

**Mission Statement:** 

#### May 2006

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.

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 <u>LubeLearn</u> on-line education program.

### Certification: Earn

recognition and valuable credentials through STLEsponsored programs: Certified Lubrication Specialist (CLS), Oil Monitoring Analyst (OMA) and Certified Metalworking Fluids Specialist (CMFS).

### **Professional Networking:**

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

Visit the website at www.stle.org



#### CALGARY · MAY 7-11, 2006



### WELCOME

Everything U.S. citizens need to know about attending a meeting in Canada. This includes information on required documents for entry and exit, customs restrictions, getting from the airport to the hotel, and Canadian dollars.

What to do if you are not registered yet but still planning to attend.

Sneak a peek here at the complete Program Guide for the Annual Meeting.

Come to Calgary for the networking, technical sessions, exhibits and special events but consider <u>ADDING AN EDUCATION COURSE</u> too while you're there.

Relax with a free 10-minute massage at the Annual Meeting!

Contents of May 2006 Tribology and Lubrication Technology magazine

Contents of June 2006 Tribology and Lubrication Technology magazine

How to join or renew your membership in STLE

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# Everything you need to know about arriving and departing Calgary from the US.

Source for the below info is: http://www.amcits.com/index.asp

### **Required Documents for U.S. Citizens**

When entering Canada from the United States, U.S. citizens must show either 1) a U.S. passport or 2) other proof of U.S. citizenship - such as an **original** or **certified birth certificate** together **with photo identification**. U.S. citizens entering Canada from a third country must have a valid passport. A visa is not required for U.S. citizens for a stay up to 180 days.

### **Required Documents for Naturalized Citizens**

If you are a naturalized citizen and do not have a passport, you should travel with your naturalization certificate. A driver's license or Social Security card is not valid proof of citizenship. All U.S. citizens entering Canada from a third country must have a valid passport. Alien permanent residents of the U.S. must present their Alien Registration Card, commonly called the "Green Card."

### **Required Documents for Dual Citizens**

If you are a dual U.S.-Canadian citizen you should always present yourself as a Canadian citizen when entering Canada and as a U.S. citizen when entering the United States.



Oct. 23-25, 2006 Hyatt Regency San Antonio San Antonio, Texas



Handbook of Lubrication and Tribology: Volume 1: Application and Maintenance, Second Edition by George E. Totten, Ph.D, FASM, Portland State University, Oregon, USA 2006, 1,068 pages (hard cover) Publisher's price: \$ 249.95 STLE member's price: \$225 Now available

This 2nd edition has been fully updated and revised with additional reference tables and figures. New chapters on current topics have been added, as well as new international standards on safety, environmental protection, and waste.

This new edition is expected to replace the first edition as an essential tool for every tribology and lubrication science library.

Order here

#### Customs Restrictions for U.S. Visitors to Canada

As a visitor, you can bring certain goods into Canada for your own use as "personal baggage" during your stay. If you declare these goods when you arrive, and take them back with you when you leave, you will not have to pay any duties or taxes. These goods may not be used by a resident of Canada or on behalf of a business based in Canada.

Personal baggage includes things like clothing, sports equipment, personal computers, cameras and vehicles. Items for business use in Canada are admissible as personal baggage. You may be required to fill out a Customs Declaration Card.

A business visitor may temporarily import certain goods duty-free. Goods that qualify are professional equipment (tools of the trade), cinematographic equipment, goods for sports purposes, and goods for display. (Contact the STLE importer for more details at <u>www.mend.com</u>).

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### Options from the airport to the hotels

#### YYC

Calgary has one airport - The Calgary International Airport (YYC). The Calgary airport handles both domestic and international travel.

### Car Rental

The Rental Car Centre is located on the departures level. You must exit the main terminal and cross the road to reach the car rental area. There are numerous signs throughout the Airport directing you. If in doubt, ask one of the folks in white cowboy hats and red vests for directions. The Rental Car Centre can also be accessed by elevator in the parkade area. Companies working out of the Rental Car Centre include:

Alamo Rent-A-Car Avis Rent-A-Car Budget Rent-A-Car Hertz Rent-A-Car National Rent-A-Car Thrifty Rent-A-Car

Remember if driving that distances and speeds are posted in metric units. 100 kilometers equals 62 miles.

The maximum speed limit in Canada is 50km/hr in cities, 80km/hr on highways, and 100 km/hr on rural highways.

### Taxi

There are 2 taxi stands on the Arrivals level. Each stand has cars available 24 hours a day, 7 days a week. Look for transportation signs throughout the airport for directions to the stands. Taxi service (including rates) in Calgary is regulated by the City of Calgary via the Calgary Taxi Commission.

