

The Institution of Diesel and Gas Turbine Engineers

Founded in 1913 as Diesel Engineers and Users Association



NOTICE OF MEETING

Dear Members, Colleagues, & Guests;

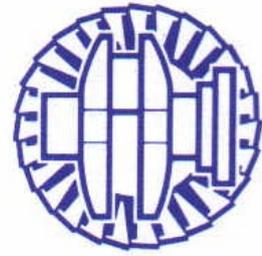
The IDGTE is pleased to announce that the Canadian Branch have arranged for a fall seminar to be held at Ryerson University on Thursday, November 13th, 2014.

Topics:	<p>Engine & Power Plant Life Cycle Cost Optimization using Data Analytics</p> <p>The Seminar will be structured to explore the benefits of condition based maintenance (CBM) and Remote Monitoring that is fast becoming standard in land based power plants & ship engine rooms. Presentations and a panel discussion will explore both past and emerging practices, review the recently announced 3.6 billion euro Munin Project to create the “Autonomous Ship” and comment on several recent cruise liner machinery failures leaving thousands of passengers stranded for days enduring unsanitary conditions.</p> <p>Optimization of Condition Based Maintenance (CBM) Decisions</p> <ul style="list-style-type: none"> • Dr. Andrew Jardine - University of Toronto, Centre for Maintenance Optimization & Reliability Engineering <p>Maintenance Management & Maintenance Strategy Optimization, CBM and Remote Monitoring</p> <ul style="list-style-type: none"> • Barry Shepherd - Principal Surveyor, Lloyds Register Marine <p>CBM Risk Management</p> <ul style="list-style-type: none"> • William M Sharpe - William M. Sharpe, Barrister & Solicitor <p>Moderator</p> <ul style="list-style-type: none"> • Joe VanSchaick – Toromont, CAT
Location:	Ryerson University- 350 Victoria St., Toronto, Room EPH242 (detailed directions provided on last page of notice)
Date:	Thursday, November 13, 2014
Time:	4:30 PM - Optional Dinner @ Pickle Barrel - 312 Yonge St. 6:15 PM - Registration 6:30 PM - Welcome & Introductions - Joe VanSchaick 6:50 PM - CBM Decisions - Dr. Andrew Jardine 7:35 PM - CBM and Remote Monitoring - Barry Shepherd 8:20 PM - CBM Risk Management - William M. Sharpe 8:40 PM - Panel Discussion - Joe Van Schaick Moderator 9:10 PM - Closing Remarks
Attendees:	Members & Guests Welcome
Registration:	Register on line at: www.eventbrite.ca , (click here for event page)
Fee:	\$30.00 IDGTE Members in advance \$35.00 Non-Members in advance \$40.00 Registration at the door Students- no charge (please present valid student ID with ticket)
Refreshments	Coffee & Tea will be provided
Photography:	Permitted

Please register online at www.eventbrite.com by November 1st, 2014
([click here for event page](#))

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Detailed Directions

The seminar will be held at Ryerson University in Eric Palin Hall which is located at 87 Gerrard St. East, one building east of Church St. Please enter through the doors at the top of the stairs. The room we are using is EPH-242 is just through the second set of doors. A full map of Ryerson's Campus can be found at the following link: <http://www.ryerson.ca/maps/>

TTC Subway access is either through Dundas Station or College Station, walking on Yonge St. towards Gerrard St. E, and then East towards Church St. Parking on the street is available on either Church or Gerrard St. after 6:30pm. Otherwise there are parking lots off of Church St., or behind Eric Palin Hall on Mutual St.

Optional Dinner Before the Seminar

There will be an optional dinner at the Pickle Barrel located at 312 Yonge St. for those arriving early who would like to join us for dinner. Everyone will pay individually for their meal but we ask that you RSVP to president@idgte.ca if you plan to attend in order for us to reserve a spot for you. Please plan to arrive on time at 4:30pm as we will have limited time to order and eat in order to arrive at Ryerson (a short walking distance from the Restaurant) on time for registration at 6:00pm.

