PRACTICAL INFORMATION

REGISTRATION DESK

Sunday: 6:00 p.m. to 8:00 p.m.
Monday: 7:30 a.m. to 7:00 p.m.
Tuesday: 7:30 a.m. to 6:00 p.m.
Wednesday: 8:00 a.m. to 5:00 p.m.
Thursday: 8:00 a.m. to 4:00 p.m.

FOLLOW QUÉBEC MINES IN THE SOCIAL MEDIA

Facebook: www.facebook.com/QuebecMines
LinkedIn: www.bit.ly/16XBFip
Flickr: www.flickr.com/photos/quebecmines
YouTube: www.youtube.com/user/MRNquebec
Twitter: www.twitter.com/MRN_Quebec

COFFEE BREAK AND SNACK BAR

Coffee will be available in the Exhibition Hall every day between 9:00 a.m. and 11:00 a.m. and 1:30 p.m. and 3:30 p.m.. There will also be a snack bar where you can buy food if necessary.

SUSTAINABLE TRANSPORTATION

During the Congress, we invite you to use sustainable transportation methods, such as walking, cycling, car-pooling, taxi-sharing and the public bus service.

VIDEO CAPTURE

The Ministère des Ressources naturelles will take advantage of the opportunity offered by Québec Mines 2013 to capture video images of the event. The footage will appear in daily reports on the convention broadcast, in particular, on the MRN’s Youtube channel.

Exhibition room maps and exhibitors’ list, page 43

Note: Registration for Québec Mines gives access only to the conferences and activities listed in this program.
Québec Mines, the crossroads of geoscience and mineral resources, is intended for everyone who has a direct or indirect interest in Québec’s mining sector.

**SCIENCE - INNOVATION - SOCIETY**

For a mining project to see the light of day, it must first and foremost be based on science. Second, if it is to pass through all the development steps in order to produce more, in a better way, it must also be innovative. And third, to succeed, it must take into account the community, environmental and social context in which it is situated. “Science – Innovation – Society” are the keywords for responsible mining development – and also the theme of Québec Mines 2013!

**INTERNATIONAL**

With its INTERNATIONAL component, Québec Mines’ program invites convention participants from a range of countries to see Québec’s expertise in the field of mineral exploration and mining development.

The activities of this component are marked: [QM INTERNATIONAL]

**FOR ALL**

Québec Mines for all is the educational, employment and general public component of Québec Mines conference. Québec Mines for all invites the general public—and particularly primary and secondary school students—to come discover earth sciences, the various facets of mining and mineral exploration and career opportunities in this vast scientific and technical field.

The activities of this component are marked: [QM for all]
Québec Mines 2013, an Eco-Responsible Event

For the first time, the Québec Mines 2013 organizing committee is pleased to offer an eco-responsible Congress. Québec Mines will be a certified Level One event under responsible management standard BNQ 9700-253. The main conditions required to achieve certification at this level are:

- Reduce the volume of waste on site.
- Raise awareness of eco-responsibility among partners and participants.
- Apply the 4R principle: Reduce, Reuse, Recycle and Recover
- Reduce transportation-related impacts
- Make a social and economic contribution to the region (local suppliers, redistribution of surplus food, use of local talent, support for the new generation)

Many measures have already been implemented. However, you will also have a key role to play during the Congress:

- By using sustainable transportation to get to and from the Congress site.
- By using the recycling bins and taking only those documents and promotional items that will be of use to you.
- By placing your plastic name badge in the containers provided, at the end of the Congress.
- By paying special attention to the water and energy used at the Congress site and in hotel rooms.

Enjoy your eco-responsible Congress!
A WORD FROM THE MINISTER

SHAPING THE FUTURE OF THE QUÉBEC MINING INDUSTRY

I am pleased to extend this invitation to all players in the broad field of geosciences and mining development to attend Québec Mines 2013.

This year, the convention highlights the importance of research, new practices and social responsibility in mining development. Science, innovation, society: these three words set the foundation for our government’s approach to fostering the responsible development of Québec’s mineral resources.

Québec Mines 2013 will offer multiple opportunities to acquire new knowledge and discuss these issues. By attending the conference, you will be contributing to shaping the mining industry of tomorrow in harmony with the environment and communities for the benefit of all Quebecers!

I wish you an excellent convention!

Martine Ouellet
Minister of Natural Resources of Québec
INVITATION FROM THE ASSOCIATE DEPUTY MINISTER, MINES

It is my great pleasure to invite Québec’s mining industry stakeholders, along with everyone who works in the domain of the Earth Sciences, to attend our 2013 showcase for the geosciences and mineral resources. This year, the theme is Science – Innovation – Society, three meaningful words that refer to research, exploration and mining, and to the social context within which mine development takes place.

Once again this year, the MRN is delighted to count on the valuable collaboration of the Canadian Institute of Mining, Metallurgy and Petroleum, the Québec Mineral Exploration Association, the Institut national des mines du Québec, the Comité sectoriel de main-d’œuvre de l’industrie des mines and Québec International, to offer you a program filled with conferences, training sessions, workshops and top quality, highly original activities.

I am extremely proud that Mr. Pierre Lortie has agreed to be Honorary President of Québec Mines 2013. With his impressive background in national and international business, and in particular his knowledge of and interest in the mining sector, he is a credible and relevant spokesperson for the event.

Québec Mines 2013 will also offer a new international component, welcoming delegations from some of the world’s major mining regions, and also involving the world’s French-speaking mining community.

Once again this year, Québec Mines is proud to offer an Open Day to be attended by more than 3,000 schoolchildren, students and members of the general public who would like to learn more about a sector that, while not always in the spotlight, nevertheless plays a key role in today’s economy.

Lastly, I would like to mention the Québec Mineral Exploration Association Convention, which will be held under the same roof as Québec Mines, on the same dates. The two events have been brought together to respond to the wishes of many mining industry stakeholders who prefer to have a single rendezvous for the sector.

More than ever before, Québec Mines 2013 will be a showcase for the geosciences and mineral resources, and the event of the year for everyone who works in a sector that generates passion and wealth for our society. I hope to see you at the Québec City Convention Centre on November 11 to 14.

Line Drouin
Associate Deputy Minister, Mines Sector
Ministère des Ressources naturelles
INVITATION FROM THE HONORARY PRESIDENT OF QUÉBEC MINES 2013

Many Québécois view the mining industry as part of a global market whereby the level of activity is affected by fluctuations in international prices for metals and minerals, by changing demands driven by the needs of emerging countries, and by competitiveness in terms of grade, operating costs and transport. Others see it as a local activity with significant concerns in terms of stable, well-paid jobs, quality of life, as well as potential consequences, whether real or expected, on the immediate environment.

While these two viewpoints do depict important aspects of the industry, they also paint an incomplete and unbalanced portrait by failing to recognize important elements. It is imperative that we rectify this situation, and this is where Québec Mines plays an essential and critical role.

The modern mining industry relies on a large body of scientific and technological knowledge. Québec possesses state-of-the-art geoscientific infrastructure, and over the years has produced highly qualified men and women in a variety of fields in the mining sector.

The mining industry is an economic driver for Québec: it represents 30.5% of the province’s total foreign exports and is a major source of well-paid jobs, particularly in outlying regions, those without well-diversified economies.

