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I invite you to Vancouver, Canada, in June 2018 to attend the first international conference dedicated to the availability and delivery of resources to sustain future generations. Resources for Future Generations—RFG2018—will examine three critical resources—energy, minerals, and water—in the context of the earth, environment, education, society, and the needs and roles of future generations.

The conference will take place under the auspices of the International Union of Geological Sciences (IUGS), and will be delivered by Canadian partners: the Canadian Federation of Earth Sciences (CFES), the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), the Geological Association of Canada (GAC), and the Mineralogical Association of Canada (MAC). More than 85 sponsors, technical partners, and supporting partners representing a wide variety of local and global interests are playing critical roles in the development of this novel conference. Attendees will represent earth science and engineering research and practice, industry, governments, Indigenous people, and communities. We especially welcome early career professionals, researchers, and students and will have dedicated events for them—the Future Generation.

RFG2018 has six major themes: the Earth, Energy, Minerals, Water, Resources and Society, and Education and Knowledge. The Earth theme addresses the knowledge that underpins the future availability and responsible use of resources, and provides venues for a wide variety of sessions covering fundamental and applied earth science, topics of particular interest to members of IUGS, GAC and MAC. This theme links through sessions that will focus on the interplay between human ingenuity and new technologies in the context of a world that is changing dramatically and unpredictably, to numerous sessions covering societal themes related to governments, Indigenous people, communities, civil society in general, and education. The oral and poster sessions cover many areas of specific interest, and topics that should appeal to many participants.

Given the multi-sector, multi-disciplinary nature of the conference, we have developed a plenary program that will include two to three sessions each day with topics that address the major opportunities and challenges related to the three key resource sectors. These sessions provide opportunities for all participants to listen to speakers and panel members with international stature, and to participate in the ensuing discussion. Check out the plenary session and speakers on the RFG2018 website (RFG2018.org).

The conference will be held from June 16–21, 2018 in Vancouver in the province of British Columbia, Canada. Vancouver is a magnificent city surrounded by mountains and the Pacific Ocean, Canada’s gateway to Asia and other Pacific nations. The city is renowned for being forward-looking, friendly, cosmopolitan, and entertaining. It is also an appropriate location for RFG2018, since the extraction and responsible management of energy, minerals, and water are integral to the success of British Columbia.

On behalf of the RFG2018 Steering Committee and all our partners, I look forward to welcoming you to Vancouver in June 2018.

J. Thompson

John F.H. Thompson
RFG2018 General Chair
PARTNER ORGANIZATIONS

The International Union of Geological Sciences (IUGS), the Canadian Federation of Earth Sciences (CFES), the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), the Geological Association of Canada (GAC) and the Mineralogical Association of Canada (MAC) are partnering to bring together industry, academia, governments, and civil society for RFG2018.

COMMITTEES

Leaders of CIM, GAC, and MAC—working with staff and supported by volunteers from academia, government, and business—are combining their knowledge, networks, and resources through the Steering Committee, Program Committee, and other sub-committees to develop the scientific program, sponsorship, international relations, local activities, workshops, field trips, marketing, and more. The community of volunteers and contributors growing around RFG2018 includes individuals with diverse expertise, all focused on empowering a new generation to address the availability and management of resources in the future.

STEERING COMMITTEE

GENERAL CHAIR
John Thompson, Cornell University and PetraScience Consultants Inc.

VICE CHAIR
Bill Mercer, Avalon Advanced Materials Inc.

SECRETARY GENERAL
Andrew Stumpf, University of Illinois, Urbana-Champaign

DIRECTORS
Peter Bobrowsky, Natural Resources Canada (NRCan), Former IUGS Secretary General
Stephen Johnston, International Director, CFES / Councilor IUGS
Melody Brown Burkins, Chair, US National Committee for IUGS
Jim Ryan, Geological Survey of Canada (GSC) and CFES
Bill Stiebel, Past President, CFES
Garth Kirkham, President 2015–2016, CIM
Bob Schafer, Past President, CIM and Officer, Prospectors & Developers Association of Canada (PDAC)

CO-CHAIRS
John Thompson
Chair RFG2018, Cornell University and PetraScience Consultants Inc.
Lana Eagle
Aboriginal Relations Whitecap Dakota First Nation

COMMITTEE MEMBERS
Roger Beckie, University of British Columbia
Oliver Bonham, Geoscientists Canada
Peter Bobrowsky, NRCan
Mark Cooper, President, Canadian Society of Petroleum Geologists
Lesley Hymers, Mining Matters
Kendra Johnston, Independence Gold Corporation, Below BC
Jim Ryan, GSC and CFES
Garth Kirkham, Past-President, CIM
Steve Morison, President, GAC
Jim Ryan, NRCan
Rob Stevens, Canadian International Resources and Development Institute
Kirstie Simpson, Program Committee Secretary
Glyn Williams-Jones, Simon Fraser University

