

# Tribology and 2009



Patrick Swan

**Happy New Year to all our members and readers. Inevitably the start of a new year brings fresh ideas and challenges, and it is time to think about strategies, objectives and goals. Hopefully you have a clear mind after the year-end break.**

**E**very year is a special year that needs to be nurtured and enjoyed, for what is life without enjoyment? Enjoyment can take many forms: to some it is a personal quest, but to many it is a sense of achievement, and pride in that achievement. To others it is the satisfaction of empowering others, and enjoying the achievement of synergy, where goals become exciting challenges.

Tribology is fundamental to so much of our everyday activities – imagine a world without friction; there would be no traction, and so walking and transport would be impossible, and movement uncontrollable, or controllable by impact! Friction is clearly needed in every industry.

**This course should be mandatory for all responsible engineering staff throughout industry**

## Friction and wear

Because it takes two surfaces in relative motion to generate friction, the other side of tribology is wear. Wear is unavoidable when two surfaces are in contact during relative motion.

Tribology is therefore about the understanding and control of friction, and through that, the reduction of wear. Friction consumes energy, and wear consumes machinery. Both friction and wear consume resources.

Take time this new year to consider how tribology affects your business, and ask the obvious questions:

- How much unwanted friction is generated in my plant?
- How can the energy input – production output ratio be improved?
- How much is wear costing me in replacement parts, in breakdowns, and in equipment replacements?
- What are the norms for my industry?

The SAIT is in a unique position; we offer a comprehensive range of training courses, from basic one day courses to our 5 day certificated course. The courses are:

## Basics of lubricating oils

A one-day course covering the real basics, which has been developed for lower level operators who need to know the difference between one lubricant and another to prevent unwanted top up with the incorrect type or grade.

## Introduction to lubrication engineering

A one-day course developed as an introduction to all aspects of lubrication engineering, and its influence on maintenance. The level of this course makes it ideal for responsible people throughout industry, from engineers to artisans.

## Introduction to wear and materials

A one-day course covering the various wear regimes and the influence that material selection has on wear and friction. This course should be mandatory for all responsible engineering staff throughout industry.

## Understanding and managing wear

A three-day course building on the fundamentals established in the one-day course.

## Lubrication engineering

A five-day certificated course that gives a thorough understanding of lubrication engineering, this course should be mandatory for personnel responsible for plant maintenance.

## SAIT CLS study course

Through our affiliation with the Society of Tribologists and Lubrication Engineers (STLE) of the USA, we are able to offer their Certificated Lubrication Specialist exam. This is a specialist course developed to guide candidates through the wide spectrum of experience and information required for this international exam.

Tribology is fundamental to so much in engineering and maintenance. Empower yourself and others to be properly prepared for this critical responsibility, and enjoy the achievement of synergy in your plant personnel.

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