The mining industry has and will continue to face long-term issues. Investments in the mining sector are characterized by substantial initial outlays that must be made long before any revenue can be generated, and also by elevated technical, economic and financial risks. The time between the discovery of a mineral deposit and the start of production ranges from 8 to 15 years. In these circumstances, it is not surprising that optimal and sustained contributions to the economic growth of a region depend on stable and appropriate policies, as well as sensitivity on the part of the industry, to maintain a balanced relationship with the host environment.

Québec Mines 2013 is an effective way to raise awareness about the nature, importance and contribution of the mining industry to Québec society. This gathering is also an ideal time to learn more about the latest scientific, technological, political and industrial developments that are shaping the future of the mining sector. It is also a great opportunity to interact with members of the industry, and those developing and administrating the policies that govern Québec’s mining sector. As our continued success depends on your participation, we hope to see you there.

I look forward to meeting you.

Pierre Lortie
Senior Business Advisor
Dentons Canada S.E.N.C.R.L.
WELCOME TO QUÉBEC MINES

JEAN VAVREK
Executive Director
Canadian Institute of Mining, Metallurgy and Petroleum
“Québec Mines is a not-to-be-missed event that will help satisfy your appetite for new sources of ideas, different approaches and innovative methods.”

Josée Méthot
Chief Executive Officer
Québec Mining Association
“I am pleased to extend a personal invitation to attend Québec Mines 2013, an event that will bring people together and demonstrate the dynamism of Québec’s entire mining industry.”

Line Lagacé
Vice President – Business Growth and Foreign Investment Prospecting
Québec International
“Québec International, as the Québec City region’s economic development agency, is delighted to be involved once again in the Québec Mines program. This year, our organization will offer Québec’s mining industry shareholders the opportunity to share its experience of supporting company growth and developing strong sectors .”
ROBERT MARQUIS
Chief Executive Officer
Institut national des mines
“The Institute, by coordinating the presence of the educational institutions at the event, will highlight Québec’s extensive expertise in all forms of education. We are pleased to extend a warm invitation to come and meet us in the “Education Space” of the exhibition hall, or at the workshops led by our staff.”

LUC BAILLARGEON
Executive Director
Comité sectoriel de main-d’œuvre de l’industrie des mines
“We will be at the Congress to provide information for job seekers and students considering their career choices on the many opportunities available in Québec’s mining sector.”

CLAUDE THIBAULT
Executive Director and International Commissioner
48e Nord international
“We support the arrival of Québec Mines as an unprecedented forum for discussion that will help demonstrate Québec’s mining sector expertise.”

See the Québec Mines website for the complete invitation texts.
QUÉBEC MINES TEAM

STRATEGIC COMMITTEE

Joëlle Boudigou
Luc Charbonneau
Line Drouin
Renée Garon
Nathalie Germain
Robert Giguère
Jean-Yves Labbé
Robert Marquis
Patrice Roy
Lucie Ste-Croix

Coordinator
Christian Fortin

Secretary
Johanne April

LOGISTIC AND COMMUNICATION TEAM

Andrea Amortegui
Annie Bérubé
Gladys Chamberland
André Cloutier
Diane Devault
Marie Dussault
Céline Filteau
Charlotte Grenier
Marie-Josée Hudon
Mariève Jean
Anthony Kish
Marie-Eve Lagacé
Roxanne Lamy
Sonia Montambault
Caroline Nadeau

Sylvie Otis
Catherine Poulin
Pierre-Thomas Poulin
Sophie Proulx
Gaétan Simard

TECHNICAL PROGRAM

Michel Jébrak
Jean-Yves Labbé
Jean Vavrek

ORGANIZING COMMITTEE
QUÉBEC MINES FOR ALL

Luc Charbonneau
Julie Gagné
Charlotte Grenier
Heather Henry (Mining Matters)
Sylvie Otis (coordinator)
Catherine Poulin
Lucie Vincent (ICM)

ORGANIZING COMMITTEE
QUÉBEC MINES
INTERNATIONAL

Annie Bérubé
Émilie Beorofei
François Boutin
Robert Giguère
Anthony Kish
PARTNERS

QUÉBEC MINING ASSOCIATION (QMA)
André Lavoie
Josée Méthot

COMITÉ SECTORIEL DE MAIN-D’ŒUVRE DE L’INDUSTRIE DES MINES
Luc Baillargeon

CANADIAN INSTITUTE OF MINING, METALLURGY AND PETROLEUM (CIM)
Lise Bujold
Jean Vavrek
Lucie Vincent
Mireille Goulet

INSTITUT NATIONAL DES MINES
Jean Carrier
Robert Marquis
Louise Bryce

QUÉBEC INTERNATIONAL
Pierre Grenier
Line Lagacé
Alexandra Masson

48ᵉ NORD INTERNATIONAL
Claude Thibault
THE MINISTRY WANTS TO THANK THE FOLLOWING PERSONS FOR THEIR SPECIAL CONTRIBUTION TO THE ORGANIZATION OF THE EVENT

Séphane Baribeau
Diane Bélanger
Denis Blanchette
Marlène Bouchard
Pierre Buist
Lynda Carrier
Céline Côté
Julie Côté
Daniel Dubé
Clément Gaudreau
Daniel Faustino Silvestre
Alexa Harvey
Johanne Jobidon
Joanne Nadeau
Geneviève Paquet
Marie-France Rioux
Michaël Roy
Solange Saillant
André Tremblay
Anne Veilleux
Alain Vigneault
Émilie Villeneuve
Québec’s interactive geological map

Come and try it at Géologie Québec’s booth

carte-geomine.mrn.gouv.qc.ca
SUMMARY

QUÉBEC MINES
Short courses

Evening
Icebreaker

[QM INTERNATIONAL]

Morning
Young leaders forum (welcome meeting)
Conferences
  ▶ Public framework for mine development in Québec

Afternoon
Workshop
  ▶ Québec's supply of mining-related education
SHORT COURSES

9:00 a.m.  **CONSOREM workshop – Mineral exploration tools**  
Stéphane Faure, Lucie Mathieu, Silvain Rafini and Réal Daigneault (CONSOREM)
Length: Full-day session  
[Room 205C]

9:00 a.m.  **Exploring the Grenville Province: The ABC of its Geology, Deposits and Mineral Potential**  
Abdelali Moukhsil, Fabien Solgadi (MRN), Aphrodite Indarès (Memorial U.), Louise Corriveau (CGC) and Thomas Clark (MRN)
Length: Full-day session  
[Room 204B]

9:00 a.m.  **Exploration geochemistry: moving beyond statistics toward a deterministic approach**  
Réjean Girard, Pierre-Luc Gaudreault and Karen Gagné (IOS Services Géoscientifiques)
Length: Full-day session  
[Room 207]

9:00 a.m.  **Submarine volcanology applied to exploration: VMS and komatiites**  
Pierre-Simon Ross (INRS) and Michel Houlé (CGC-Québec)
Length: Full-day session  
[Room 204A]

9:00 a.m.  **Introduction to metallurgy: Everything a geologist should know**  
Denis Blackburn (MRN)
Length: Full-day session  
[Room 202]