SUPPORTING COMMITTEES

PROGRAM COMMITTEE

CO-CHAIRS
John Thompson
Chair RFG2018, Cornell University and PetraScience Consultants Inc.
Lana Eagle
Aboriginal Relations Whitecap Dakota First Nation

COMMITTEE MEMBERS
Roger Beckie, University of British Columbia
Oliver Bonham, Geoscientists Canada
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Garth Kirkham, Past-President, CIM
Steve Morison, President, GAC
Jim Ryan, NRCan
Rob Stevens, Canadian International Resources and Development Institute
Kirstie Simpson, Program Committee Secretary
Glyn Williams-Jones, Simon Fraser University

SUPPORTING COMMITTEES

EDITORIAL & COMMUNICATIONS
CHAIR
Anne Thompson
PetraScience Consultants Inc.

COMMUNITIES & EDUCATION
EDUCATION
Lesley Hymers
Education and Outreach Programs, Mining Matters
Eileen Van Der Fier
Professor Simon Fraser University

INDIGENOUS COMMUNITIES
CHAIR
Lana Eagle
Aboriginal Relations Whitecap Dakota First Nation
VICE CHAIR
Nalaine Morin
Principal, ArrowBlade Consulting Services

STUDENTS & EMERGING LEADERS
Andy Randall, Executive Director, Below BC
Lindsay Steele, Practice Advisor, Association of Professional Engineers and Geoscientists of British Columbia
Kendra Johnston, Manager, Independence Gold Corporation
Courtney Jermyn van der Zee
Executive Director, Earth Science Matters

STAFF
Lise Bujold
CIM Director, Conferences & Exhibitions
Chantal Murphy
CIM Convention Planner and Event Leader
Janice Burke
CIM Technical Program Coordinator
Martin Bell and Walter Willett
CIM Trade Show and Sponsorship Sales Team
Nadia Bakka
CIM Trade Show and Sponsorship Coordinator
Rachel Séguin
CIM Registration Coordinator
Carol Lee
CIM Digital Communications Specialist
Veronique Jones
RFG2018 Special Sessions Coordinator

POTENTIAL SESSIONS

- Future Resources for Future Generations:
  - Exploration
  - Innovative Processing
  - Novel Applications
  - Hydrocarbon Resources
  - New Metal Prospects
  - Bio-Geological Resources

- Geoscience Challenges for Future Generations:
  - Geomorphology
  - Geohazards
  - Geomatics
  - Geoculture

- Geoscience Education for Future Generations:
  - Curriculum Development
  - Faculty Development
  - Student Engagement
  - Mentoring Programs

- Geoscience for Development:
  - Infrastructure
  - Energy
  - Agriculture
  - Water

- Geoscience in the Media:
  - Public Perception
  - Media Engagement
  - Communication Strategies

- Geoscience for Policy:
  - Environmental Protection
  - Economic Development
  - International Cooperation

- Geoscience for Industry:
  - Innovation
  - Sustainability
  - Technological Advancements

- Geoscience for Society:
  - Social Impacts
  - Community Engagement
  - Equity and Access

- Geoscience in Art:
  - Artistic Partnerships
  - Public Displays
  - Educational Programs

- Geoscience in Literature:
  - Fiction
  - Memoirs
  - Poetry

- Geoscience in Film:
  - Documentaries
  - Feature Films
  - Animation

- Geoscience in Games:
  - Educational Games
  - Simulation Tools
  - Interactive Experiences
Human existence and progress is based on a sustainable supply of energy, minerals, and water. In order to provide resources, we must understand the complexity of the earth. Equally important is the need to develop and utilize these resources in better and cleaner ways that minimize impacts. Success will require a consensus on how we work together.

The International Union of Geological Sciences (IUGS), the Canadian Federation of Earth Sciences (CFES), the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), the Geological Association of Canada (GAC), and the Mineralogical Association of Canada (MAC) are partnering to bring together industry, academia, governments, and civil society to tackle these issues.

The Resources for Future Generations conference (RFG2018) takes its theme from a new IUGS initiative of the same name designed to mobilize geoscientists, policy-makers, and other stakeholders to explore resource and related sustainability issues.

**WHAT TO EXPECT**

We aim to provide participants with a program that will explore six vital and inter-related themes that are multi-disciplinary in nature: the Earth, Energy, Minerals, Water, Resources and Society, and Education and Knowledge. Grounded in fundamental earth science, the conference will serve as a forum for participants to discuss their research initiatives and activities, as well as the key issues and trends. These topics are central to the United Nations 2030 Sustainable Development Goals.

