



Department of Science & Technology

6th SUMMER SCHOOL IN TRIBOLOGY
Venue: liPM, Gurgaon: Duration: 23rd – 27th June, 2014

Programme Schedule

23rd June, 2014

INAUGURAL SESSION

- 09:30 – 10:30 hr. Inaugural Session-**
Chief Guest : Mr. Srinivasulu Dampur
Vice President, R&D, NEIL, Jaipur
Guest of Honour : Mr Verghese Cherian,
ED, liPM, Gurgaon
- 10:30 – 11:00 hr. Group Photograph & Hi Tea**
- 11:00 – 12:00 hr. Session 1**
Theme : Basics of Tribology (F W & L) Part 1
Speaker: Prof. Satish V Kailas, IISc, Bangalore
- 12:00 – 13:00 hr. Session 2**
Theme: Basics of Tribology (F W & L) Part 2
Speaker: Prof. Satish V Kailas, IISc, Bangalore
- 13:00 – 14:00 hr. Lunch Break**
- 14:00 – 15:00 hr. Session 3**
Theme: Tribology of Machine Elements
Speaker: Prof. Mayank Tiwari, IIT Patna
- 15:00 – 16:00 hr. Session 4**
Theme: Tribology of Manufacturing Operations
Speaker: Mr. Rajendra Mahapatra, IOC R&D
- 16:00 – 16:30 hr. Tea Break**
- 16:30 – 17:30 hr. Session 5**
Theme: Conditional monitoring through Oil Analysis
Speaker: Mr. Deepak Sharma, Kittiwake India



17:30-17:45 hr.

Tea Break

17:45-19:15 hr.

Guest Lecture on “Space Tribology”

Speaker: Prof N Vedachalam

ISRO Distinguished Professor

VSSC Trivendram

24th June, 2014

09:00 – 10:00 hr.

Session 6

Theme : Tribology & Rheology of Lubricating Greases

Speaker: Dr. Naveen Pokhriyal, Mgr IOC R&D

10:00 – 11:00 hr.

Session 7

Theme : Analytical Techniques for Tribology & Surface Characterisation

Speaker: Prof M S Bobji, IISc, Bangalore

11:00 – 11:30 hr.

Tea Break

11:30 – 12:30 hr.

Session 8

Theme : Nano Tribology

Speaker: Prof M S Bobji, IISc, Bangalore

12:30 – 13:30 hr.

Lunch Break

13:30 – 14:30 hr.

Session 9

Theme: Application of NDT in Tribology

Speaker: Prof Krishnan Balasubramaniam, IIT M

14:30 – 15:30 hr.

Session 10

Theme: Principles of Hydrostatic Lubrication

Speaker: Prof Satish C Sharma, IIT R

15:30 – 16:00 hr.

Tea Break

16:00 – 17:00 hr.

Session 11

Theme : Bio Tribology

Speaker: Dr. B Basu, IISc

17:00 – 1830 hr

Project Work Presentations**

All participants



Department of Science & Technology

25th June, 2014

**To proceed to IOCL (R&D) at Faridabad. To leave liPM early by
07:30 Hrs in two AC Buses.**

- 09:30 – 10:30 hr. Session 12**
Theme : Tribo Testing and Performance Evaluation of Lubricants & Materials
Speaker: Mr Ajay Kumar Harinarain
- 10:30 – 10:45 hr. Tea Break**
- 10:45 – 11:45 hr. Session 13**
Theme : Role of Corrosion in Tribology
Speaker: Mr Q M Amir, SRM (PR & C) IOC R&D
- 11:45 – 12:45 hr. Session 14**
Theme : Automotive Tribology
Speaker: Mr. Reji Mathai, Chief Manager IOC R&D
- 12:45 – 1300 hr. IOC (R&D) Film**
- 13:00 – 14:00 hr. Lunch Break**
- 14:00 – 17:00 hr. IOC (R&D) Laboratory Visit in 2 groups**
- 17:00 – 17:30 hr. Tea Break**
- 17:30 – 19:00 hr. To leave IOCL (R&D) for liPM Gurgaon at 18:00 hrs in two bus**



26th June, 2014

- 09:00 – 10:00 hr. Session 15**
Theme: Fluid Film Lubrication & Hydrodynamic
Speaker: Prof Rakesh Sehgal, NIT Hamirpur
- 10:00 – 11:00 hr. Session 16**
Theme : Tribology of Rolling Element Bearings
Speaker: Dr Rajaram Ganesan, NE IL Japur
- 11:00 – 11:30 hr. Tea Break**
- 11:30 – 12:30 hr. Session 17**
Theme : Coatings for Wear Protection
Speaker: Dr. S V Joshi
- 12:30 – 13:30 hr. Lunch Break**
- 13:30 – 14:30 hr. Session 18**
Theme : Condition Monitoring/ Diagnostics of Tribological Systems
Speaker: Dr. Barun Chakrabarti
- 14:30 – 15:30 hr. Session 19**
Theme: Lubricating Base Oils Types, their Production and Lubricant Formulation
Speaker: Dr. S S V Ramakumar, GM IOC R&D
- 15:30 – 16:00 hr. Tea Break**
- 16:00 – 17:00 hr. Session 20**
Theme: Chemistry of Lubricants and Additives
Speaker: Dr. S S V Ramakumar, GM IOC R&D
- 17:00 onwards Preparation/Revision time for the Exam**

27th June, 2014

- 09:00 – 11:00 hr. Examination**
Examination with objective type questions (multiple-choice) based on the Topics covered during the program
- 11:00 – 11:30 hr. Tea Break**
- 11:30 – 13:00 hr. Feedback and Concluding Session**
Chief Guest: Mr R Suresh , ED (LT),
IOC R&D, Faridabad
Sh. Amitabha Choudhury,
DGM liPM
- 13:00 onwards Lunch Break and closure of the Program**