

SAIT Training Newsletter, June 2021

Follow the path from data to information and into knowledge.

Enrol Now for Lubrication Engineering 132 Cape Town, 30 August – 3 September

This course has been on our Schedule since the beginning of the year; if you would like to attend our Lubrication Engineering 132 in Cape Town, please contact the SAIT Secretary at secretary@sait.org.za to request a registration form, or visit our Website at <http://www.sait.org.za/events/training/> and scroll down to LE 132 to download the form. Complete it as soon as possible and return it to us at either secretary@sait.org.za or admin@sait.org.za.

Lubrication Engineering 131 CedarWoods (live) from 26-30 July.

At this time we are still planning on running this course face-to-face in July. However, if the Covid-19 restrictions, announced by the State President on Sunday 27 June, are not eased in time, we will run the course online.



Report-back on Lubrication Engineering 130 Held from 7-11 June 2021 in Durban



This five-day Course, held at Sica's Guest House in Mayville, Durban, was extraordinarily successful, thanks to the hard work put in by the delegates and the excellent lectures.

The main lecturer was Dave Gamble, Previous SAIT President and currently a member of the SAIT Executive Committee. Well done, Dave, on running an excellent course.



David was assisted by Howard Benadé, who is currently finalizing his Doctorate, working full time and a member of the SAIT Committee. Howard is setting up SAYTA – the South African Young Tribologists' Association – within the SAIT. He will continue to lecture at future courses.

A small group of 5 people participated in the course, and between them achieved an average of 73% in the exam, with 3 Distinctions and two excellent passes.

Those who achieved Distinctions were: Trishen Naidu, Deharen Pillay and Sirena Pydee.

Those who achieved excellent passes were Shevika Ramnath and Alexandre Cholokh.

Well done to Everyone!

Sirena Pydee



Deharen Pillay



Trishen Naidu



Shevika Ramnath



Alex Cholokh



Lubrication Engineering – General

1. Please note that all our courses, whether face-to-face or on-line on Zoom, will depend on numbers attending or participating, and on government regulations.
2. From 2021 onwards, our Zoom Courses will cost the same as the 'live, face-to-face' courses.

Here is our proposed Training Schedule for the remainder of 2021 and early 2022:

Course Nos	Course Dates	Online / face to face	Venue
LE 131: SAIMM No.01471	26-30 July 2021	face to face	Johannesburg
LE 132: SAIMM No. Pending	30 Aug – 3 Sept	If face to face:	Cape Town
LE 133: SAIMM No. 01472	18-22 October 2021	face to face	Johannesburg
LE 134: SAIMM No. 01473	21-25 February 2022	face to face	Johannesburg

In-house courses will be considered on request.

The Following Information is applicable to all Lubrication Engineering courses held by the SAIT:

Registration closes a week before the starting date of each course; please book early to ensure your position.

Please note that photographs will be taken during the course and published in the SAIT Training Newsletter and on the SAIT Website.

Course Objectives: The course is designed to transfer a thorough understanding of tribology from a lubrication engineering perspective. Some twenty topics take participants through from basic chemistry, the theory of rubbing contact and friction in industrial applications, to the application of management principles, safety and the environment.

Who Should Attend? The course is aimed at maintenance personnel but will be of benefit to anyone, including Engineers, concerned with the operation, maintenance, condition monitoring or management of industrial plant, machinery, transport and other lubricant related disciplines. Marketing personnel can also gain valuable knowledge from the course.

Experience: Delegates should have a good understanding of lubricants and their application. Delegates must have at least twelve months experience in the lubricant and maintenance professions.

Case Studies: Delegates are invited to bring their case studies, their problems and their questions to the course for discussion.

Course Content: Lubrication Terminology, Fundamentals of lubrication, Production and characteristics of lubricant base oils, Properties of base oils, Additives, Specifications, Grease, Lubrication Devices, Synthetic Lubricants, Internal Combustion Engine Lubrication, Auto Drive Line Lubricants, Plain Bearings, Rolling Bearings, Gears, Hydraulics, Compressors, Transformer Oils, Metal

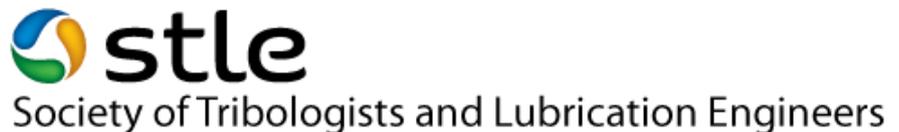


working, Filtration, Condition monitoring & Used Oil Analysis, Seals, Coolants, assessment of failed components, Lubrication Surveys, Storage and Handling of Lubricants and Environment.