This unique collaborative event will provide an unprecedented view of the earth and the availability of resources for human sustainability. Expect big picture thinking, dialogue, technical presentations, and social interaction. Established science, innovation, policy, social benefits, and impact will all be part of RFG2018.

**WHO WILL ATTEND?**

This joint venture is estimated to attract 3,500 scientists, policy-makers, industry representatives, educators, students, and members of civil society.
REGISTRATION
Delegate registration includes full access to the RFG2018 Conference Program, Opening Event, Plenary, Keynote Sessions, Technical Sessions, Trade Show, plus drink tickets for the RFG Opening Reception and Receptions on the Trade Show floor. All prices are in Canadian dollars.

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<td><strong>GAC, MAC, CIM MEMBER REGISTRATION CATEGORIES</strong></td>
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<tr>
<td>GAC, MAC, CIM Member</td>
<td>$695</td>
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<td><strong>EXHIBITOR REGISTRATION CATEGORY</strong></td>
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<tr>
<td>Exhibitor staff (maximum 3)</td>
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<td>Additional exhibitor staff Access to trade show only</td>
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<td><strong>OTHER REGISTRATION CATEGORIES</strong></td>
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<tr>
<td>Guest / Spouse of delegate No access to technical sessions</td>
<td>$75</td>
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<tr>
<td>Visitors Access to trade show only</td>
<td>$35</td>
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TRAVELING TO CANADA

**VISAS**
Most foreign visitors wishing to enter Canada must have a valid passport and obtain a Canadian visa before coming. Visa application should be made at the Canadian consulate in your country.
Visit Citizenship and Immigration Canada: cic.gc.ca.

**INVITATION LETTER**
Your delegate registration must be completed and paid for in full in order for you to receive a confirmation and personalized invitation letter. The confirmation provides you with a link for you to complete the VISA REQUEST directly to Citizenship and Immigration Canada. Please apply early; some countries take a couple of months to process.

HOTEL RESERVATIONS
Conference Direct is the only official housing bureau for RFG2018. Our one-stop room reservation central makes it seamless for you to reserve your room at the group rate. Visit the RFG website (RFG2018.org) to make your reservation under Hotel & Travel.

**IMPORTANT**
The city of Vancouver is experiencing exceptional demand for its rooms in the month of June and we are concerned that RFG2018 participants who reserve late may not be able to get a hotel room at the RFG2018 discounted rates. RFG management secured a limited number of rooms in different hotels at discounted rates. When our negotiated room blocks are no longer available, you may have to reserve rooms at much higher rates, at different properties, and perhaps even outside the city center. Please do not wait!
Welcome to VANCOUVER

USEFUL INFORMATION

CONFERENCE LANGUAGE
The official language of the congress is English and all printed materials will be published in English.

TIME ZONE
Vancouver is on Pacific Daylight Savings Time.

CLIMATE
The average daytime temperature in June is 19°C / 66°F (high), 11°C / 52°F (low). It is a great time to combine business with pleasure and head outside to discover Vancouver.

CURRENCY & CREDIT CARDS
The Canadian currency is the dollar. The dollar can be divided in 100 cents. Coin denominations are 5c, 10c, 25c, $1 and $2. Bank notes are $5, $10, $20, $50 and $100. Foreign currency and traveler's cheques can be converted into Canadian dollars at foreign exchange banks and other authorized money exchangers. Credit cards such as VISA, MasterCard and American Express are accepted in hotels, department stores and restaurants. Some international debit cards are accepted as well.

TRANSPORTATION
The Vancouver International Airport is only 30 minutes from the Vancouver Convention Centre (conference venue) and RFG2018 host hotels. The Canada Line (railway) connects directly from the airport to downtown. Shuttle buses, car rentals, and taxis are also available.

CONFERENCE VENUE
The RFG2018 Conference will be held at the Vancouver Convention Centre, Vancouver, BC, Canada. The Vancouver Convention Centre is located just 30 minutes from the Vancouver International Airport. It is the world’s first LEED® Platinum-certified (leed.usgbc.org/leed.html) convention centre and has excellent facilities as well as a stunning view.