The following taxi companies are licensed to provide service at the Airport: Advance Cab / Calgary Cab Associated Cab Black Top Checker / Yellow / Red Top Co-op Taxi Mayfair Taxi

Fares are based on meter rates. The approximate fare to Downtown Calgary is between \$27 to \$30(CAD) under normal traffic and weather conditions.

### Airport Sedans

If you want to ride in style, Airport Sedans are your answer. These cars and their drivers provide premium transportation services to travelers in Lincoln Town Cars. Airport Sedans are available on-demand on the arrivals level curb, adjacent to each



Metalworking Fluids, Second Edition

By Jerry P. Byers, Milacron, Inc., Cincinnati, Ohio USA 2006, 480 pages Publisher's price: \$ 139.95 STLE member's price: \$125

Now available This fully revised and expanded

2nd edition summarizes the latest thinking related to metalworking fluid development, evaluation, and application. It has new chapters on metal cutting, air quality and fluid mist in the workplace and costs and benefits of metalworking fluids. This is the must-have book for current metalworking fluid knowledge.

Order here



#### TRIBOLOGYnetBASE

You can now readily access nearly 30 books just as easily as you can access this email, thanks to your STLE membership.

### TRIBOLOGYnetBASE offers a

fully searchable and downloadable online library with the most trusted resources and reference volumes in the field of tribology and lubricants.

For a limited time, 30 day trial subscriptions are available. This innovative resource co-sponsored by CRC Press was originally designed to serve only libraries and larger companies. Only STLE members may purchase an of the two taxi stands. Expect to pay approximately 25% higher fares for Airport Sedans (as opposed to 'regular' taxis). The regulated fare to downtown Calgary is \$37(CAD). Licensed Calgary Airport Sedans include:

Allied Limousine: (403) 299-9554 Ambassador Limousine: (403) 299-4910 Air Linker Limousine Service: (403) 250-8300 Limojet: (403) 863-5268

#### **Airport Shuttles**

Airport shuttles are an economical way to get to and from the Calgary Airport. There are a couple of different shuttle options, including:

**Downtown Shuttle** - The Airporter Shuttle Express provides shuttle service between the Airport and Downtown Calgary (including downtown hotels) on a scheduled basis. The counter is located on the arrivals level right next to International Arrivals. For more information contact Airporter Shuttle Express at (403) 509-4799.

**Door To Door** (Shared Ride) Shuttle - In addition to the Downtown Shuttle, **The Airporter Shuttle Express** can take you to any location within Calgary and the surrounding area. This service does not run on a regular schedule and reservations should be made in advance. For more information contact Airporter Shuttle Express at (403) 509-4799.

**Hotel Courtesy Shuttles** - Want a free way to get to your hotel? Follow the signs in the airport to Bus Bay 10 and 11 on the arrivals level. You can call your hotel from one of the phones in the arrivals level to arrange for pick-up.

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#### Money

Many U.S. automated teller machine (ATM) cards, such as those on the PLUS or CIRRUS system, can be used throughout Canada to obtain Canadian funds on your U.S. bank account. Western Union Wire services are also available in Canada.

As of Wednesday, April 26, 2006 100 US Dollar = 113.583 Canadian Dollar 100 Canadian Dollar (CAD) = 88.04134 US Dollar (USD)

Use <u>http://www.oanda.com/convert/classic?user=amcits</u> to find the value of any money conversion.

### Not registered but still planning to attend?

If you are planning to attend the 2006 Annual Meeting in Calgary, but have not yet registered, it is too late for advance registration. Please register on site, at the On-Site registration table in Calgary. Come to the MacLeod Foyer in the lower level of the TELUS Convention Centre in Calgary, Alberta, Canada. Registration is open from Saturday, May 6 through Thursday, May 11. Registration hours are generally from 7 am through 6 pm Sunday through Thursday. On Saturday, registration is from 3 pm until 6 pm. It is not too late to attend, just too late for advance registration.

#### Annual Meeting Program Guide now online

The complete Program Guide is now posted at <u>www.stle.org</u>. That means you can go online to access the full schedule of technical sessions, the Commercial Marketing Forum, the education courses, the exhibition, etc. and plan your days in advance so you don't miss anything. <u>Link here</u>.