Examination: An examination will complete the course, with a certificate for successful candidates.

Costs: **SAIT Members: R18,750.00** **Non-Members: R21,275.00** **Students: R5,750.00**
(proof of registration as a full-time student is required)

The SAIT is affiliated with the American Society of Tribologists and Lubrication Engineers (STLE)



Information regarding the STLE Exams

Please note that the SAIT will no longer be hosting these exams each year.

“CLS, OMA, CMFS EXAMS”

These Exams are Now Available Online for SAIT Members at <https://www.stle.org/>

**One of the benefits of SAIT Private Membership
is the included STLE Membership.**

- **Certified Lubrication Specialist (CLS):** Although not compulsory, it is highly recommended that you first attend the SAIT five-day ‘Lubrication Engineering’ course. A distinction of 75% is a good indication of success in the CLS exam, where the standard is high, and the pass mark is 70%. The recommended books for the CLS exam are the STLE Alberta Section ‘Basic Handbook of Lubrication’ Third Edition, and/or the AIST ‘The Lubrication Engineers Manual’ Fourth Edition.
- **Oil Monitoring Analyst (OMA I and OMA II)**
- **Certified Metalworking Fluids Specialist (CMFS)**

A significant amount of study is required for these exams, so it is advisable that candidates make an early start. Recommended reading for all modules is on the [STLE website](https://www.stle.org/) under [“Professional Development”](#).

You will need to be a registered, paid-up member of the SAIT, with its built-in membership of STLE, before you write these exams.

SAIT CLS Study Overview Can Be Arranged

Contact Isabel at secretary@sait.org.za,

or Berice at admin@sait.org.za.

If you are interested in participating in a Sait CLS Study Overview **6 months before writing the CLS Exams on-line**, we will arrange it for you.

Please note that before participating in the overview, you will need to spend time on a large amount of preparatory self-study and reading. Such an Overview will only go ahead if enough people wish to attend – PLEASE CONTACT US at either secretary@sait.org.za or admin@sait.org.za>

Introductory Courses on Lubrication Engineering and Wear and Materials

Introduction to Lubrication Engineering gives give participants an introduction to the practical understanding of lubrication engineering, knowledge which would suit plant operators, buyers, lubricators, artisans and apprentices, but with sufficient detail to warrant CPD credits with ECSA. The course will also benefit anyone involved with the operation and maintenance of industrial plant and machinery, or mining, trucking, transport and other lubricant related disciplines.

Course Content: Lubrication Terminology, Source, Chemistry, Physical Characteristics, Additives, Fundamentals of Lubrication, Greases, Plain Bearings, Rolling Bearings, Gears, Hydraulics, Compressors, IC Engines, Oil Analysis & Condition Monitoring, Storage & Handling, Filtration and Synthetics.

Introduction to Wear and Materials gives participants an introduction to the different wear mechanisms and a practical understanding of the range and right selection of materials available to combat wear. A short introduction into the theory is complimented by practical examples of applications. The course is aimed at supervisors and foremen, who must be able to understand and recognise wear and related problems but will also benefit anyone requiring an introductory understanding of the common wear processes and the materials currently used to combat wear. The course is accredited with ECSA, for 0.8 CPD point.

Course Content: Wear mechanisms such as sliding wear, abrasion, erosion, fatigue-related wear, corrosive-wear and cavitation; Wear resistant materials including ceramics, rubbers, hardmetals (tungsten carbide), polymers, ferrous and non-ferrous alloys; Case studies on wear failures. A certificate of attendance will be awarded to delegates who complete the course.

If you wish to attend one of our 1-day Introductory Courses, email us at secretary@sait.org.za or admin@sait.org.za.

A certificate of attendance will be awarded to delegates who complete each course. Delegates will also earn 0.8 CPD Credits, as the courses are registered with ECSA.

We Want to Hear from YOU!

1. **Please email us** at admin@sait.org.za if you would be interested in participating, or registering trainees to participate in any of our Training Courses.
2. **Please contact us at** admin@sait.org.za if you are interested in participating in a SAIT CLS Study Overview. This is NOT a full course, just revision and writing of previous test papers in preparation for the CLS Exam.



SAIT Office Hours and Social Media

SAIT's Office Hours:

09:00 – 15:00, Mondays to Thursdays; Telephone No. 011 804 3710.

On Fridays we work from home.

Please email Isabel at secretary@sait.org.za or Berice at admin@sait.org.za at any time with your queries.

Please Like the South African Institute of Tribology – SAIT – on Facebook and regularly check our Website for updates.



Telephone: +27 (0)11 804 3710