VANCOUVER
CONVENTION CENTRE
WEST BUILDING
1055 Canada Place
Vancouver, BC, Canada, V6C 0C3
DAILY SCHEDULE

SATURDAY, JUNE 16
07:30-09:30 Registration for short course participants Foyer Level 1
08:00-17:00 GAC Outgoing Council Meeting 202
08:00-17:00 Short Courses Level 100 and 200
09:00-14:00 Sightseeing walking tour: North Shore Off-site
10:00-16:00 Communicating Earth Science Workshop Simon Fraser University
13:00-17:00 Registration open for all participants Foyer Level 1

SUNDAY, JUNE 17
06:30-17:00 Educators’ Sea to Sky Geotour Field Trip Off-site
07:30-20:00 Registration Foyer Level 1
07:30-17:00 Media Room 107
07:30-17:00 Presenters’ Preview Room 113
08:30-10:30 Panel and Keynotes: The North and Arctic Ballroom A
08:30-12:00 Technical program (6 themes, 17 parallel rooms) Level 100 and 200
10:00-14:00 Trade Show / Meeting Hub / Poster Session Exhibit Halls
10:00-14:00 Early Career Lounge Exhibit Halls
10:30-13:00 Early Career Speed Mentoring 211
12:00-13:30 Cash Lunch Concessions Exhibit Halls
12:15-13:25 Early Career Program Lunchtime Workshop* 211

MONDAY, JUNE 18
07:00-08:00 Pre-Breakfast Run Off-site
07:30-17:00 Registration Foyer Level 1
07:30-17:00 Media Room 107
07:30-17:00 Presenters’ Preview Room 113
08:30-10:30 RFG2018 Opening Ceremony Ballroom A
10:30-12:00 Technical Sessions (6 themes, 17 parallel rooms) Level 100 and 200
11:00-17:00 Trade Show / Meeting Hub / Poster Session Exhibit Halls
11:00-17:00 Early Career Lounge Exhibit Halls
11:00-17:00 Innovation Stage Presentations Exhibit Halls
11:30-12:00 GAC Presidential Address 302
12:00-13:30 GAC Awards Luncheon 306
12:00-14:00 MAC Annual General Meeting 304
18:30-20:00 RFG Movie Night: Koneline Ballroom A

TUESDAY, JUNE 19
07:00-08:00 Pre-Breakfast Run Off-site
07:30-17:00 Registration Foyer Level 1
07:30-17:00 Media Room 107
07:30-17:00 Presenters’ Preview Room 113
08:30-10:00 Dialogue: The Future of Energy Ballroom A
08:30-12:00 Technical program (6 themes, 17 parallel rooms) Level 100 and 200
10:30-11:15 Keynote Address: Alf Barrios Ballroom A
11:15-12:00 Discussion with Resource Leaders Ballroom A
11:00-17:00 Trade Show / Meeting Hub / Poster Session Exhibit Halls
11:00-17:00 Early Career Lounge Exhibit Halls
11:30-12:00 Young Scientist Medalist Lecture 302
12:15-13:25 Early Career Program Lunchtime Workshop* 211
12:00-13:30 MAC Awards Luncheon 306
12:00-14:00 Peacock Medalist Lecture 302
13:30-15:30 Keynote Session: Energy, Water, and Minerals Ballroom A
13:30-17:00 Technical Sessions (6 themes, 16 parallel rooms) Level 100 and 200
15:30-17:00 Reception at the Trade Show (Meeting Hub) Exhibit Halls
17:15-17:45 MAC Annual General Meeting 304
18:30-20:00 RFG Movie Night: Koneline Ballroom A

WEDNESDAY, JUNE 20
07:00-08:00 Pre-Breakfast Run Off-site
07:30-17:00 Registration Foyer Level 1
07:30-17:00 Media Room 107
07:30-17:00 Presenters’ Preview Room 113
08:30-10:30 Panel and Keynotes: The North and Arctic Ballroom A
08:30-12:00 Technical program (6 themes, 17 parallel rooms) Level 100 and 200
10:00-14:00 Trade Show / Meeting Hub / Poster Session Exhibit Halls
10:00-14:00 Early Career Lounge Exhibit Halls
10:30-13:00 Early Career Speed Mentoring 211
12:00-13:30 Cash Lunch Concessions Exhibit Halls
CONFERENCE OPENING & PLENARY

Monday, June 17 | Ballroom A

8:30-10:30 | OPENING CEREMONY

Traditional Indigenous welcome to the Traditional Territory; Introductory comments from Federal, Provincial, and Indigenous leaders, and opening remarks from the General Chair and other officials will set the tone for a rich and dynamic week of knowledge exchange and learning.

The conference will feature a range of innovative and provocative special sessions and events including panels, debates, thematic keynotes, public lectures, and events for Early Career professionals. These sessions are specially designed to engage participants, provoke new ideas and conversations, and further our understanding of the nexus between minerals, energy, water, and how human society can sustain itself on Earth well into the future. The aim is to connect big thinkers with practical matters and real-world situations. Roundtable events during the conference will provide further opportunities for interaction on a range of topics.

