



Hilton Toronto Airport Hotel, Ontario, Canada  
October 3 – 5, 2017

SUNDAY, OCTOBER 1, 2017

12:00 Field Trip to NORCAT Mine, Sudbury, Underground Centre; vehicle leaves conference hotel for Sudbury, and returns on Monday, October 2 by 20:00

TUESDAY, OCTOBER 3, 2017

07:30 – 08:30 WORKSHOP REGISTRATION & BREAKFAST  
08:30 – 16:00 WORKSHOP “TIER 4 ENGINE AND MAINTENANCE”  
17:00 - 19:00 CONFERENCE PRE-REGISTRATION & NETWORKING  
18:00 – 22:00 EXHIBIT ROOM SET UP

WEDNESDAY, OCTOBER 4, 2017

07:30 CONFERENCE REGISTRATION AND BREAKFAST

08:30 SESSION 1: CONFERENCE OPENING CEREMONIES:

**Welcome:** *John Stekar (CEP Ltd.), MDEC President*

**Introduction of Keynote Speaker:** *Victor Pakalnis (MIRARCO and ISSA-Mining, VP, N.A.)*

**Keynote Address:** *Leo Gerard, President United Steel Workers of America, COPY OF PRESENTATION NOT AVAILABLE*

**Organization:** *David Young (Natural Resources Canada), Co-Chair MDEC Conference*

Is setting a suitably protective occupational exposure limit (OEL) for diesel particulate matter (DPM) a “key driver” to reduce exposure, *Kevin Hedges (Occupational Health Clinics for Ontario Workers Inc.)*

10:00 COFFEE BREAK

10:30 SESSION 2: EMISSIONS MONITORING  
CHAIRPERSON: *Evelynn Stirling (Cummins)*

Removing Particulate Material from the existing fleet, *Joseph McCarney (Johnson Matthey)*

The Industrial Internet of Things (IoT) and Low Power Wide Area Networks (LPWAN) – advances in real-time monitoring to increase production and improve health and safety, *Paul Sheremeto (Pattern Discovery Technologies Inc.) and Brian Fleury (Wireless Systems Networks Inc.)*

A CFD Approach for Investigating DPM Concentration over Multiple Work Cycles of an LHD in an Underground Mine, *Hongbin Zhang (Mirarco)*

In-Use Emissions Measurements of Off-Road Diesel Engines, *Debbie Rosenblatt (Environment Canada)* CANCELLED

**12:00 LUNCH**

**13:00 SESSION 3: ALTERNATIVE ENERGY  
CHAIRPERSON: Michelle Levesque (CanmetMINING)**

Borden Gold: Mine of the Future, *John Mullally (Goldcorp)*

Underground Battery Electric Equipment at Macassa Mine – Challenges and Opportunities, *Andrew Schinkel (Kirkland Lake Gold)*

Hydrogen Mine Introduction Initiative - Study of Hydrogen Behaviour in Underground Mine Conditions, *Andrei V. Tchouvelev (A.V.Tchouvelev & Associates Inc.)*, *Benjamin Angers (UQTR)*, *Marc Bétournay and Gilles LeBlanc (Natural Resources Canada)*

A View of the Standards and Certification Landscape for Electric Vehicles, *Peter Glowacki, Brent Hartman and Jim Green (Canadian Standards Association, CSA)*

**14:30 COFFEE BREAK**

**15:00 SESSION 4: VENTILATION & GREENHOUSE GAS (GHG) STUDIES  
CHAIRPERSON: Philip Bousquet (OMA)**

A Mine Ventilation Challenge and Solution(s), Innovative solutions to the Ontario Mining Association's industry challenge that focused on improving mine ventilation (Sponsor, Ontario Mining Association):

*Team "Pipe Dream", Joshua Fortes, Alex MacInnes, Adam Grinbergs, Liam Dunn, Muhammad Syed, Justin So, Laurentian University*

*Team "The Next Phase", Sarah Bulanda, Peter Gazaes, Patrick Lamontagne, Laurentian University*

*Team "Safe Through Sound (STS)", Yoko Yanagimura, Marina Reny, Matt Hart, Justin Samardzic, University of Toronto: CANCELLED*

Greenhouse Gas (GHG) emissions from Underground Mining Diesel Engines, *Brent Rubeli, Mahe Gangal and David Young (CanmetMINING)*

**16:30 ADJOURNMENT**

**16:30 – 18:30 RECEPTION & NETWORKING**

**THURSDAY, OCTOBER 5, 2017**

**07:30 REGISTRATION AND BREAKFAST**

**08:30 SESSION 5: HEALTH AND POLICY  
CHAIRPERSON: Josef Stachulak (MIRARCO)**

**Keynote Address:** The Health Impact of Engine Generated Ultrafine Particles, *J. Schiltknecht (VERT, Switzerland)*

Meeting ACGIH NO<sub>2</sub> Limits in Mechanized Underground Mining, *Mark Laine (Vale) and Melissa Brown and Darryl Witow (Hatch)*

**10:00 COFFEE BREAK**

**10:30 SESSION 6: EMISSIONS CONTROL TECHNOLOGIES**  
**CHAIRPERSON: Glen Staskus (MOL)**

Musselwhite Mine DPF Installation Project, *Dwaine Gaudette (Goldcorp)*

DPM Management Strategy and Results, *Hannah Demers (Barrick Hemlo William Mine)*

DPM Management Insights from Around the World, *Kevin Mailey and Wayne Wallis (Mammoth)*

Elimination of Diesel Particulate Filters and SCR equipment using a novel catalytic evaporation (CatVap™) device to reduce soot and NO<sub>x</sub> emissions in Internal Combustion Engines, *Mike Mazzuca (T.F. Hudgins)*

**12:00 LUNCH - introduction of sponsors and award of draw prizes**

**13:00 SESSION 7: DPM, EDUCATION & MDEC Plenary Consultation**  
**CHAIRPERSON: David Young (Natural Resources Canada)**

Evaluation of Advanced PM and/or NO<sub>x</sub> Aftertreatment for Small Off-Road Diesel Engines, *Derek Hooley (DCL International)*

Diesel Particulate Matter Exposure and Concentration Monitoring in Underground Mines, *Aleksandar Bugarski, Emanuele G. Cauda, Teresa L. Barone, and Shawn Vanderslice (NIOSH)*

An Innovative Online Platform for the Education of Mine Ventilation Professionals, *Dan Stinnette, (Virginia Tech)*

**MDEC Plenary Consultation, David Young (Co-Chair MDEC Conference)**

Summary of comments from MDEC 2016 survey

Review of MDEC 2017

Plans for MDEC 2018

Final remarks

**14:30 COFFEE BREAK**

**15:00 SESSION 8: ROUNDTABLE FORUM**  
**Facilitator: Brent Rubeli (CanmetMINING)**

GHG Emissions, Standards and Regulations

**16:00 ADJOURNMENT**