**Make the most of your trip to Calgary by adding a one day education course.** Add a course to make your attendance at the 2006 STLE annual Meeting in Calgary even more useful. If you are already registered, adding a one day course on Advanced Lubrication (May 7); Condition Monitoring (May 10); Hydraulic Fluid Power Transmission Systems (May 7) or Bearings and their Lubrication (May 10) may make sense. Each of these one day course costs \$625 for an STLE member or \$825 for a non-member. Register on site for these one day courses. See the program guide for more details. Link Here individual annual subscription at a steeply discounted rate of \$250.

#### Order here.

Note: Corporate STLE members can call our representative, Corey Worthington directly at 1-561-998-2237 or email him at corey.worthington@ taylorandfrancis.com.

#### ASTM 2006 Interlaboratory Crosscheck Program IN-SERVICE OIL MONITORING HYDRAULIC FLUIDS & OILS Quality assurance testing program for labs doing oil condition monitoring

This new program provides labs with a statistical quality assurance tool, enabling them to compare, improve, and maintain, a high level of performance in the use of ASTM methods against other labs worldwide.

Used or in-service hydraulic fluids or oils used in the program will be obtained from a single point source for each test cycle. A 250 ml bottle of sample material will be provided to each participant each test cycle along with the appropriate instructions necessary to submit data.

The first In-Service Hydraulic Fluids & Oils Monitoring test cycle will be held in May 2006. However if you miss the May deadline, you may still register for the August and November 2006 test cycles, but contact ASTM-ILCP for pricing details.

For more information, including testing schedule and fees, contact Jamie Lake at 610-832-9682 or jlake@astm.org. Or go to www.astm.org and click on Proficiency Testing.

#### STLE 2006 Annual Meeting Exhibitor List

| Acheson Colloids Co.                     |
|--|
| Acme-Hardesty Co.                        |
| ADE Phaseshift                           |
| Afton Chemical Corp.                     |
| AGAT Laboratories                        |
| American Petroleum Inst.                 |
| Ametek Test & Calibration<br>Instruments |
| Arch Chemicals                           |
|  |

### Relax with a free 10-minute massage!

We all know a full day at STLE's Annual Meeting & Exhibition can be a physically taxing experience. Whether you're sitting, standing or walking, an active day of tribology can stress even the most energetic of us. This year's meeting offers a service to help you unwind and recharge your batteries. Lonza Inc. is sponsoring a Wellness Break Massage Station where you can receive an energizing 10-minute neck, shoulder and back massage from a licensed massage therapist. Lonza is offering the service to all registered attendees.

The station is located in the Macleod Foyer in the lower level of the TELUS Convention Centre next to the exhibition entrance and STLE Registration Desk. No need to make an appointment—just stop by when you have a moment.

The massages are designed for conventioneers on the go. You'll be fully clothed and seated in a special massage chair. No lotions or oils are involved. Just relax and let the therapists do their job. Ten minutes later you'll feel like a new person.

The Wellness Break Massage Station is open during exhibit hours Monday, Tuesday and Wednesday.

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The May 2006 issue of *Tribology and Lubrication Technology was mailed in mid April and current members should have received it already.* If you missed it, here is *quick reference to the contents.* 

**20 Minutes With ... Dr. Elaine Yamaguchi** This Yale-educated researcher reviews the pros and cons of ZnDTP and previews engine-oil additives coming down the road. **By Karl M. Phipps** 

List of exhibitors at STLE's 2006 Annual Meeting While you're in Calgary, make sure to visit these exhibitors for a sneak preview of the industry's newest products, technologies and services.

List of sponsors at STLE's 2006 Annual Meeting The success of STLE's Annual Meeting & Exhibition wouldn't be made possible without the generous support of our sponsors.

LUBRICATION FUNDAMENTALS It all adds up to dollars and cents Sure, tribology saves money and increases efficiency. But are you communicating this effectively to senior management? By Dr. Robert M. Gresham.

### FEATURE ARTICLE The business of tribology

Lubrication engineering plays a major role in conserving energy and raw materials. Accurate accounting tools can help make your case to business managers—in the language they understand. **By Andrew and Valli Batchelor** 

**PEER-REVIEWED PAPER** (Editor's Choice) Rheological Properties of Extreme Pressure Greases Measured *Using a Process Control Rheometer By Julie A. Glasscock and Robin S. Smith.* 

**Tech Beat** Application of ultrananocrystalline diamond coatings; higher-peforming lithium ion batteries. **By Dr. Neil Canter** 

**Around the Industry** This month's newsmakers include Coolant Control, Houghton International, Lubrizol and more.

**Sounding Board** Readers recommend the books that have helped them the most in their careers.

**New Products** Flashpoint testing equipment; microbe oil spill cleaner; biodegradable all-purpose lubricant; digital paddle viscometer.