10:30-12:00 | RESOURCES OPPORTUNITIES AND CONSTRAINTS 

PLENARY

Sources and constraints: an overview of resource opportunities and challenges, including available sources, environmental and human constraints, challenges, and imperatives.

MODERATOR

Allyson K. Anderson Book
Executive Director of the American Geosciences Institute, an organization which serves the needs of the U.S. geosciences community, while also connecting society to the geosciences globally.

PANELISTS

- **Ross Beaty**
  Founder and Chairman of Pan American Silver Corporation and Alterra Power Corporation, a mid-sized renewable energy company. Mr. Beaty is also a well-known environmental philanthropist, primarily through the Sitka Foundation.

- **Tzeporah Berman**
  Strategic advisor for dozens of environmental organizations, First Nations and philanthropists on clean energy, oil sands and pipelines. She is the author of *This Crazy Time: Living Our Environmental Challenge*.

- **Richard Chuchla**
  Director of the Energy and Earth Sciences (EER) graduate program and Leslie Bowling Professor in Geological Sciences, University of Texas-Austin.

- **Gavin Mudd**
  Associate Professor of Environmental Engineering at RMIT University in Melbourne, Australia. Gavin is a renowned global expert on the environmental impacts and sustainability of mining.
THEMATIC KEYNOTE SESSIONS
The four-day technical program will feature themed keynote sessions on all days in Ballroom A of the Vancouver Convention Centre.

MONDAY, JUNE 18
13:30-15:30 | THE EARTH THROUGH TIME
Some of the major tectonic, magmatic, geochemical and biological changes that have occurred on Earth over time and their implications for resources needed to sustain humans.

KEYNOTE SPEAKERS
- Richard Ernst
  Scientist in Residence at Carleton University, Ottawa, Canada and Guest Professor, Tomsk State University, Siberia, Russia.
- Michel Jébrak
  UQAM-UDAM Chair in Mining Entrepreneurship, Université du Québec à Montréal.
- Christopher Reinhard
  Assistant Professor of Biogeochemistry, School of Earth and Atmospheric Sciences at Georgia Institute of Technology.
- Dominique Weis
  Canada Research Chair (Tier I) in the Geochemistry of the Earth’s Mantle, University of British Columbia.

TUESDAY, JUNE 19
8:30-10:00 | THE FUTURE OF ENERGY
How will we continue to increase our supply of energy to meet human needs while minimizing the impact on the environment? Energy supply is changing, but how fast will it happen?

MODERATOR
- Edie Thome
  President & CEO, AME

PANELISTS
- Merran Smith
  Founder and Executive Director of Clean Energy Canada.
- Scott Tinker
  Director of the Bureau of Economic Geology and the State Geologist of Texas; Past President of the American Association of Petroleum Geologists and the Association of American State Geologists.

TUESDAY, JUNE 19
10:30-11:15 | KEYNOTE ADDRESS: ALF BARRIOS

LEADERS
- Alf Barrios
  CEO Rio Tinto Aluminum

11:15-12:00 | DISCUSSION WITH RESOURCE LEADERS

LEADERS
- Rod Bull
  Vice President and General Manager, North America Mining Division Komatsu

More leaders to be confirmed

13:30-15:30 | ENERGY, WATER AND MINERALS
Energy supply and use – relationship to water and mineral extraction.

KEYNOTE SPEAKERS
- Kevin Book
  Head of the research team, Clear/View Energy Partners, LLC, an independent research firm headquartered in Washington D.C.
- Mark Poweska
  Executive Vice-President, BC Hydro’s Operations business group.
- Jasmin Raymond
  Research Chair, Institut National de la Recherche Scientifique (INRS), Québec City
WEDNESDAY, JUNE 20

8:30-10:30 | THE NORTH AND ARCTIC

An introduction from northern political and Indigenous leaders followed by overviews of the critical geoscientific data, and the relationship to Indigenous communities and resource development.

Daniel Lebel
Director General, Geological Survey of Canada

Holly Steenkamp
Regional Mapping Geoscientist, Canada-Nunavut Geoscience Office, Iqaluit, Nunavut.

Territorial and Indigenous Leaders
A representative will be confirmed shortly.

13:30-15:00 | WHO OWNS RESOURCES AND WHO BENEFITS

Who owns resources and who ultimately benefits from resources? Should this change and how will change happen?

MODERATOR

Jessica Bratty
Principal, Confluence Solutions. Facilitator, mediator and strategic engagement practitioner in complex planning and decision making processes.