9:00 a.m.  **Introduction to predictive control**  
André Desbiens and Jocelyn Bouchard (UL)
Length: Half-day session  
[Room 203]
1:30 p.m.  **Québec’s mining tax regime: A new approach**  
Jocelyne Lamothe (MRN)  
Length: 1 hour  
[Room 202]

1:30 p.m.  **The BNQ 21000 Approach: An Effective Strategic Tool to Bring Sustainable Development to Your Organization**  
Francine Craig (Cohésion-RSO)  
Length: Half-day session  
[Room 203]

1:30 p.m.  **Introduction of new technologies in the mining community**  
Robert Brouillette (Brouillette & Partners) and Alexandre Cervinka (Newtrax Technologies)  
Length: Half-day session  
[Room 206A]

3:00 p.m.  **Québec’s mining tax regime: A new approach**  
Jocelyne Lamothe (MRN)  
Presentation in English  
Length: 1 hour  
[Room 202]

**TOUR**

1:30 p.m.  **Québec, A City of Rock and Stone: From Place D’Youville to Saint-Denis Avenue**  
Robert Ledoux and Henri-Louis Jacob  
Length: 2 hours  
Registration required, guide book included  
[Main Hall, departure in front of the registration desk]

**ACTIVITY**

5:00 p.m.  **Icebreaker**  
[Foyer 4 - Loggia]
**SUMMARY**

**QUÉBEC MINES**

**Morning**
Official opening
Plenary session
  - Mine development: A responsibility for communities, government and industry
  - Multi-stakeholder dialogue on mining

**Afternoon**
Conferences sessions
  - The challenges of innovation in the mining sector
  - Results of recent geoscience work in Québec and in Canada

**Evening**
Geococktail
Launch of the IDNR-TV Mining Film Festival

**[QM INTERNATIONAL]**
Breakfast conference
  - The potential for mining projects in West Africa
CONFERENCES

9:00 a.m.  Official opening
[Foyer 4 - Loggia]

10:00 a.m.  Plenary session - Mine development: A responsibility for communities, government and industry
Moderator: Robert Giguère (MRN)
Guest speaker: Matthew Coon Come, Grand Chief of the Grand Council of the Crees (Eeyou Istchee)
Participants: Emmanuel B. Raufflet (Hec Montréal), Dominique Ferrand (Eco-Advisory Research Chair, UQAC), Josée Méthot (Québec Mining Association), Lise Pelletier (Mayor of Fermont)

[Room 301]

THE CHALLENGES OF INNOVATION IN THE MINING SECTOR

Session chairs: Jean-Marie Fecteau (AMQ) and Michel Jébrak (UQAM)
[Room 301]

1:30 p.m.  Strategic futurecasting: What can scenarios of the future teach us today?
Jeff Loehr and George Hemingway (VCI-Virtual Consulting International)  Keynote speakers
Presentation in English

2:15 p.m.  The mine of the future: Intelligent ore management
Martin Provencher (IBM Canada)

2:40 p.m.  The evolution of canadian mining: Open innovation for survival and growth
Alan Galley and Carl Weatherell (Canada Mining Innovation Council)
Presentation in English

3:05 p.m.  Groupe MISA: Support mechanisms for innovation, achievements to date, and outlook for the future
Alain Beauséjour (Groupe MISA)

3:30 p.m.  Laser-induced breakdown spectroscopy (LIBS): A new tool for the mining industry
Mohamad Sabsabi, Paul Bouchard, François Doucet, Lütfü Özcan, André Moreau, Aissa Harhira and Alain Blouin (NRC)
Presentation in English
3:55 p.m.  The Télébec research laboratory in underground communications: A leader in telecommunications solutions for Québec mining companies
Mohamed Aïlas (UQAT)

4:20 p.m.  How can optical-photonic technologies of today and tomorrow contribute to increasing your productivity?
Pierre Grenier (Québec International)

RESULTS OF RECENT GEOSCIENCE WORK IN QUÉBEC AND IN CANADA

Session chairs: Patrice Roy (MRN) and Mike Villeneuve (GSC)
[Room 302]

1:30 p.m.  Geology of the Malartic area
Pierre Pilote, Pierre Lacoste, James Moorhead (MRN), Réal Daigneault (UQAC), Vicki McNicol (GSC) and Jean David (MRN)

1:50 p.m.  The Canadian Malartic mine, Abitibi, Québec: Geological characteristics and relative timing of low-grade bulk-tonnage gold mineralization
Stéphane de Souza, Benoît Dubé, Vicki McNicholl, Patrick Mercier-Langevin, Céline Dupuis (GSC) and Robert Creaser (University of Alberta), Pierre de Chavigny and Donald Gervais (Osisko Mining Corporation)

2:10 p.m.  New developments in mineral-scale trace element analysis and mapping in ore deposit research and exploration: examples from gold deposits of Québec and Ontario
Simon Jackson, Jianfeng Gao and Benoît Dubé (GSC)

2:30 p.m.  Geological reconnaissance drilling in the area between Lac Quévillon and Lac Turgeon
Pierre-Luc Deschênes and Guillaume Allard (MRN)

2:50 p.m.  High-resolution multi-parameter analysis of drill core from the Chibougamau area – Implications for mineral exploration
Pierre-Simon Ross, Alexandre Bourke (INRS), François Leclerc (MRN) and Alexandre Boulerice (INRS)

3:10 p.m.  Geological and metallogenic context of the Kuujjuaq, Lac Saffray and Ungava Bay region, Southeast Churchill Province, Québec
Daniel Bandyayera, Isabelle Lafrance, Martin Simard and Carl Bilodeau (MRN)
3:30 p.m. Iron ore deposits in the Labrador Trough: past, present and future developments
James Conliffe and Andy Kerr (Geological Survey of Newfoundland and Labrador)
Presentation in English

3:50 p.m. Geology, alteration, and metamorphism of Paleoproterozoic volcanogenic massive sulphide (VMS) deposits in the Snow Lake area, Flin Flon Belt, Manitoba
Simon Gagné (Manitoba Geological Survey), Alan H. Bailes (Bailes Geoscience), Anthony E. Williams-Jones and Andrew Hynes (McGill University)

WORKSHOPS

10:00 a.m. Optoelectronics at the service of the mining industry
Cercle de l’industrie optique-photonique and Québec International
Length: Full-day session
[Room 203]

13:00 p.m. Multi-stakeholder dialogue on mining
Environmental and Social Responsibility Society (CIM) and Centre for Excellence in Corporate Social Responsibility
[Hilton, Courville - Montmorency rooms]

TOUR

1:30 p.m. Québec, A City of Rock and Stone: From Place D’Youville to Saint-Denis Avenue
Robert Ledoux and Henri-Louis Jacob
Length: 2 hours
Registration required, guide book included
[Main Hall, departure in front of the registration desk]
ACTIVITIES

7:00 a.m  Breakfast conference
The potential for mining projects in West Africa
Presented by 48° Nord international and the Canadian Institute
of Mining, Metallurgy and Petroleum
[Hilton, Portneuf – Sainte-Foy rooms]

9:00 a.m.  School visit M4S exhibition
[Exhibition room]  [QM for all]

Noon  Lunchtime seminar
Responsible mine development in the French-speaking
world: Issues and prospects
Presented by the Société des relations internationales
de Québec (SORIQ)
[Hilton, Villeray – De Tourny rooms]