Presentation Details

Joe VanSchaick: Moderator

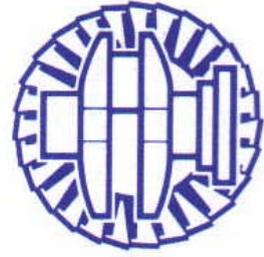
Joe VanSchaick, Electric Power Market Manager at Toromont Cat, is a recognized leader in the Ontario energy market for landfill, biogas, syngas and CHP projects. He has been in the Caterpillar dealer network for 34 years starting his career in Eastern Canada before joining Toromont Cat in 1994. Joe is often sought out for his knowledge and experience developing power system projects in the gas, biogas and mining sectors. He has extensive experience with power generation systems operating on diesel fuels, natural gas, biogas, syngas and a variety of low energy gaseous fuels. Joe brings a strong technical background and keen business acumen for the development of these types of projects. Joe is the immediate past-president of the IDGTE (Institution of Diesel and Gas Turbine Engineers). Joe has also sat on a number of other industry advisory boards such as the Biogas Association and has been a member of several Caterpillar dealer advisory groups.

Barry Shepherd:

Barry Shepherd is a Marine Engineer who holds a Chief Engineers License and has sailed on both Steam and Motor Ships, including Passenger and Cargo vessels, Crude Oil Tankers and Ice Breakers. Trained at the Warsash School of Maritime studies near Southampton UK, Barry Holds an HNC in Mechanical Engineering. He spent three years with Rolls Royce as Propulsion Engineer at the Naval Nuclear Test Facility at Dounreay Scotland. Immigrating to Canada in 1984, Barry spent most of the remainder of the 1980's as an Engineer for Gulf Canada Resources serving on Ice Breaking supply vessels supporting oil exploration in the Beaufort Sea. Taught Thermodynamics, Control and Automation and managed the Propulsion Plant simulator at BCIT Marine Campus from 1991 -1995. Joined Lloyds Register in Vancouver in 1995 as surveyor, and has surveyed machinery and hulls on most vessels but spent a lot of time on Cruise ships while in Vancouver. Moved to LR Burlington office as Surveyor in Charge in 2000, Regional Operations Manger Great Lakes and Atlantic Canada in 2005, now Client Support and Business Development Manager for Central and Eastern Canada.

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William M. Sharpe:

William M Sharpe has had an independent maritime and transportation law practice in Toronto since 1990 and is admitted to practice in Ontario and British Columbia (William M. Sharpe Barrister & Solicitor). He has worked with marine industries in both commercial transactions and dispute resolution throughout ships' life cycles from naval architects to ship breakers. William Sharpe has advised in construction, ship repair and conversion contracts and commissioning and delivery of new built ships into service. He recently acted for a defendant European marine engine equipment supplier in achieving a court mediated resolution of a multiparty Federal Court product liability claim. William Sharpe also has acted as a marine mediator and arbitrator.

Dr. Andrew Jardine:

Dr. Andrew Jardine is Director of the Centre for Maintenance Optimization and Reliability Engineering (C-MORE) at the University of Toronto, Canada. He is also Professor Emeritus in the Department of Mechanical and Industrial Engineering, at the University of Toronto.

Professor Jardine has garnered an impressive array of awards, honours and tributes, including having been the Eminent Speaker to the Maintenance Engineering Society of Australia, as well as the first recipient of the Sergio Guy Memorial Award from the Plant Engineering and Maintenance Association of Canada. In 2013 he was elected a Fellow of the Canadian Academy of Engineering and received the Lifetime Achievement Award from the International Society of Engineering Asset Management. He is one of 10 Fellows in Canada of the Institute of Industrial Engineers and is registered as a professional engineer in Canada and a chartered engineer in the UK.

Presentation Abstract: On the Optimization of Condition-based Maintenance (CBM)

Decisions:

Condition monitoring is an activity that is now widely used, mainly for expensive and complex equipment/systems consisting of a large number of simpler components, and subject to different failure modes. Due to the rapid development of ICT, much more data from condition monitoring and all types of maintenance and corrective activity is collected and stored in maintenance data bases. In this presentation a tool (EXAKT) that has been developed at the University of Toronto is introduced that can be used to assist organizations optimize their CBM decisions. Obtaining the remaining useful life (RUL) of equipment is also included in the presentation. Several case studies of CBM optimization will illustrate application of the EXAKT tool. The applications will include condition monitoring through oil sampling, vibration monitoring and visual inspection.