

4th SUMMER SCHOOL IN TRIBOLOGY
Venue: liPM, Gurgaon: Duration: 25th – 29th June, 2011

Programme Schedule

25th June, 2012

INAUGURAL SESSION

09:30 – 10:30 hr. Welcome Address

Mr. N. K. Bansal, Executive Director (liPM), IOCL

About the Programme

Inaugural Address and Theme Lecture

Vote of Thanks

10:30 – 11:00 hr. Group Photograph & Hi Tea

11:00 – 12:00 hr. Session 1

Theme : Basics of Friction, Wear and Lubrication

Speaker: Dr. A. Sethuramiah, Former Prof. ITMMEC, IIT Delhi

12:00 – 13:00 hr. Session 2

Theme: Boundary Lubrication, EHL and HL

Speaker: Prof. A. Sethuramiah, Former Prof. ITMMEC, IIT Delhi

13:00 – 14:00 hr. Lunch Break

14:00 – 15:00 hr. Session 3

Theme: Fluid Film Lubrication

Speaker: Prof. S C Sharma , IIT Roorkee

15:00 – 15:30 hr. Tea Break

15:30 – 17:00 hr. Session 4

Theme: Lubricating Oils: types, production and composition

Speaker: Dr.S P Srivastava , Former ED IOC R&D

26th June, 2012

09:00 – 10:30 hr. Session 5

Theme: Chemistry of Lubricants and additives

Speaker: Dr. S K Majumdar, DGM, IOC R&D

- 10:30 – 11:00 hr. Tea Break**
- 11:00 – 12:00 hr. Session 6**
Theme : Failure Analysis of Machine Elements (Gears and Bearings)
Speaker: Dr. Anand Prabhakaran, Tata Steel
- 12:00 – 13:00 hr. Session 7**
Theme : Automotive Tribology
Speaker: Mr. Reji Mathai, Chief Mgr. IOC R&D
- 13:00 – 14:00 hr. Lunch Break**
- 14:00 – 15:00 hr. Session 8**
Theme : Grease Rheology
Speaker: Dr. N K Pokhriyal, Dy Mgr (Gr) , IOC R&D
- 15:00 – 15:30 hr. Tea Break**
- 15:30 – 16:30 hr. Session 9**
Theme: NDT in Tribology
Speaker: Prof. Krishnan Balasubramanian, IIT Madras
- 16:30 – 17:30 hr. Session 10**
Theme: Oil Analysis Techniques for Health Monitoring of Equipment
Speaker: Mr. Deepak Sharma, MD Kittiwake India

27th June, 2012

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

- 09:30 – 10:30 hr. Session 11**
Theme : Tribo Testing and Performance Evaluation of Lubricants & Materials
Speaker: Mr Ajay Kumar, Sr Mgr., IOC R & D
- 10:30 – 10:45 hr. Tea Break**
- 10:45 – 11:45 hr. Session 12**
Theme : Analytical Techniques for Tribology and Surface Characterisation
Speaker: Dr. M B Patel, DGM , IOC R&D

11:55 – 12:45 hr. Session 13
Theme : Corrosion and Tribology
Speaker: Mr. Qazi Mohammed Amir, Sr Mgr. IOC R&D

12:45 – 1300 hr. IOCL (R&D) Film

13:00 – 14:00 hr. Lunch Break

14:00 – 15:30 hr. Laboratory Visits

15:30 – 16:00 hr. Tea Break

16:00 – 17:30 hr. Laboratory Visits

To leave IOCL (R&D) for liPM Gurgaon at 18:00 hrs in two buses

28th June, 2012

09:00 – 10:00 hr. Session 14
Theme : Bio Tribology
Speaker: Dr. A P Harsha, Prof IT BHU

10:00 – 10:30 hr. Tea Break

10:30 – 11:30 hr. Session 15
Theme : Tribology of Rolling Element Bearings
Speaker: Mr. S Dampur , Vice President (R&D) , NIE, Jaipur

11:30 – 12:30 hr. Session 16
Theme : Gear Tribology and Lubricant
Speaker: Dr. Barun Chakrabarti, Jt. GM & Head R&D , L&T Mumbai

12:30 – 13:30 hr. Lunch Break

13:30 – 14:30 hr. Session 17
Theme : Wear Mechanisms and Mitigation of Wear by Tribology Based Design
Speaker: Prof. Satish Kailas , IISc , Bangalore

14:30 – 15:00 hr. Tea Break

15:00 – 16:00 hr. Session 18

Theme: Nano Tribology – Basics & Techniques
Speaker: Prof. Satish Kailas , IISc , Bangalore

16:00 – 17:00 hr. Session 19

Theme: Tribology of Manufacturing Operations
Speaker: Rajendra Mahapatra , Dy Mgr (tribology), IOC R&D

29th June, 2012

09:00 – 12:00 hr. Workshop on “Tribology Education and Research”

09:00 – 09:40 hr. Presentation by Participants on UG/PG Syllabi in Tribology
Participants (GroupWise)

09:40 – 10:20 hr. “Syllabi used for UG/PG level in Tribology in Engineering Institutions”
Prof. S C Ramesh, PES Inst. Of Technology, Bangalore

10:20 – 10:35 hr. Tea Break

10:35 – 11:15 hr. “Research in Tribology area at academic institutions in India”
Prof. Satish Kailas, IISc, bangalore

11:15 – 12:00 hr. “Way Forward for Tribology Education & Research in India”
Dr. D V Singh, Former Director, IIT Roorkee

12:00 – 13:30 hr. Valedictory Session and Certificate Distribution

Lunch Break and closure of the Program