



Society of Tribologists and Lubrication Engineers

## Toronto Section

**LUNCH SPEAKER**

**March 12, 2013**

### **Developments in New Organic Friction Modifiers: Performance -Additive Interactions and Friction Reduction Retention**

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**Abstract:** Tribology studies of a new organic friction modifier (O-FM) for use in fully formulated Group I-IV, Passenger Car Engine Oils (PCEO), will be discussed. Specifically, the additive's impact on friction reduction and anti-wear performance as measured by the Cameron Plint (TE-77), Mini-Traction-Machine (MTM) methods, and the Falex Four Ball wear method are reviewed and compared to other commercial friction modifiers. In addition to its friction reduction performance, a discussion of its No-harm lubricant performance (specific key lubricant parameters), and the impact on friction-reduction by the other lubricant additives in PCEO (Antioxidants, Detergents, Dispersants, Viscosity Improvers, Molybdenum FMs...) follows. Finally, the friction reduction retention will be reviewed, based upon new experimental methods developed for the CPlint and MTM instruments. The data indicates this new, completely organic friction modifier (C,H,O,N) shows competitive friction reduction performance, very good No-harm results, with a surprising strong friction reduction retention.

**Biography;** Frank J. DeBlase, Ph.D. is a Research Fellow at Chemtura Corporation, and has worked developing various petroleum additives and fluids for lubricant and fuels, for nine years at the Chemtura Research facilities at Middlebury CT, and Naugatuck CT; with colleagues at Elmira Canada, and West Hill, Canada; and at Anderol in East Hanover, NJ. Prior to working at Chemtura he worked for fifteen years at Chevron Oronite and at Texaco Research and Development at Beacon, NY as a scientist developing new products for fuels and lubricants such as Clean System-3 gasoline additives and Fuel Saver Fuel Economy additive (friction reduction additive).

#### **Location;**

The Old Mill  
21 The Old Mill, Toronto  
(Bloor near the Old Mill subway stop)  
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#### **Meeting Fees;**

STLE Members - \$25  
Non-Members - \$30  
Students - \$15  
Retirees, transition members - \$15

Hospitality	11:00 - 11:30
Technical Presentation	11:30 - 12:15
Buffet Lunch	12:15

(Includes full meal, refreshments & talk.  
Subject to change without notice and add  
\$5 if not pre-registered)

Please preregister with Ed Milanczak at [emilan@cogeco.ca](mailto:emilan@cogeco.ca) because we require numbers for the meal.