



**Society of Tribologists and Lubrication Engineers
Caribbean Region Section**

in collaboration with the

**Engineering Department of
The University of The West Indies, St. Augustine**

Presents



STLE 2008 Annual Education Course: Condition Based Maintenance Lube Oil Analysis at **Cara Suites Hotel, Southern Main Road, Claxton Bay, Trinidad and Tobago. March 18th to 20th, 2008.**

MANAGING DIVERSITY FOR EXCELLENCE

**Condition Based Maintenance
Lube Oil Analysis (3 - Day)**

Course Outline

ARE YOU ASKING YOURSELF :

- My maintenance budget was cut. How can I manage my maintenance program more efficiently?
 - Where does lube oil analysis fit into my maintenance program and how do I make the most out of it?
 - Where can I learn world class oil analysis program management best practices?
 - Ok I have the oil report, now what?
- Then **THIS** is the short course for you!

Introduction

- The case for condition-monitoring
- History of Tribology

Lubricant Fundamentals

- Functions of Lubricating Oil
- Properties of Base Oil
- Oil Additives
- Synthetic oils

**Classification of oils
Performance Tests**

- Acid & Base Numbers
- Seal compatibility
- Foaming, Dispensancy, Demulsibility, Filterability
- Rust & Corrosion
- Oxidation & Thermal Stability

Lubricant Analysis

- Fourier-Transform Infra-Red
- Karl Fischer
- Gas Chromatography
- Particle Count
- Elemental Analysis
- Wear Particle Analysis

Program Management

- Maintenance Strategies
- Setting Program Goals
- Oil Sampling
- Reading Oil Analysis Sample Reports

Lubrication Excellence

- Lubrication Audit
- Lubrication Survey
- Filtration

Interpretation Fundamentals

- Key Oil Analysis Tests
- Setting Wear Alarms

Interpretation of Contamination and Lube Degradation

- Lubricant Degradation
- Interpretation of TAN/TBN/Viscosity
- Additive Depletion
- Contamination
- Determining incorrect oil top-ups

Wear Particle Analysis

- Particle Analysis Techniques
- Ferrous Particles
- Non-Ferrous Particles

Interpretation of Wear & Fatigue

- Understanding Wear Limits
- Determining Wear Limits

New Technologies

- Reliability-Based, Knowledge Base
- Condition-Based Maintenance
- Reliability-Centred Maintenance

Technology Integration

- Thermography
- Vibration Analysis
- Measuring Success
- IT and Maintenance

**3 DAY COURSE
Costing :**

Members:
TT\$7,500.00
Non-Members:
TT\$8,000.00

Package Includes:

Course Material
Conference tote bag
Polo t-shirt
One year membership with STLE
Breakfast, lunch and coffee break
2.5 CEU with UWI & STLE

What exactly is tribology?

TRIBOLOGY:
The study of wear, friction and lubrication engineering as it relates to moving surfaces.

OMA / CSL Certification Examination offered.
To registered: sign up online @ www.stle.org

REGISTER for this course
PLEASE CONTACT :
stle@tstt.net.tt or call/fax our office Tel/Fax 868 652-1042.

**ABOUT YOUR LECTURER :
MR. JACK POLEY**

Years experience	> 40
Papers written	> 15
Seminars presented at	> 100
Co-founded STLE Oil Monitoring Analyst (OMA) Committee.	

Contact us, Monday to Friday 9:00am to 3:00pm
STLE Office **Tel # (868) 652 1042** **Digicel # 321 8425** **Bmobile # 777 5854**