



STLE Update

WHERE SCIENCE MEETS THE BOTTOM LINE



Mission Statement:

To advance the science of tribology and the practice of lubrication engineering in order to foster innovation, improve the performance of equipment and products, conserve resources, and protect the environment.

MARCH 2005

WELCOME

STLE Update provides our 4,000 members worldwide with news about STLE and practical content useful to technical professionals. Here's what's happening this month.

Learn From The Experts - Leave With Practical New Ideas

Industrial lubrication professionals can get a year's worth of experience and ideas during four days at STLE's 2005 Annual Meeting in Las Vegas on May 15-19. Seven short courses cover today's leading ideas and best practices. Learn the business from 50 expert faculty members selected by STLE's Education Committee.

An exceptional value, because course fees (which start at only \$625 per day for STLE members) include classroom instruction, a course manual with details on each speaker's presentation and registration for the STLE Annual Meeting itself. This year's course line-up includes:

- Lubricant Technology: A Journey Beyond the Basics (Advanced Lubrication)**
- Lubes 101: Fundamentals of Lubrication and Lubricating Materials (Basic Lubrication)**
- Reliability Centered Maintenance: Today's Hottest Topic in Manufacturing Management (Condition Monitoring)**
- Principles of Hydraulic Fluid Technology - Fluids (Hydraulic Systems)**
- Total Metalworking Fluid Management (Metalworking Fluids)**
- Shaft Seal Application and Performance Evaluation for Improved Reliability (Sealing Systems)**
- Getting to Know Non-Petroleum Based Lubricants (Synthetic Lubricants)**

Use these links to access complete program information and registration materials. [Course Descriptions](#) and [Registration Form](#)

Tribology of Rocket Design Comes to Keynote Session



One of the international engineering community's foremost experts on liquid rocket engine propulsion has joined the Keynote Program for STLE in Las Vegas.

Pascal Pempie, a 20-year veteran of the French Space Agency (CNES), will address the main tribology problems related to cryogenic liquid rocket engines. He joins Dr. Uzi Landman, an award winning physicist and nanotribology pioneer, on the Monday, May 16, morning program that will open the 2005 STLE Annual

Meeting.

These engines, burning liquid oxygen and liquid hydrogen, represent daunting tribological challenges. In cryogenic engines the control of more than one hundred tribological couples is mandatory to reach high reliability and safety requirements. A roadmap addressing the future of tribology in liquid rocket engines will be discussed as part of his talk.

Pempie, a mechanical engineer, joined the French Space Agency (CNES) in 1985

Upcoming Meetings:	
STLE's 2005 Annual Meeting May 15-19 Las Vegas	
E-mail your comments to STLEUpdate	

STLE membership supports and expands your professional abilities through:

Education: Top-rated and affordable courses are offered live at a variety of locations or through the new [LubeLearn](#) on-line education program.

Certification: Earn recognition and valuable credentials through two STLE-sponsored programs: Certified Lubrication Specialist (CLS) and Oil Monitoring Analyst (OMA).

Professional Networking: Offered at two major

international conferences, local section meetings or one of 23 technical committees and industry councils.

Marks of professional achievement: CLS and OMA

The following questions capture the kind of knowledge tested on the CLS and OMA exams, but are not actual test questions. See below for correct answers.

Questions:

1. All diesel engine oils are basically the same with the exception of the types of additives used. Any of these oils may be used in any diesel engine. (True or False)

2. If you were unable to obtain a dynamic sample on a piece of equipment, what would be the most desirable course of action to take?

3. In a typical industrial setting, it is more likely that oil will require a change due to its lack of cleanliness than due to its chemical degradation. (True or False)

4. What can protect surfaces that have relative sliding or rolling motion?

Terms of the Profession

cloud point – the temperature at which a lubricant appears hazy due to wax formation when a sample is cooled under standard conditions.

flash point – the minimum temperature at which a fluid will support instantaneous combustion (flash) but before it will burn continuously (fire).

friction modifier – an additive designed to affect the frictional properties of rubbing surfaces.

immiscible - incapable of being mixed without separation of phases. Water

to develop the turbopumps of cryogenic liquid rocket engines within the framework of the Ariane 5 program. He is currently technical advisor to the Launch Vehicle Directorate.

CMF Expands To Meet Growing Demand For Presentation Time

To meet the demand from organizations seeking opportunities to connect with the lubricant industry's top professionals, STLE is for the first time expanding the schedule for its Commercial Marketing Forum, held in conjunction with the society's May 15-19 Annual Meeting at Bally's hotel and casino in Las Vegas.