4:00 p.m.  Geococktail
[Québec Mines Exhibition room]

6:00 p.m.  Launch of the IDNR-TV Mining Film Festival
The first showing of IDNR-TV’s most recent productions
[Foyer 4 - Loggia]
SUMMARY

QUÉBEC MINES

Morning
Conferences sessions
- Evolution of knowledge in the Abitibi Subprovince
- Geomechanical challenges in Québec mines
- The new reality in Québec for gold mineral processing: low-grade refractory ores

EXPLO Québec Mines Challenge

Afternoon
Honorary president: Mr Pierre Lortie (Dentons Canada)
- The mining industry’s contribution to Québec society: Past and present

Conferences sessions
- Sustainable development and mines: Real-life experience of companies’ social responsibility
- Challenges in mining engineering
- New grinding technologies: Finding your way through the maze of words

[QM INTERNATIONAL]

Morning
How to do business abroad

Evening
International Networking Activity

[QM FOR ALL]

Employment and Education Fair

Afternoon
Open House
## EVOLUTION OF KNOWLEDGE IN THE ABITIBI SUBPROVINCE

Session chairs: Réal Daigneault (UQAC-CONSOREM) and Pierre Pilote (MRN)  
[Room 301]

**9:00 a.m.** Evolution of ore deposit models in the Abitibi and implications for exploration  
Michel Jébrak (UQAM)

**9:25 p.m.** Abitibi stratigraphy and geochronology over the past 30 years and their impact on mineral exploration  
Jean Goutier (MRN)

**9:50 p.m.** Synthesis of knowledge acquisition in the Ontario segment of the Abitibi Subprovince: A review of 1993-2013  
Sonia Préfontaine (OGS), John Ayer (MERC), Andy Bajc and Stew Hamilton (OGS)

**10:15 p.m.** Geophysics applied to mineral exploration in the Abitibi or the Quest for the Holy Grail  
Michel Allard (Glencore)

**10:40 a.m.** Exploration methods for volcanogenic massive sulphides in Abitibi: Contribution of geochemical data processing  
Stéphane Faure (CONSOREM-UQAM), Sylvain Trépanier (Virginia Mines) and Réal Daigneault (UQAC)

**11:05 a.m.** Evolving thoughts on faults and deformation zones in the Abitibi Subprovince  
Réal Daigneault (CONSOREM-UQAC)

## GEOMECHANICAL CHALLENGES IN QUÉBEC MINES

Session chairs: Martin Grenon (UL) and Ali Saeidi (UQAC)  
[Room 302A]

**9:00 a.m.** Geomechanical challenges in Québec mines  
Veronique Falmagne (Agnico Eagle Mines)

**9:20 a.m.** Ground control in permafrost conditions  
Paul Germain (Glencore)

**9:40 a.m.** Development of a damage simulator to study the vulnerability of areas subject to landslide hazards  
Ali Saeidi (UQAC), Olivier Deck and Thierry Verdel (Université de Lorraine, France)
10:00 a.m.  
Starting up production at Éléonore with its various geomechanical challenges
Pierre-Luc Lajoie, Denis Fleury and Luc Joncas (Goldcorp)

10:20 a.m.  
Methodologies for ground control challenges in underground mines
Hani Mitri (McGill University)

10:40 a.m.  
Geomechanics and ground control at the Niobec Mine
Jean-François Dorion (IAMGOLD)

11:00 a.m.  
Challenges related to adequate underground paste backfill design
Tikou Belem and Mostafa Benzaazoua (IRME-UQAT)

11:20 a.m.  
Geomechanical challenges associated with mine design at the Renard diamond project
Patrick Mercier and Guy Bourque (Stornoway Diamonds)

THE NEW REALITY IN QUÉBEC FOR GOLD MINERAL PROCESSING: LOW-GRADE REFRACTORY ORES

Session chairs: Jocelyn Bouchard (UL) and Marlène Lanouette (Agnico Eagle Mines)
[Room 302B]

9:00 a.m.  
Challenges and opportunities associated with the development of giant low-grade gold deposits
Jacques McMullen (BBA)

9:30 a.m.  
Challenges and constraints associated with measuring gold distribution in new gold-bearing ores
Jean-François Wilhelmy (COREM)

10:00 a.m.  
Pause

10:30 a.m.  
Gold ore processing at the Éléonore project
Jean-Félix Lepage (GOLDCORP)

11:00 a.m.  
Operational issues related to a concentrator start-up
Steve Bellec, Danielle Bouffard and Mathieu Bélisle (Soutex)
1:30 p.m.  Honorary president’s presentation
The mining industry’s contribution to Québec society: Past and present
Pierre Lortie (Dentons Canada S.E.N.C.R.L.)
[Room 301]

SUSTAINABLE DEVELOPMENT AND MINES: REAL-LIFE EXPERIENCE OF COMPANIES’ SOCIAL RESPONSIBILITY
Session chairs: Mireille Goulet (ICM) and Jean Rousseau (BNQ) [Room 301] [QM INTERNATIONAL]

2:15 p.m.  Main findings on the BNQ 21000 Approach tested by members of the Québec Mining Association
Francine Craig (Cohésion-RSO) and Nathalie Tremblay (Québec Mining Association) [Keynote speakers]

3:15 p.m.  Arnaud Mine: Application of the sustainable development evaluation grid developed by the Chair on Eco-advising
Olivier Riffon, Hélène Côté, David Tremblay (UQAC), Stéphanie Prévost (CPESI) and Claude Villeneuve (UQAC)

3:45 p.m.  Mining industry and gender equity: Initial steps taken by New Millennium Iron Corporation
Élisabeth Benoît (New Millennium Iron Corporation)

4:15 p.m.  Mining, agriculture and water: The case of Eldorado Gold in Turkey
Adam McEniry (Wayne Dunn & Associates)

NEW GRINDING TECHNOLOGIES: FINDING YOUR WAY THROUGH THE MAZE OF WORDS
Session chairs: Danielle Bouffard (Soutex) and Nadia Ouellet (Corem) [Room 302A]

1:30 p.m.  Evolution of the IsaMill into magnetite processing
Greg Rasmussen (Xstrata Technology)  Presentation in English

2:00 p.m.  High pressure grinding roll (HPGR) familiarization seminar
Bruce Christensen (Weir Minerals)  Presentation in English
2:30 p.m. Benchmarking the energy efficiency of fine grinding in the mining industry  
Michel Brissette and John Starkey (Starkey & Associates)

3:00 p.m. Pause

3:30 p.m. An overview of the HPGR and fine grinding technologies to characterize ore grindability  
François-Olivier Verret (SGS)  
Presentation in English

4:00 p.m. Stirred milling machine development and application expansion  
Jon Allen (Metso Mining and Construction Technology)  
Presentation in English

**CHALLENGES IN MINING ENGINEERING**

Session chairs: Marcel Laflamme (UL) and Jean-Marie Fecteau (AMQ)  
[Room 302B]

1:30 p.m. Diesel and ventilation in underground mines – Challenges and best practices  
Michel Grenier (Canmet MINES)

1:55 p.m. Challenges in the start-up of the Éléonore project  
Guy Belleau (Goldcorp)

2:20 p.m. Operational challenges at the Canadian Malartic Mine  
Christian Roy (Osisko Mining Corporation)