PANELISTS

Cynthia Callison
Cynthia is the Chair of the First Peoples Cultural Council and an advisory council member of (CIRDI) Canadian International Resources and Development Institute.

Tony Hodge
Senior Scholar in Residence at the Robert M. Buchan Department of Mining Engineering, Queen’s University, Kingston, Ontario and past President, International Council on Mining and Metals.

Ian Gill
Principal of Cause + Effect

WEDNESDAY, JUNE 20

15:30-17:00 | WATER CONSTRAINTS

What controls and limits the supply of water globally and locally? How do we evaluate the availability and sources of water and how does that impact mining and Indigenous communities?

KEYNOTE SPEAKERS

Paul Bauman
Principal, Paul Bauman Geophysics and Technical Director of the Near Surface Geophysics group of Advisian WorleyParsons.

Jay Famiglietti
Senior Water Scientist at the United States National Aeronautics and Space Administration (NASA) Jet Propulsion Laboratory, California Institute of Technology.

Jason Gurdak
Associate Professor in the Department of Earth & Climate Sciences and Associated Faculty in Environmental Studies, San Francisco State University.

Nalaine Morin
Principal at ArrowBlade Consulting Services, providing services in technical review, regulatory support, negotiations, community consultation, and environmental resource management.

PANELISTS

Jessica Bratty
Principal, Confluence Solutions. Facilitator, mediator and strategic engagement practitioner in complex planning and decision making processes.

Ian Gill
Principal of Cause + Effect

Cynthia Callison
Cynthia is the Chair of the First Peoples Cultural Council and an advisory council member of (CIRDI) Canadian International Resources and Development Institute.

Tony Hodge
Senior Scholar in Residence at the Robert M. Buchan Department of Mining Engineering, Queen’s University, Kingston, Ontario and past President, International Council on Mining and Metals.

WEDNESDAY, JUNE 20

8:30-11:00 | NEW RESOURCE FRONTIERS

Where will we find and extract resources in the future - on the sea floor deposits, at depth, in new environments that host critical elements, in remote parts of Africa, or through recycling? What are the boundaries for the future?

KEYNOTE SPEAKERS

Richard Blewett
General Manager of the Minerals Systems Branch, Geoscience Australia.

Kathryn Goodenough
Principal Geologist, British Geological Survey (BGS) and Deputy Director, BGS Global.

Jennifer Graham
Technical Advisor and Project Manager to artisanal mining projects in the Democratic Republic of Congo and the Central African Republic, TetraTech ARD.

Christian Hagelüken
Director of European Union Government Affairs, Umicore.

Sven Petersen
Research Scientist, GEOMAR, Helmholtz Centre for Ocean Research, Kiel, Germany.

13:30-15:00 | WHO OWNS RESOURCES AND WHO BENEFITS

Who owns resources and who ultimately benefits from resources? Should this change and how will change happen?

MODERATOR

Jessica Bratty
Principal, Confluence Solutions. Facilitator, mediator and strategic engagement practitioner in complex planning and decision making processes.

PANELISTS

Cynthia Callison
Cynthia is the Chair of the First Peoples Cultural Council and an advisory council member of (CIRDI) Canadian International Resources and Development Institute.

Tony Hodge
Senior Scholar in Residence at the Robert M. Buchan Department of Mining Engineering, Queen’s University, Kingston, Ontario and past President, International Council on Mining and Metals.

Ian Gill
Principal of Cause + Effect

THURSDAY, JUNE 21

8:30-11:00 | NEW RESOURCE FRONTIERS

Where will we find and extract resources in the future - on the sea floor deposits, at depth, in new environments that host critical elements, in remote parts of Africa, or through recycling? What are the boundaries for the future?

KEYNOTE SPEAKERS

Richard Blewett
General Manager of the Minerals Systems Branch, Geoscience Australia.

Kathryn Goodenough
Principal Geologist, British Geological Survey (BGS) and Deputy Director, BGS Global.

Jennifer Graham
Technical Advisor and Project Manager to artisanal mining projects in the Democratic Republic of Congo and the Central African Republic, TetraTech ARD.

Christian Hagelüken
Director of European Union Government Affairs, Umicore.

Sven Petersen
Research Scientist, GEOMAR, Helmholtz Centre for Ocean Research, Kiel, Germany.
THURSDAY, JUNE 21

13:30-15:30 | INNOVATION FORUM

What is the role of innovation, from social to impact investing, to new business models, technology and carbon capture? How do we evaluate and communicate data, ideas, and resource development?