Traditionally the first CMF presentation begins at 8:30 a.m., and the last at 4:30 p.m. However, so many companies are requesting slots that this year the CMF begins at 8 a.m. on Monday, May 16, and 7:30 a.m. on Tuesday and Wednesday, May 17-18. In addition, a presentation occurs at 5 p.m. on Monday.

The CMF is a unique marketing opportunity in which companies present 30-minute commercial presentations on their products and services. Commercialism of this type is not allowed in the more than 300 technical presentations that will be heard at the 2005 Annual Meeting.

For a complete listing of CMF times, presenters and topics, [click here](#).

Exhibit Hall Filling Rapidly. Act Now To Reserve Space!

While space is still available, booths for the 2005 trade show, a major component to the Annual Meeting, are rapidly selling. If you are interested in reserving space to present your organization's latest technologies, you are urged to act today.

More than 1,200 lubricant professionals are expected to participate in this year's Annual Meeting. The last time STLE held its annual meeting in Las Vegas was 1999 when the society set records for attendance and number of technical presentations. 2005 looks to be a repeat of that performance.

Exhibitors can purchase a 10-by-10 foot booth for the same price as the 8-by-10 foot booths offered in Toronto. If you have already reserved your space, STLE is preparing a mailing, including the Exhibitor Service Kit, which should reach you very soon, if it hasn't already.

To reserve space at STLE's 2005 Exhibition, contact Tracy Nicholas VanEe at 630-922-3459, nicholas@stle.org For a list of exhibitors, [click here](#).

It's Official! You Can Now Sign Up For MWF Certification

More than 15 months in the design and concept, STLE's Certified Metalworking Fluids Specialist exam will be offered for the first time at the 2005 Annual Meeting. The three-hour, 150-question exam takes place in Bally's on May 19 at 9 a.m.

The exam-reservation form has just been posted on the STLE Web page. To learn more about the requirements and sign up for the May 19 test, [click here](#).

The CMFS certification joins two other STLE certification programs: Certified Lubrication Specialist and Oil Monitoring Analyst. Nearly 25% of all STLE members have attained certification status.

Important: Do not confuse the CMFS certification with the certificate that can be earned after taking the Metalworking Fluids education course offered May 17 and 18 in Las Vegas as part of the Annual Meeting program. A test is being offered at the end of that course, and those who pass will receive a certificate. While taking the course certainly will help you prepare for the certification exam, please be aware that requirements for the CMFS are much more demanding.

For more information on the CMFS certification and exam, contact Bob Gresham at rgresham@stle.org or Barb Rapacz at brapacz@stle.org

Have You Reserved Your Room At Bally's Yet?

The best place to stay in Las Vegas during the STLE Annual Meeting is Bally's, host hotel for all education, technical and networking events. Staying at Bally's is

and petroleum oil are immiscible under most conditions, although they can be made miscible with the addition of an emulsifier.

lubricity - the ability of an oil or grease to lubricate; also, called film strength. Lubricity can be enhanced by additive treatment.

CLS/OMA Quiz Answers:

1. False.
2. Take the sample within 1 hour of shutdown.
3. True.
4. Lubrication.

Visit our website at www.stle.org

exceptionally convenient, puts you right on the famous Las Vegas Strip and helps STLE meet its commitment to the hotel, which, in turn, keeps annual meeting registration fees low.

Bally's is offering a great rate: \$131 for single and double rooms. After April 22, rooms at Bally's will be offered subject to availability and prevailing room rate, so now is the time to book your room.

To download a copy of the reservation form to either mail or fax, [click here](#)

History Of Tribology Poster Available In June TLT Magazine

In honor of STLE's 60th Annual Meeting, the editors of TLT magazine are preparing a special article for its June issue reviewing the history of tribology, including Tribology's Top Ten Greatest Events. Nominations for the Top Ten came from a special survey of STLE members.

As part of that article, Afton Chemical Corp., an additives chemistry company in Richmond, Va., is sponsoring a special foldout poster reviewing the history of tribology and lubrication engineering. The detachable poster is suitable for framing or posting on a wall or bulletin board.

TLT's editors are selecting the Top Ten events based on the member nominations. The article is being written by TLT features editor Kathryn Carnes and STLE Director Michael Anderson, Falex Corp., Sugar Grove, Ill.

The June TLT will be distributed at the Annual Meeting in Las Vegas. For advertisers, that represents a bonus circulation of 1,200 lubrication professionals. To reserve your ad space or inquire about other Annual Meeting-related sponsorship opportunities, contact Tracy Nicholas VanEe at 630-922-3459, tnicholas@stle.org

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