Arizona Chemical Co. Arkema BASF Corp. Biosan Laboratories Buckman Laboratories Cannon Instrument Co. Cathay Biotechnology Center for Tribology Chemax Performance solutions Chemtura Corp. Chevron Phillips Chemical Ciba Specialty Chemicals Cognis Compass Instruments/Falex Corp. Crystal Inc. PMC Dover Chemical Corp Dow Chemical Co. E-ION EPT ExxonMobil Chemical Co. Functional Products Inc GE Advanced Material Huntsman Corp. Hysitron, Inc. ndustrial Research & Devel. Inst. Infineum USA nnovene Ivanhoe Industries John Wiley & Associates King Industries Koehler Instrument Co. ambent Technologies onza Inc \_ubrizol Corp. ufhissa De Mexico Maintenance Technology Magazine MICROTAP USA INC Munzing/Ultra Additives OM Group PAC PCS Instruments Phoenix Tribology Pilot Chemical Co. PMC Specialties Group Polaris Laboratories LLC Rhein Chemie Corp. Rhodia Inc. Rohm and Haas Shamrock Technologies Inc. Spectro Inc. Staveley Services North America Stepan. Co.

**Advertisers Index** 

**Test Your Knowledge** 

Resources

President's Report STLE examines its own structure and governance.

From the Editor Planting the seeds for our next generation of tribologists.

Headquarters Report 'A vision of excellence' from the Caribbean.

On Condition Monitoring Breaking down the process of interpreting data.

Worldwide Unlocking the truth about controlled friction.

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### **CONTENTS of June 2006 Tribology and Lubrication Technology**

The June 2006 issue of *Tribology and Lubrication Technology* will be distributed onsite at the Calgary meeting, as well as going out in the mail to members in early May.

Meet STLE's new president and 2006-2007 board members Industry veteran Daniel D. McCoy assumes the helm as 2006-2007 STLE

president.

List of exhibitors at STLE's 2006 Annual Meeting

List of sponsors at STLE's 2006 Annual Meeting

**20 Minutes With ... Dr. Raj Shah** Working with his team at Koehler Instruments Co., this sales and marketing executive helps design test devices for the petroleum and petrochemical industries. **By Karl M. Phipps** 

LUBRICATION FUNDAMENTALS **The basics of metalworking fluids** These versatile lubricants come in four basic categories and have more functions than a Swiss Army knife. **By Dr. Robert M. Gresham** 

PRACTICAL APPLICATIONS **Improving your sales with the 'Inside-out' approach** Want to be a great salesperson? First commit to becoming a great person. (First of a four-part series) **By Jerry L. Kennedy** 

FEATURE ARTICLE **It's not your father's motor oil** The United States and Europe are creating a new generation of environmentally friendly engine oils. Basestock and additive innovations are making it possible. **By Dr. Alan C. Eachus** 

**PEER-REVIEWED PAPER** (Editor's Choice) Calculation of a Safety Margin for Hydro Generator Thrust Bearings By Christopher M. Ettles, Jan Seyler and Michael Bottenschein

Tech Beat Measuring the friction of fabrics; the interface between metal and water; nanofiber-based diesel engine filters. By Dr. Neil Canter

**Around the Industry** A look at the people and companies that are making news in the world of lubricants.

**Sounding Board** Readers respond in record numbers when asked to describe the circumstances that led to them joining STLE.

| Tannas Co.                        |
|-----------------------------------|
| Taylor Francis Group-Jorunals     |
| Taylor & Francis CRC Press- Books |
| The Fluid Life Corp.              |
| TribSys                           |
| Uniqema Lubricants                |
| W.L. Gore                         |
| Wincom Inc.                       |

**New Products** Through-the-tool lubrication system; high-performance grease; friction and wear testing system; solid-state viscosity sensor and more.

## **Advertisers Index**

Test Your Knowledge

# Resources

President's Report It's been a great (and eventful) year for STLE.

From the Editor Guess who you won't be seeing in Calgary.

Headquarters Report Log on and learn with four free lubrication courses.

Lube Legislation Playing politics with chemical safety.

Shop Floor Shaking off the rust.

Cutting Edge The tribology of teeth

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## To join STLE go to

https://www.stle.org/secure/membership\_application/index.cfm

To update your records, including email changes, go to <a href="http://www.stle.org/address\_change/index.cfm">http://www.stle.org/address\_change/index.cfm</a>

The Society of Tribologists and Lubrication Engineers

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