2:45 p.m. Recovery of secondary stopes in unconsolidated ground  
Herman de Los Rios and Benjamin Berson (Hecla Québec)

3:10 p.m. LaRonde – The challenges of a deep mine  
Daniel Paré (Agnico Eagle Mines)

3:35 p.m. The Westwood Mine: A lode gold deposit from exploration to the start-up of production  
Daniel Vallières and Guy Gosselin (IAMGOLD)

**SHORT COURSE**

1:30 p.m. Overview of disclosure requirements applicable to mining companies  
Luc Arsenault and Nadine Gamelin (Autorité des marchés financiers)  
Length: Half-day session  
[Hilton, Orléans room]
WORKSHOPS

9:00 a.m.  Québec seeks solution – Mining edition
Québec International
Registration is required
[Hilton, Kent – Saint-Louis rooms]

1:00 p.m.  Geoparks: What are they for?
Pierre Verpaelst and Godfrey Nowlan
(Canadian National Committee for Geoparks)
Free, no registration is required
[Hilton, Portneuf room]

TOUR

1:30 p.m.  Québec, A City of Rock and Stone: From Place D’Youville to Saint-Denis Avenue
Robert Ledoux and Henri-Louis Jacob
Length: 2 hours
Registration required, guide book included
[Main Hall, departure in front of the registration desk]

EMPLOYMENT AND EDUCATION FAIR

[QM for all]

9:00 a.m.  Employment and Education Fair
Submit your résumé to apply onsite for any of the jobs offered by mining sector companies and the Ministère des Ressources naturelles.
[Exhibition room]

Workshop – Mining development cycle jobs and the skills required: How to present them in order to obtain a job in the mining sector
Presentations start at 9:00 a.m., 10:30 a.m., 1:30 p.m. and 3:00 p.m.
Length: 1 hour
[Room 203]
<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Location</th>
<th>Details</th>
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<tbody>
<tr>
<td>7:30 a.m.</td>
<td>KEGS breakfast conference</td>
<td>Hilton, Portneuf room</td>
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<td>8:00 a.m.</td>
<td>EXPLO Québec Mines Challenge</td>
<td>Foyer 4 - Loggia</td>
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<td>9:00 a.m.</td>
<td>School visit M4S exhibition</td>
<td>Exhibition room</td>
<td>QM for all</td>
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<td>Noon</td>
<td>Open house</td>
<td>Exhibition room</td>
<td>QM for all</td>
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<tr>
<td>Noon</td>
<td>Silent Auction</td>
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<td>All profits from the silent auction will go to the Canadian Mining</td>
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<td>and Metallurgy Foundation, which will use the funds for scholarships</td>
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<td>and educational activities.</td>
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<td>You have until 4:30 p.m. to place your bids!</td>
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<tr>
<td>1:00 p.m.</td>
<td>IDNR-TV Mining Film Festival</td>
<td>Foyer 3 - Solarium</td>
<td>What’s New in 2013 (roughly 45 minutes)</td>
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<td>Il était une fois Malartic (15 minutes)</td>
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<td>Le Québec a de la veine (20 minutes)</td>
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<td>Le sommet des profondeurs (1 hour)</td>
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<td>Troilus (30 minutes)</td>
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<td>5:00 p.m.</td>
<td>International Networking Activity</td>
<td>Foyer 3</td>
<td>Free for registered Québec Mines participants.</td>
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<td>QM INTERNATIONAL</td>
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</tbody>
</table>
SUMMARY

QUÉBEC MINES

Morning
Conferences sessions
  ▸ Mines and environment: Achievements, challenges and solutions
  ▸ Quaternary geology and glacio-sedimentary prospecting
Awards Ceremony

Afternoon
Conferences sessions
  ▸ Sustainable development, the economy and mines: How do we ensure the longevity of the mining industry?
  ▸ Alkaline intrusions: From exploration to rehabilitation

[QM INTERNATIONAL]

Young leaders forum (round-table)
MINES AND ENVIRONMENT: ACHIEVEMENTS, CHALLENGES AND SOLUTIONS

Session chairs: Jean-François Doyon (Agnico Eagle Mines) and Denis Bois (UQAT) [Room 301]

9:00 a.m.  The Research Institute of Mining and Environment and the management of mine tailings
Michel Aubertin (École Polytechnique) and Bruno Bussières (UQAT-École Polytechnique)

9:30 a.m.  Reclamation of concentrator waste piles in northern conditions
Bruno Bussières (UQAT-École Polytechnique)

10:00 a.m.  Geoscience techniques used to address challenges in the assessment of environmental risks downstream from metal mines: Example of the receiving environments at the Aldermac site in Abitibi, Québec
Sam Alpay, Rick J. McNeil, Alain Grenier (GSC)

10:30 a.m.  Environmentally sensitive transportation systems for base-metal mines
Doug Morrison (Centre for Excellence in Mining Innovation)
Presentation in English

11:00 a.m.  The responsible mining management toolbox
Louise Grondin (Agnico Eagle Mines)

QUATERNARY GEOLOGY AND GLACIO-SEDIMENTARY PROSPECTING

Session chairs: Hugo Dubé-Loubert (MRN) and Martin Roy (UQAM) [Room 302]

9:00 a.m.  Modern glacial process and dynamics applied to mineral exploration
Roger C. Paulen and M. Beth McClenaghan (GSC)  Keynote speaker
Presentation in English

9:40 a.m.  New challenges in glacio-sedimentary exploration: Complex glacial zones and deeper targets
Martin Ross (University of Waterloo)
10:00 a.m.  Indicator minerals and till geochemistry near porphyry deposits in the Canadian Cordillera
Alain Plouffe (GSC), Travis Ferbey (British Columbia Geological Survey), Bob Anderson (GSC), Sarah Hashmi and Brent Ward (Simon Fraser University, B.C.)

10:20 a.m.  Glacial dispersal and till provenance in Northern Québec and Abitibi – New constraints on the Late Quaternary glacial record of the Laurentide Ice Sheet
Michel Parent (GSC), Troy E. Rasbury (State University of New York), Sidney R. Hemming (Columbia University, N.Y.), Pierre Rhéaume (MRN) and Éric Boisvert (GSC)

10:40 a.m.  Examples of tracking indicator minerals in glacial sediments
Rémi Charbonneau (Inlandsis Consultants)

11:00 a.m.  Provenance of mineral indicators in the James Bay Lowland: Diamond exploration in challenging terrain
Nicole Januszczak and John Delgaty (De Beers Group of Companies)

11:20 a.m.  Technological advances in Quaternary mineralogy
Réjean Girard (IOS Services Géoscientifiques)

SUSTAINABLE DEVELOPMENT, THE ECONOMY AND MINES: HOW DO WE ENSURE THE LONGEVITY OF THE MINING INDUSTRY?