PANELISTS

Greg Dipple
Professor in the Department of Earth, Ocean and Atmospheric Sciences and Director of the Bradshaw Research Initiative for Minerals and Mining at the University of British Columbia.

Erin Johnston/Caroline Rossignol
Biography and photo to come

Matthew Lato
Senior Engineer at BGC and Adjunct Professor in the Department of Geological Sciences and Geological Engineering, Queen’s University.

Susan Morrice
Founder of Belize Natural Energy LTD and International Natural Energy LLC.

Adam Pidlisecky
Chief Research Officer, Seequent

Joy Romero
Vice President, Technology & Innovation, Canadian Natural Resources Limited.

Laurel Sabur
Impact Investing Consultant and Faculty Member, Corporate Social Responsibility (CSR) Training Institute.

THURSDAY, JUNE 21

15:30-17:00 | FUTURE RESOURCES – CHANGING WORLD

Can we find and deliver resources; can we meet the needs of a rapidly developing and technological world; can we do this better to assist Indigenous people and developing countries; can it be done in an environmentally responsible manner?

MODERATOR

Stephen D’Esposito
Stephen D’Esposito is the President and CEO of RESOLVE.

PANELISTS

Robert Armstrong
Director, MIT Energy Initiative – an Institute-wide initiative at the Massachusetts Institute of Technology.

Tamlyn Botel
Technical Lead of the Territorial Stewardship Department, Citxw Nlaka’pamux Assembly (CNA).

Megan Leslie
Head of World Wildlife Fund Canada, previously Member of Parliament representing Halifax, Nova Scotia.

John Ludden
Executive Director, British Geological Survey.

LUNCH SPEAKERS

Thursday, June 21 | Room 109

12:15-13:15 | MINERAL SUPPLY

Two lectures examining the availability and supply of different minerals and critical importance to the modern world.

Thomas Graedel
Professor of Industrial Ecology Emeritus, School of Forestry and Environmental Studies, Yale University. His research is centered on developing and enhancing industrial ecology, the organizing framework for the quantification and transformation of the material resource aspects of the Anthropocene.

Simon Jowitt
Assistant Professor in Economic Geology, University of Las Vegas. He has extensive expertise in mineral economics and the “economic” side of economic geology, and has several recent publications on global Cu, Ni, Co, Pb-Zn, rare earth element, and indium resources.
THEMED TECHNICAL PROGRAM

The four-day technical program has 1,500+ authors already committed to the conference. Join these diverse and talented participants focusing on the integrative aspect of natural resources and sustainability. With 50% of the presenters from Canada and the other 50% from all other regions of the world, the global vision emanating from RFG2018 will serve generations to come.

Listed below are confirmed sessions to date by conference theme.

THE EARTH

How has Earth changed over 4.5 billion years, and why do we have resources – energy, minerals and water? Earth’s defining systems are complex, including interactions of the atmosphere, oceans, active plate tectonics, and abundant life.

THEME LEADERS:   Stephen Morison, President, GAC
                 Deanne van Rooyen, Cape Breton University

EA1:   Convergent Margin Geohazards and Geodisasters:
       Present Understanding, Mitigation, and Long and Short Term Preparedness
EA3:   Geo-engineering and Earth Sciences: Integration Opportunities
EA4:   Contaminants in the Natural Environment
EA6:   Archean Evolution and Ore Deposit Models:
       Is Plate Tectonics the Key to the Past. A Session to Honour the Career of John Percival
EA7:   Proterozoic Crustal Evolution and Metallurgy
EA8:   Resources in Paleozoic Orogenic Belts and Associated Sedimentary Basins:
       Challenges and Opportunities for Multidisciplinary Tectonics
EA9:   From Continental Shelf to Slope – Mapping the Oceanic Realm
EA10:  Global Plate Models: The State of the Art and Future Developments
EA11:  Supercontinent Cyclicity with a Focus on Contributions from Circum-Pacific Regions
EA14:  Geomicrobiology - Driving Force in Earth History
EA17:  Integrated Geosciences for Regional Geology: Geophysics, Remote Sensing and Field Mapping
EA18:  Geophysical Constraints on Lithospheric Structures and Processes
EA19:  Geophysical Exploration Methods
EA22:  Geochronology and Mineralogy of Crusts and Their Ores using Emerging Techniques
EA24:  Quaternary Paleoenvironments
EA25:  Advances in Surficial, Environmental, and Geomorphic Hazard Characterization in the Anthropocene: Changing Climates, Changing Threats
EA27:  Proterozoic Sedimentary Basins: The Bigger Picture of a Formative Eon
EA30:  Tectonics and Metallurgy of Cordilleran-Type Orogens:
       A Celebration of the Career of JoAnne Nelson
EA32:  From EarthScope to the Canadian Cordillera Array: Integrated Earth Systems Observatories
EA33:  Fault and Shear Zone Processes Across Space and Time
EA37:  Minerals as Archives of P-T-X and Time
EA38:  Current Concepts in Igneous and Metamorphic Petrology and Related Processes
EA39:  In Memory of Kurt Kyser: Snapshots of Studies to Emphasize the Application of Isotope Geochemistry and Mineralogy to Earth Processes

EDUCATION AND KNOWLEDGE

Education and knowledge has shaped us and our society as we know it. Teachers will continue to form future generations by transmitting their knowledge, values, and passions, and by guiding students toward their future careers.

