



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*

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)*

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 Gzaes, Patrick Lamontagne, Laurentian University*

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

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 NO₂ 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_x 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_x Aftertreatment for Small Off-Road Diesel Engines, *Derek Hooey (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