Session chairs: Martin Labrecque and Jean-Yves Labbé (MRN)
[Room 301] [QM INTERNATIONAL]

1:30 p.m.  The direct economic impact of gold in the world’s major gold producing and consuming countries
Janice Plumstead (PwC)  **Keynote speaker**
Presentation in English

2:15 p.m.  What value sustainability brings to the mining sector?
Milla Craig (Deloitte)

2:45 p.m.  The Québec City region, an asset for Québec’s mining development
Louis Gagnon (Québec International)

3:15 p.m.  Manpower training in a sustainable development context
Luc Baillargeon (CSMO Mines)

3:45 p.m.  Mining in Québec: 100 years of history, 100 years in the future
Jean-Marc Lulin (Azimut Exploration)
4:15 p.m.  Historical mining development dynamics in the Baie-James region (1975-2012)
Robert Edgard Ndong, Michel Jébrak (UQAM), Mehdi Guemache and Andrea Amortegui (MRN)

ALKALINE INTRUSIONS: FROM EXPLORATION TO REHABILITATION

Session chairs: Jean Goutier (MRN) and Guillaume Matton (Iamgold)  [Room 302]

1:30 p.m.  Controls on the formation of rare earth element ore deposits
Anthony E. Williams-Jones (McGill University)  [Keynote speaker]
Presentation in English

2:00 p.m.  The Strange Lake B-Zone rare earth deposit, Québec: Updated mineral resource estimate and progress report on pre-feasibility and feasibility studies
Pierre Guay (Quest Rare Minerals)

2:20 p.m.  The Nb-Ta-REE-enriched Crevier alkaline intrusion: New geochronological, isotopic, geochemical and mineralogical data
Pierre-Arthur Groulier, Daniel Ohnenstetter, Anne-Sylvie André-Mayer (Université de Lorraine), Fabien Solgadi, Abdelali Moukhsil (MRN) and Armin Zeh (Goethe Universität)

2:40 p.m.  Preliminary characterization of rare earth mineralization in the Saint-Honoré ferrocarbonatite (Québec, Canada)
Alexandre Néron, Paul Bédard, Damien Gaboury (UQAC) and Steve Thivierge (IAMGOLD)

2:55 p.m.  Progressive reclamation of tailings ponds at Niobec – A sustainable development approach
Thierry Tremblay (IAMGOLD)

3:20 p.m.  Geological update and mining development of the Montviel REE project, James Bay, Québec
Simon Britt and Alain Cayer (Géoméga Resources)

3:40 p.m.  Petro-metallogenesis of the carbonatic alkaline system (REE-Nb) of Montviel, Abitibi
Olivier Nadeau (UQAM), Alain Cayer, Mia Pelletier (Géoméga Resources), David Séguin, Ross Stevenson and Michel Jébrak (UQAM)
WORKSHOP

9:00 a.m.  Immigrant labour as a potential solution
Frédéric Lavoie (MICC)
Free, registration is required
[Hilton, Portneuf room]

ACTIVITIES

9:00 a.m.  School visit M4S exhibition
[Exhibition room]  [QM for all]

11:30 a.m.  Awards Ceremony
▶ AQUEST scholarships
▶ Québec Mines EXPLO Challenge
▶ Le marteau d’or (golden hammer)
▶ Outstanding Merit Award
[Foyer 4 - Loggia]
The availability of natural resources, including mineral resources, offers significant potential for economic and social development, and this in turn can contribute in a meaningful way to the fight against poverty by improving the living conditions of populations in the areas concerned. Many French-speaking developing countries have access to mineral resources, but their major challenge is to manage and use those resources in an ecologically rational way. Fair and sustainable access to the revenues generated by resources is an important objective.

The economic, socio-cultural and environmental importance of mine extraction for local populations, and the need for good stewardship of resources with a view to achieving sustainable development, have both been acknowledged in the undertakings made by the Francophonie at recent Summits attended by heads of State and government.

Québec 2008, Montreux 2010 and Kinshasa 2012, in their declarations, all mentioned the promotion of and respect for the principles associated with the Extractive Industries Transparency Initiative (EITI), corporate social and environmental responsibility (CSER) and sustainable development.

One of the main missions of the Institut de la Francophonie pour le développement durable (IFDD), a subsidiary of the Organisation internationale de la Francophonie (OIF), is to train and upgrade the skills of development actors in OIF member States and governments. Aspects that the mining sector must address if it is to propose appropriate sustainable development policies include environmental management tools for sustainable development, such as environmental impact assessments, environmental law, environmental economics, energy efficiency and corporate social and cultural acceptability.

Québec Mines International 2013 offers an opportunity to learn more about recent developments in new technology and to share mining sector experience within the French-speaking world. It is an opportunity that should be seized and used by young entrepreneurs, at a time when post-2015 is being prepared and international negotiations are taking place on the sustainable development objectives that have become a “must” for every economic sector. This important mining sector gathering will certainly address these topics from the standpoint of integrated sustainable development, and the IFDD is delighted to be a partner in this outstanding event that will be attended by all the actors concerned (public and private sectors, the scientific communities, NGOs, the civil society, women, young people, elected representatives, and so on).

I am also delighted to underscore the commitment shown by the Québec Government towards young people, who are a priority for the OIF in its cooperation programs and actions in favour of sustainable development. This year, Québec Mines International will host the first-ever International Forum of Young Leaders in Responsible Mine Development, which offers young French-speaking participants an opportunity to attend the Congress in order to learn, discuss and form networks.

I hope these meetings will allow everyone concerned to strengthen their knowledge, take part in content-rich discussions and – why not – initiate cooperative projects in the French-speaking world similar to those that emerged from the International Forum on Youth and Green Jobs, organized by the Francophonie as a prelude to the RIO+20 Conference.

Fatimata Dia
Director,
Institut de la Francophonie pour le développement durable (IFDD)
INTERNATIONAL LOUNGE

BUSINESS PROSPECTS IN WEST AFRICA: NETWORKING WITH MINING SECTOR FIRMS AND ORGANIZATIONS

A business networking formula to promote business opportunities in West Africa

48e Nord has organized an activity that will allow firms to identify new business prospects and create strategic alliances. Added value for firms from Québec and abroad.

Date: November 12 from 9:00 a.m. to 4:00 p.m.
Participants may register online, and will receive a timetable of meetings.
[Exhibition room, International lounge]

HOW TO DO BUSINESS ABROAD

EXPORTING QUÉBEC’S MINING PRODUCTS AND SERVICES

Export 101: From Labrador to Chile? How a mining sector company can be successful on international markets

Commerce International Québec

What are the 14 components of international trade that all SMEs must fulfill if they are to be successful in new markets? Whether you are an established exporter, or already obtain supplies abroad, or are a complete beginner when it comes to foreign markets, this workshop will help you to understand the 14 components of international trade and how they are connected. You will also discover a resource in your region with which you may not be familiar – your “International Commissariat” – and will learn what it does to help companies.

New mining market prospects

Export Development Canada

The conference, given by Export Development Canada (EDC), examines world economic trends and considers the strategies that will be implemented in the coming year to support Canadian mining equipment suppliers on foreign markets.

