



**SHERATON PARKWAY, TORONTO NORTH, RICHMOND HILL  
OCTOBER 4 – 9, 2009**

**SUNDAY, OCTOBER 4, 2009**

**14:45 – 15:00** Field trip, bus leaves hotel, and returns on Monday, October 5, by 16:30

**TUESDAY, OCTOBER 6, 2009**

**07:45 – 08:30** WORKSHOP REGISTRATION (Markham Room)

**08:30 – 16:30** Advanced Diesel Engines and Emission Control Technologies for Underground Mines

**18:00 - 20:00** CONFERENCE PRE-REGISTRATION & NETWORKING (Grand York B & C Foyer)

**18:30 – 22:00** EXHIBIT ROOM SET UP (Grand York B & C Foyer)

**WEDNESDAY, OCTOBER 7, 2009** ( Grand York B, C and Foyer)

**07:30** REGISTRATION

**08:30** CONFERENCE OPENING CEREMONIES:

**Welcome and Introduction**, JP Ouellette (*Kubota Canada Ltd.*), Co-Chair MDEC Conference

**Introduction of Keynote Speaker**, David Young (*Natural Resources Canada*), Secretary & Treasurer MDEC

**Keynote Address: Business Approach to Mine Air Quality and Ventilation**, Michael J. Byrne, Vice President, Health and Safety Loss Prevention, Newmont Mining Corporation

**Organization**, Mahe Gangal (*Natural Resources Canada*), Co-Chair MDEC Conference

**10:00** COFFEE BREAK

**10:30** SESSION 1: BIODIESEL  
CHAIRPERSON: Joe Stachulak (Vale Inco)

Evaluation of the impact of using biodiesel fuel in mine production equipment, *Brent Rubelj*, Steve Hardcastle, and Mahe Gangal (*Natural Resources Canada*)

Controlling exposure to DPM: Diesel particulate filters vs. biodiesel, *Aleksandar D. Bugarski* and *Xiao-Chun Shi* (*NIOSH*)

The national renewable diesel demonstration initiative (NRDDI), *Nancy Johns* (*Natural Resources Canada*)

**12:00 LUNCH - introduction of sponsors (Thornhill Room)**

**13:00 SESSION 2: CONTROL TECHNOLOGIES**

**CHAIRPERSON: David Young (Natural Resources Canada)**

Success through fuel borne catalysts in the mining, *Volker Hensel and Ulrich Lampen (MANN+HUMMEL), Joe Stachulak (Vale Inco), Matthew Vincent (Innospec)*

NO<sub>2</sub> management in diesel exhaust in mines, *Joseph Holroyd (Airflow Catalyst Systems)*

Retrofit SCR system for NO<sub>x</sub> control from heavy-duty mining equipment, *M.A. Mannan (Nett Technologies Inc.)*

**14:30 COFFEE BREAK**

**15:00 SESSION 3: AMBIENT DPM**

**CHAIRPERSON: John Blogg (Ontario Mining Association)**

An eight year look at diesel particulate matter (DPM) results – Vale Inco Ltd., *Cheryl L. Allen and Doug F. O'Connor (Vale Inco Ltd.)*

Real-time airborne diesel particulate matter monitoring in underground mines, *Michel Grenier and Kevin Butler (Natural Resources Canada), Cheryl Allen (Vale Inco Ltd.), and Gordon Hnatiuk and Charlie Hazen (Xstrata Nickel Sudbury)*

A real-time, wearable elemental carbon monitor for diesel particulate measurements in underground mines, *Larry Takiff (ICx Normadics)*

**16:30 ADJOURNMENT**

**16:30 – 18:30 RECEPTION & NETWORKING** (Grand York B & C Foyer)

**THURSDAY, OCTOBER 8, 2009** (Grand York B & C Foyer)

**08:00 REGISTRATION**

**08:30 SESSION 4: DIESEL AND MDEC PLENARY CONSULTATION**

**Keynote Address: Advanced Diesel Engines and the Exhaust Emission Controls,**  
*Presidential Professor John H. Johnson (Michigan Technological University)*

Final Plenary Consultation, *Mahe Gangal (Co-Chair MDEC Conference)*

Summary of comments from MDEC 2008

Review of MDEC 2009

Plans for MDEC 2010

Final remarks

Review of last ten years of MDEC, *Edward Richards (LiquidPiston, Inc.)*

**10:00 COFFEE BREAK**

**10:30 SESSION 5: ENGINE AND EMISSIONS****CHAIRPERSON: Edward Richards (LiquidPiston Inc.)**Soot accumulation in diesel particulate filters using ULSD and B20 biodiesel fuel blends, *Paul Charbonneau and James S. Wallace (University of Toronto)*Development of aluminium alloys for high temperature applications in diesel engines, *W. Kasprzak, M. Sahoo, and D. Emadi (CANMET-MTL, Natural Resources Canada)*Performance evaluation of underground mine diesel engine exhaust insulation products, *John Stekar (Catalytic Exhaust Products Limited)***12:00 LUNCH - award of draw prizes (Thornhill Room)****13:00 SESSION 6: DPM AND VENTILATION****CHAIRPERSON: JP Ouellette (Kubota Canada Ltd.)**Partial flow diesel particulate filters – Practical experiences, *Paul Turpin, Chris Aniolowski, Shazam Williams (DCL International Inc.)*New chemical tracers for diesel source emission apportionment in ambient fine particulate matter, *JeanPierre Charland, Gianni Caravaggio, Penny MacDonald, and Tony MacPhee (Natural Resources Canada), and Lisa A. Graham (Environment Canada)*Optimized mine ventilation on demand (OMVOD), *Mark Anderson and Mark Laine (Simsmart Technologies)***14:30 COFFEE BREAK****15:00 SESSION 7: MDEC 2008 ROUNDTABLE FORUM REVIEW PANEL****Moderator: Michel Grenier (Natural Resources Canada)**

**Panellists:** Diesel Particulate Filters, *Michel Grenier (NRCan)*  
 Fuels, *JP Ouellette (Kubota Canada Ltd.)*  
 DPM and NO<sub>2</sub>, *Aleksandar Bugarski (NIOSH)*  
 Engine and Vehicles, *John Vergunst Ontario Ministry of Labour*

**16:30 ADJOURNMENT****FRIDAY, OCTOBER 9, 2009****ROUNDTABLE FORUM**

	Room - Markham A	Room - Aurora
<b>08:30</b>	<b>Diesel Particulate Filters (new technology, evaluation &amp; certification, mines access for testing &amp; development, safety with high temperatures/active regeneration)</b> <b>Facilitator: Aleksandar Bugarski (NIOSH)</b>	<b>Fuels (biodiesel – lower DPM and higher NO<sub>x</sub>, additives, low &amp; ultralow sulphur, standards, alternative fuels)</b> <b>Facilitator: Brent Rubeli (NRCan)</b>
<b>10:00</b>	<b>COFFEE BREAK</b>	<b>COFFEE BREAK</b>
<b>10:30</b>	<b>DPM and NO<sub>2</sub> in Mines (DPM monitoring control and regulation, NO<sub>2</sub> reduction, DOCs with NO<sub>2</sub> suppression techniques)</b> <b>Facilitator: Addy Majewski (Ecopoint)</b>	<b>Engines (new tech, suitability of tier 3 &amp; 4 for mines, emission, evaluation &amp; certification, alternative, fuel cell)</b> <b>Facilitator: John Vergunst (Ontario MOL)</b>
<b>12:00</b>	<b>ADJOURNMENT</b>	<b>ADJOURNMENT</b>