

# Tribology is Alive and Well

**Tribology is an interdisciplinary science and of great importance in all walks of life. It is necessary in so many engineering, manufacturing, medical and transport fields, with the purpose of improving maintenance, conserving energy, reducing costs, downtime and stress.**

Energy consumption is a critical issue in South Africa today and SAIT has recently contributed to ASSAf's report to the DST, "The State of Research, Development and Innovation of Electrical Energy Efficiency Technologies in South Africa" and when government has formalised and put this into operation, the country can only benefit from vast savings to the natural resources.

The South African Institute of Tribology continues its drive to further Tribology within South Africa and neighbouring countries, through transfer of technology, training and discussion.

The Cape Town "Lubrication Engineering" course was the fifth run by the Institute this year, and the 117th course to date in the main centres of Johannesburg, Cape Town and Durban. But that number is not the total.

In addition to these courses held in the main centres, there have been some 30 in-house courses held at various companies. These include Anglo Platinum, ArcelorMittal, Eskom (Kriel, Medupi, Koeberg power stations), Holcim, Iscor, Rotek, Saldanha Steel, Sasol, Tau Lekoa Mine, Xstrata, with a total of just over 804 students. These courses benefit the companies as they do not have the extra costs and inconvenience associated with sending the delegates to one of the main centres. The only drawback is that it is easier for classes to be disrupted by delegates being called out into the plant for problems.

### Three courses

The three Introductory courses "Introduction to Lubrication Engineering", "Introduction to Wear & Materials" and the "Introduction to Lubricating Oils" numbered 36 and were held at Science Park, and also in-house for Black Mountain Mine, Sasol Secunda and Holcim in Lichtenberg. These numbered 412 students to date.

The "Introduction to Wear & Materials" replaced the three day "Materials & Wear" course, which was held from 1991 to 2003, as this shorter course seemed to be more suited to the South African market. The course introduces the different wear mechanisms such as sliding and fatigue-related wear, abrasion, erosion, corrosion and cavitation, and the wear resistant materials such as ferrous and non-ferrous metals, hardmetals, ceramics, rubber and polymers.

It is aimed at anyone concerned with the operation maintenance and design of plant and equipment, and the selection of wear resistant materials.

Then there is the two day SAIT CLS Study Overview, held immediately prior to the CLS exam. This course is held annually, to give students an idea of what to expect from the CLS exam. The SAIT hosts and invigilates the CLS, the OMA and the CMWF exams of the STLE, which saves candidates from travelling to the US to write. Reading material is available for these exams which are prepared and marked in the US.

Since 1985, through 204 courses, 3 761 delegates have learned about Tribology through the South African Institute of Tribology.

*Gill Fuller, SAIT Secretary*



### Air Pollution Control

A business unit of John Thompson



Your partner for industrial air pollution control solutions for half-a-century.

# ACTOM

John Thompson, a division of ACTOM (Pty) Ltd  
Tel: +27 (0)11 478-0456 | Email: infoapc@johnthompson.co.za | www.johnthompson.co.za/apc