Date: November 13 from 1:00 p.m. to 2:30 p.m.
[Hilton, Courville – Montmorency rooms]
MONDAY, NOVEMBER 11

7:30 a.m.  **Young Leaders Forum (first meeting)**  
**[Hilton, De Tourny room]**

9:00 a.m.  **Conferences**  
**Public framework for mine development in Québec**
- Main aspects of the Mining Act  
  Roch Gaudreau (MRN)
- Taxation system  
  Jocelyne Lamothe (MRN)
- Development of geoscientific knowledge  
  Patrice Roy (MRN)

**[Hilton, De Tourny room]**

1:30 p.m.  **Workshop**  
**Québec’s supply of mining-related education**
- Québec’s supply of training solutions for the mining sector  
  Robert Marquis, Institut national des mines
- Québec’s expertise in training mining sector tradespeople  
  Lysiane Van der Knapp, Coopérative de services de développement et d’échanges en éducation
- Québec’s expertise in training foreign college-level students in the mining sector  
  (Daniel Marcotte, Institut national des Mines and Stéphane Labrecque, Abitibi-Témiscamingue CEGEP
- Recruiting, hosting and supporting foreign students in Québec’s universities  
  Paul Bédard, UQAC
- Discussion and conclusion

**[Hilton, De Tourny room]**

TUESDAY, NOVEMBER 12 NOVEMBRE

7:00 a.m.  **Breakfast conference**  
**The potential for mining projects in West Africa**  
Presented by 48e Nord international and the Canadian Institute of Mining, Metallurgy and Petroleum

Moderators: Jean Vavrek, Executive Director, Canadian Institute of Mining, Metallurgy and Petroleum, and Guillaume Marquis, President of 48e Nord International

**[Hilton, Portneuf – Sainte-Foy rooms]**

9:00 a.m.  **Official opening**  
**[Foyer 4 - Loggia]**
9:00 a.m.  48e Nord international – International Lounge
9:00 a.m.  Tour of exhibition room
10:00 a.m.  Plenary session - Mine development: A responsibility for communities, government and industry
   Moderator: Robert Giguère (MRN)
   Guest speaker: Matthew Coon Come, Grand Chief of the Grand Council of the Crees (Eeyou Istchee)
   Participants: Emmanuel B. Raufflet (Hec Montréal), Dominique Ferrand (Eco-Advisory Research Chair, UQAC), Josée Méthot (Québec Mining Association), Lise Pelletier (Mayor of Fermont)

Noon  Lunchtime conference
   Responsible mine development in the French-speaking world: Issues and prospects
   Presented by the Société des relations internationales de Québec (SORIQ)
   [Hilton, Villeray - De Tourny rooms]

1:30 p.m.  Conferences session
   The challenges of innovation in the mining sector
   [Room 301] program page 18
   Results of recent geoscience work in Québec and in Canada
   [Room 302] program page 19

4:00 p.m.  Geococktail
   [Québec Mines Exhibition room]

6:00 p.m.  Launch of the IDNR-TV Mining Film Festival
   The first showing of IDNR-TV’s most recent productions
   [Foyer 4 - Loggia]
WEDNESDAY, NOVEMBER 13

9:00 a.m.  Visit M4S exhibition  
[Exhibition room] [QM for all]

HOW TO DO BUSINESS ABROAD
EXPORTING QUÉBEC’S MINING PRODUCTS AND SERVICES

1:00 p.m.  Export 101: From Labrador to Chile? How a mining sector company can be successful on international markets  
Isabelle Limoges (International Commissioner and Director General, Société de développement international de Lanaudière)

New mining market prospects  
Martine Trudel (Québec Marketing Head, Export Development Canada)  
[Hilton, Courville - Montmorency rooms]

Honorary president’s conference  
1:30 p.m.  The mining industry’s contribution to Québec society: Past and present  
Pierre Lortie (Dentons Canada S.E.N.C.R.L.)  
[Room 301]

2:15 p.m. Conferences session  
Sustainable development and mines: Real-life experience of companies’ social responsibility  
[Room 301] program page 26

5:00 p.m. International Networking Activity  
To meet contractors from Québec and elsewhere  
Free for registered Québec Mines participants.  
[Foyer 3] [QM INTERNATIONAL]

THURSDAY, NOVEMBER 14

1:00 p.m. Young Leaders Forum (round-table)  
[Hilton, Portneuf – Sainte-Foy rooms]

1:30 p.m. Conferences session  
Sustainable development, the economy and mines: How do we ensure the longevity of the mining industry?  
[Room 301] program page 33
EXHIBITION ROOM MAPS
GEOLOGICAL SPACE
AND PROSPECTOR’S SPACE MAP

Exhibition room maps and exhibitors
EDUCATION SPACE

1. Institut national des mines du Québec (INM)
2. Centre de formation professionnelle de Forestville
3. Cégep André-Laurendeau
4. Commission scolaire des Trois-Lacs (formation professionnelle Multicentre)
5. Cégep de l’Abitibi-Témiscamingue et Cégep de Saint-Félicien
6. Centre de formation professionnelle de Mont-Laurier
7. École de technologie supérieure (ETS)
10-11. Comité sectoriel de main-d’œuvre de l’industrie des mines (CSMO Mines)
12. Cégep de Thetford
13. Université Laval
14. Centre de formation professionnelle de la Baie-James
15. Centre de formation en transport de Charlesbourg
16. Cégep de Sept-Îles
17. Centre de formation professionnelle de Val-d’Or – Centre national des mines

EXHIBITORS

20. Bureau d’audiences publiques sur l’environnement (BAPE)
21. INO
22. Mineralogical Association of Canada
23. DIVEX
24. CONSOREM
25. COREM
26. Centre de technologie minérale et de plasturgie (CTMP)
27. Québec Mining Association (QMA)
30. Canadian Institute of Mining, Metallurgy and Petroleum (CIM)
31. Women in Mining Canada
32. Grand Council of the Crees (GCC)/Cree Regional Authority (CRA)
33. Cree Mineral Exploration Board
34. Nunavik Mineral Exploration Fund
35 to 37. Ubifrance/Québec
40. Québec International
41. Commission de la santé et de la sécurité du travail (CSST)
42. Canada Revenue Agency (CRA)
43. Centre de Recherche industrielle du Québec (CRIQ)
44. Québec Geoscience Centre (NRCan-QGC)
45-46. Government of Newfoundland and Labrador – Natural Resources
47. Kitco Metals
55. Institut de la Francophonie pour le développement durable (IFDD)
56. 48° Nord International
65. Association internationale des étudiants en sciences économiques et commerciales (AIESEC)
66. Missions commerciales de l’Université Laval
57-58. International Lounge
67-68. International Lounge
G01 Deformation related to the burial and exhumation of the parautochthonous belt southwest of the Manicouagan Reservoir, central Grenville Province, Québec
Sophie Jannin, Félix Gervais (Polytechnique Montréal), Abdelali Moukhsil (MRN)

G02 The Nb-Ta-REE-enriched Crevier alkaline Intrusion: New geochronological, isotopic, geochemical and mineralogical data
Pierre-Arthur Groulier, Daniel Ohnenstetter, Anne-Sylvie André-Mayer (Université de Lorraine, France), Fabien Solgadi, Abdelali Moukhsil (MRN), Armin Zeh (Goethe Universität, Frankfurt, Germany)

G03 The Manicouagan astrobleme (Québec): New petrological data
Pierre-Arthur Groulier, Abdelali Moukhsil, Fabien Solgadi (MRN)

G04 A study of ultramafic intrusions in the Lac Richardie area, Baie-James
Donald Grzela (University of Ottawa), Jean Goutier (MRN), Jonathan O’Neil (University of Ottawa), Michel G. Houlé (GSC-Q)

G05 Gold mineralization at the contact between the Opinaca and La Grande subprovinces: the Quentin showing, Baie James (NTS 33H04)
Simon Bachand (UQAM), Jean Goutier (MRN), Alain Tremblay (UQAM)

