar (Historic & Holy City)

Ahmednagar is a largest district of Maharashtra state in western India, about 120 km northeast of Pune, 70 Km From Nashik, & 114 Km from Aurangabad. It is situated on the west bank of the Sina river. Sugar, Milk & Bank co-operatives thrive here. The city was founded in 1490 by Ahmed Nizam Shah Bahri. The city witnesses some magnificent architectural monuments from the Nizam Shahi dynasty. The district is strewn with a number of temples, many of the ancient, which are much visited by the pilgrims. Among them Shirdi is quite famous across the India. The famous Saibaba temple lies in Shirdi. Some other famous tourist places in Ahmednagar are Ahmednagar Fort, Alamgir, Amriteshwar temple. Ananddham, Mula Dam, Chandbibi Mahal, Harishchandragad, Meherabad, Newasa where Dyaneshwari was written, one of Ashtavinayakas at Siddhatek. The famous Kanifnath Temple, Bhandardara Dam, Ratnangad, Mountain Kalsubai, Shani Shignapur, Maldhok Bird sanctuary, Rehukari Sanctuary, etc. are some of the places of tourist attractions.

### About Sanstha

Honorable Sahakar Maharshi Late Shri. Bhausaheb Thorat, Freedom Fighter, Pillar of Co-operative Movement and founder of Amrutvahini Sheti and Shikshan Vikas Sanstha, a great visionary and philanthropist. He converted his thoughts into reality by creating educational and training facilities. For this he has founded the Amrutvahini Sheti & Shikshan Vikas Sanstha in 1978 to provide education to the poor farmer at his doorstep, which boosted the socio-economic progress of the rural people. The Sanstha is running following educational institutions :

- Amrutvahini College of Engineering
- Amrutvahini Polytechnic
- Amrutvahini Junior College
- Amrutvahini College of Pharmacy
- Amrutvahini Model School
- Amrutvahini Institute of Management & Business Administration
- Amrutvahini Industrial Training Institute
- Amrutvahini Institute of Diploma in Pharmacy
- Amrutvahini International School

### About Institute

Amrutvahini College of Engineering has been established in 1983 and presently offers UG **Civil** (Intake -180), **Production** (Intake - 60), **Computer** (Intake- 120) **Electronics** (Intake - 60), **Mechanical** (Intake - 180), **E&TC** (Intake-60), **IT** (Intake-60), **Electrical** (Intake - 60) & PG **Civil - Structure** (Intake - 18), **Mechanical - Design Engg.** (Intake - 18), **Computer** (Intake - 24), **E&TC - Microwave** (Intake - 18), **MBA** (Intake - 60) courses with Ph.D. Center in Mechanical Engineering. All the UG programs except Electrical Engineering were accredited by NBA, New Delhi.

### About the Department

Department of Mechanical Engineering was started in year 1991-92. All labs of department are well equipped with the modern equipments. The department has following major equipments, 3D Printer, Computerized IC Engine, Single Cylinder Diesel Engine, Two Stage Reciprocating Air-Compressor, Vapour Absorption Refrigeration, Computerized Natural Convection Heat Transfer, Wear and bearing test rig, VCR Engine, Steam Power Plant, FFT Vibration Analyzer, Hydraulic & Pneumatic Trainer, Hydraulic Accumulator & Intensifier, Four Ball Tester, Fatigue Testing Machine, Smarturn CNC Machine, Co-ordinate Measuring Machine, Robotic Arm (ABB) etc. Students of the department participated under the aegis of SAE chapter, in different events like SAE-BAJA, SAE-Effi-cycle, SAE-Supra, etc. Students of the department have bagged overall First prize in SAE-TIFAN Competition along with First prizes in three Categories worth Rs. 2,75,000/- in 2017-18, Second in Maharashtra in SAE-BAJA Competition 2013-14 & fourth rank in Maharashtra in SAE-Effi-cycle in 2015-16. Department has ISHARE, ISTE & VLCI chapters.



Department of Mechanical Engineering



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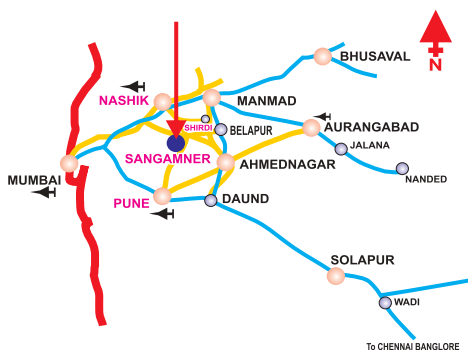


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Amrutvahini Sheti & Shikshan Vikas Sanstha's

## Amrutvahini College of Engineering

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