

>> October 18-19, 2017

>> Patrick D. Daniel / Enbridge Conference Room, Donadeo Innovation Centre for Engineering, University of Alberta



# REGISTRATION

STUDENT REGISTRATION





Global Mining Standards & Guidelines Group (GMSG), CIM and University of Alberta are hosting a two-day interactive event at the University of Alberta Edmonton, bringing global mining automation and innovation priorities into the regional context. Participants will come from mining companies and their key suppliers, as well as GMSG collaborative partners including SMART and the Canadian ISO TC82 Mining Mirror Committee.

Day one of the forum is focused on autonomy and interoperability in mining, with discussions around how to build on success and collaborate on future innovations.

Day two will observe topics of Maintenance and Equipment Reliability, and sessions on the concept of the connected mine.

# >> 08:30

Registration

>> 09:00

## Welcome and Day's Objectives

Heather Ednie, GMSG, Managing Director

>> 09:30

**GMSG: Collaboration to Build a Strong Future Mining** GMSG Overview, Autonomous Survey, Driving Industry Forward Priorities *Heather Ednie, GMSG, Managing Director*  DAY ONE DAY ONE OCTOBER 18, 2017

>> 9:10

## **Opening Remarks**

Fraser Forbes, Dean, Faculty of Engineering Tim Joseph, Associate Dean, Faculty of Engineering University of Alberta

# AUTONOMOUS MINING

>> 10:00

# Trialing an Autonomous Blasthole Drill: Unforeseen Operational Improvements

Dan Lucifora, Director, Research and Development, Peck Tech Michel Plourde, Directeur des systems, ArcelorMittal Exploitation minière Canada

## COFFEE BREAK | 10:30

>>	Autonomous Operations – Lessons Learned and the Next Steps of AHS Evolution Successes, challenges and focuses today to achieve the next level of maturity and capability.	11:15 <b>NA Autonomous Haulage-Current State, Challenges, and Future in</b> <b>NA Surface Operations</b> Australia has primarily been the industry leader with deployment of AHS. In North America, to-date there has been small sized imple- mentations. WHY? <i>Craig Dirk, Chief Operating Officer, KMC Mining</i> <i>Steve Little, Senior Engineering Advisor, Mine Equipment, Suncor Energy</i> <i>Ron Jungkind, Lead-Mine Technology, Mine Technical Services, Canadian</i> <i>Natural Resources Limited (CNRL)</i> <i>Dylan Bennett, Manager, Operational Technology, Teck</i>	
	LUNCH   12:30		
INTEROPERABILITY			
>>	13:30 Break Out Session: Addressing the Barriers Requirements for Interoperability		<ul> <li>15:00</li> <li>Interoperability: Next Generation for Autonomy</li> <li>Interoperability and the need and impact on</li> <li>autonomous operations</li> </ul>
	COFFEE BREAK   15:30		15:30
>>	15:45 <b>GMSG Interoperability Working Group: The</b> <b>Interoperability Collaboration Landscape</b> <i>Tim Skinner, SMART Systems Group and GMSG</i> <i>Vice Chair International Standards</i>		16:15 Case Study: Successes Achieved Outside of the Mining Industry 16:45 Day One Wrap-up



>> 08:30 Arrival/Registration >> 9:00

**Welcome and Day's Objectives** Heather Ednie, GMSG Managing Director

## 09:15 - 12:00 RELIABILITY AND OPERATIONAL EXCELLENCE

>> 09:15

# Operational Time Model and KPIs

>> 9:45

Zoli Lukacs, Gibraltar Mine

**SMART Benchmarking** *Golder Associates Inc.* 

#### >> 10:15

#### Roundtable Discussion: Global Benchmarking

COFFEE BREAK | 10:45

#### >> 11:00

#### Reliability Working Group

o Best Practice Model

o Update on Best Practices Interest Survey

o Working Groups Update- Work Management Sub-Group

LUNCH | 12:00

## 12:45 - 5:00 THE CONNECTED MINE

>> 12:45

Autonomous Standards and Regulatory Issues and Challenges

#### >> 13:45

**Cyber Security: Mining and Metals Information Sharing and Analysis Center (MM-ISAC)** *Rob Labbé, Teck* 

## COFFEE BREAK | 14:15

#### >> 14:30

## GMSG Innovation Spotlight:

o Battery Electric Vehicles Underground o Short Interval and Real Time Control o Mobile Equipment Open Data *Heather Ednie, GMSG Managing Director* 

#### >> 15:30

Improvements in Global Trade Value Chain & Digitalization of Marine Operations Oleg Yefremov, General Manager, ABB Marine & Ports Canada

>> 16:30

Forum Wrap-up and Next Steps

#### >> 15:00

The OMF – Open Mining Format: Detailed Use Cases, and OMF 0.9 Deswik-Leapfrog Integration Demo

Adam Pidlisecky, AranzGeo

>> 16:00

Integrated Operations Business Case