G06 Petrographic study of the Lac des Montagnes chrome-bearing ultramafic intrusion, Baie-James, Québec
Marie-Pier Bédard (ULaval), Michel G. Houlé (GSC-Q), Réjean Hébert (ULaval), Jean Goutier (MRN)

G07 Detailed mapping of the South Whip gold showing, James Bay
Marilyne Adam (UQAM)

G08 Southeast Churchill Province, Torngat sector: How many tectonometamorphic overprints are recorded in the roots of the Paleo-Proterozoic orogeny?
Benoit Charette (University of Waterloo), Daniel Bandyayera (MRN), Carl Gilmette (University of Waterloo)

G09 Geology of the Marbridge area (NTS 32D08-0102)
Véronique Lafrance (UQAC), Pierre Pilote (MRN), Réal Daigneault (CERM-UQAC)

G10 Geology and gold mineralization at the Malartic Hydrade mine - The Orion No. 8 ore zone
Stéphanie Bertrand Blanchette (UQAM), Pierre Pilote (MRN), Michel Gauthier (UQAM), Yan Ducharme and Benjamin Gagnon-Lamothe (NioGold)

G11 Geology of the “Rives du Lac Malartic” gold showing (RLM)
Rémi Schmitt (UQAM), Pierre Pilote (MRN), Alain Tremblay (UQAM)

G12 Synthesis and evolution of the Cadillac Fault, Abitibi
Pierre Bedeaux (UQAC), Pierre Pilote (MRN), Silvain Rafini (CONOREM), Réal Daigneault (UQAC)

G13 Volcanology of the Waconichi Formation, Lemoine area, Chibougamau (Abitibi Subprovince)
Alexandre R. Boulerice, Pierre-Simon Ross (INRS), Patrick Mercier-Langevin (GSC-Q), Sylvain Lépine (Cogitore Resources), François Leclerc (MRN)

G14 Geochemical classification of the rocks of the Blake River Group (Abitibi Subprovince)
Sarane Sterckx, Pierre-Simon Ross (INRS), Jean Goutier (MRN)

G15 Gold mineralization associated with the Porcupine-Destor Fault: The Duquesne-Ottoman property, Abitibi, Québec, Canada
Sacha Lafrance and Michel Jébrak (UQAM)

G16 Mineralogical study of the gold zones of the Augmitto-Astoria segment of the Cadillac Fault, Rouyn-Noranda, Québec
Julien Laporte, Michel Jébrak (UQAM), Baptiste Chapon (Yorbeau Resources)

G17 Gold mineralization of the Wasamac shear zone, Rouyn-Noranda, Québec
Nicolas Mériaud, Michel Jébrak (UQAM), Raynald Vincent (Richmont Mines)

G18 The plutonic suites of the northeastern Superior Province (NESP), Québec, Canada: a preliminary metallogenic approach
Christophe Azevedo, Michel Jébrak (UQAM), Andrea Amortegui (MRN)

G19 Magnetite-bearing parageneses of hydrothermal alterations in iron oxide-copper-gold systems
Anthony F. De Toni (INRS-ETE), Louise Corriveau (GSC-Q), Jean-François Montreuil (INRS-ETE)
G20  Geophysical signatures of late Archean alkaline intrusions in the Abitibi, Québec-Ontario, Canada
Charlotte Cappé-Kerbart, Noémie Fayol, Christophe Azevedo, Michel Jébrak (UQAM), Michel Chouteau (École Polytechnique)

G21  Quaternary sediment mapping in the Chaudière-Appalaches region: Results and prospects
Guillaume Thiery, Sylvain Milette, Nancy North, Marc-André Hurtubise, Éric Leduc, Robert-André Daigneault, Martin Roy (UQAM)

G22  An overview of Quaternary mapping work in the Vaudreuil-Soulanges region
Pierre-Marc Godbout and Martin Roy (UQAM)

G23  Rare earth mobility and sedimentary record in sediments from a northern lake
Jade Bergeron, Charles Gobeil, André Tessier (INRS-ETE)

G24  Quantifying the reliability of discontinuity orientation measurements in oriented drill core and the impact on mine slope stability assessments
Joseph Kabuya Mukendi and Martin Grenon (ULaval)

G25  Geomechanical analyses at the Meliadine mine project
Joseph Kabuya Mukendi and Martin Grenon (ULaval)

G26  Geology of the Lac Okaopéo area, Côte-Nord (NTS 22K01, 22K02, 22K07, 22K08, 22K09 and 22K10)
Abdelali Moukhil, Fabien Solgadi (MRN), Saïd Belkacem, Abdelaziz Elbasbas, Thomas Clark (URSTM-UQAT)

G27  Apatite potential in Québec
Ngolo Togola (MRN)

G28  Geology and mineral potential of the Lac des Vœux region (James Bay)
Hanafi Hammouch, Pénélope Burniaux, Abdel-Ali Kharis, Mehdi Amine Guemache (MRN)

G29  Geology of the Lac Richardie area, Baie-James: The boundary between the Opinaca and La Grande subprovinces
Jean Goutier (MRN), Joséphine Gigon (UQAT-URSTM), William Chartier-Montreuil (MRN)

G29  Ultramafic to mafic magmatism of the La Grande and Eastmain domains in the Superior Province, James Bay, Québec
Michel G. Houlé (GSC-Q) and Jean Goutier (MRN)

G30  Geology and economic potential of the Lac Henrietta region, Southeast Churchill (NTS 24H)
Isabelle Lafrance, Daniel Bandyayera, Carl Bilodeau (MRN)

G31  Presentation of geophysical data published in 2013
Rachid Intissar, Isabelle D’Amours, Siham Benahmed (MRN)

G32  Geology of the La Motte area (NTS 32D08-SE)
Pierre Pilote, Pierre Lacoste, James Moorhead (MRN), Réal Daigneault (UQAC), Vicki McNicoll (GSC-O), Jean David (MRN)

G33  Aggregate resource inventory in the Kuataq and Kangiqsujuaq regions
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P3 FRE MA RO
P4 Olivier Ayotte, prospector
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P6 Association des prospecteurs du Saguenay–Lac-Saint-Jean
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P12 Georges Hryniw, prospector
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THE QUÉBEC MINES EXPLO CHALLENGE CONTEST

Teams of three students, representing different universities, have 12 hours to produce an exploration program proposal. Each team is assigned a specific research sector, and must use ArcGIS tools, along with geological and geophysical data from SIGÉOM, to target a mining property and develop a detailed exploration program based on the geology of the land and favourable substances, along with a detailed report on their program. The winning team, i.e. the one whose program is judged to be the most promising, will receive a $3,000 scholarship from Minalliance.

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YOUNG SCIENTISTS’ CONTEST: EXPLORING THE WORLD OF GEOLOGY!

Students from Elementary Cycle 3 and high schools in Québec have been invited to enter the science contest Exploring the World of Geology!

Participants must submit a scientific research paper describing and explaining one of the following geological phenomena: erosion and sedimentation, volcanic activity and plate tectonics, or folds and faults. All the projects entered for the contest will be displayed in the main hall.

The awards given to contest winners are provided by the Société d’investissement dans la diversification de l’exploration.
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