THEME LEADER:   Lesley Hymers, Mining Matters

EK1:   Public Engagement in and Perception of Earth Science
EK2:   Speaking With One Voice – Geoscience Messaging in a Fragmented Community
EK3:   Geoheritage as a Societal Resource for Education, Environment, Culture, and Tourism
EK5:   Paleontological Collecting and Collections: Is There a Future for Fossils?
EK6:   The Changing World of Work
EK8:   Indigenous Knowledge and Perspectives in Education and Career Development
EK9:   Open Education
EK10:  New Horizons in Earth Science Education Research
EK11:  Expanding the Traditional Classroom:
       Innovative Tools for Transporting Students into the Field and Through Time
EK12:  Ideas for Enhanced Earth Science Learning
EK13:  STEM Education
EK14:  Attracting and Developing Earth Science Educators
EK15:  Mentorship and Transferring Knowledge to the Next Generation of Geoscientists and Geoscience Educators
EK17:  Bridging the Gap: Skills Training for Geoscience Graduates
EK18:  Transferring Geo-Knowledge to the Future and Beyond:
       Connecting Seasoned Experts with Early Career Generations
EK19:  Navigating Your Early Career Path - Promises and Pitfalls

ENERGY

Availability of energy has supported the development of the human race. Increasing population and basic human needs will require vast increases in energy supply.

THEME LEADER:   Mark Cooper, Canadian Society of Petroleum Geologists

EN2:   Energy Futures
EN3:   Energy and Technology
EN4:   Global Shale: Resources, Economics, and Environmental Challenges
EN5:   Marine Geosciences and Energy Resources for Future Generations
EN8:   The Role of Geoenergy Test Beds in Developing Future Energy Systems
EN10:  Geothermal Solutions for Northern Regions, Mines, and Other Remote Areas
EN11:  Geothermal Energy in the 21st Century
EN12:  New Innovations in Geothermal Exploration
EN14:  Unconformity-Related Uranium Deposits, with a Focus on the Southwest Athabasca Basin (Canada)
Minerals service every aspect of modern life. Although influenced by cycles and variability, human needs, energy demands, and new technology will maintain demand for many commodities.

**THEME LEADERS:** Liz Stock, MDD
David Lentz, SGA/CIM/IAGOD/SEG

**MIN1:** Mineralization and Hydrocarbons in Black Shale Environments
**MIN2:** Exploring Controls on Ore Deposit Formation in Volcanic and Sedimentary Environments and Evaluating the VMS-SEDEX-MVT Continuum
**MIN3:** Ore Deposit Models
**MIN4:** Multiparameter Integrated Footprints of Mineral Systems
**MIN6:** New Developments in Canadian Diamond Exploration – Finding the Next Generation of Diamond Deposits
**MIN7:** Magmatic Arc Fertility and theGenesis of Porphyry Cu-Mo-Au Deposits
**MIN8:** Bridging the Discovery Gap – Providing the Exploration Industry More Effective Area Selection Tools
**MIN9:** 20 Years of Porphyry Progress: A Cordilleran Perspective
**MIN11:** Multi-Commodity, Multi-Scale Exploration Targeting Using the Large Igneous Province Record
**MIN12:** Natural Resources at Terrestrial Impact Structures
**MIN15:** Iron Oxide Copper-Gold (±P, REE, U) and Related Deposits: The Debate Continues
**MIN17:** Reassessing Gold Deposit Models for the 21st Century
**MIN19:** Gold Deposits in Organic Belts
**MIN20:** Sediment-Hosted Base Metal Systems: Exploring the Nature, Formation, and Role of Sedimentary Processes and Implications for Detection
**MIN22:** Secondary Processes on Utes: From Sugergene Enrichment to Element Dispersion
**MIN24:** Stable and Radiogenic Isotope Systems: Applications in Exploration and the Environment (AAG: 28th IAGS)
**MIN25:** Exploration Case Studies – Out of the Box Concepts, Methodologies and Practices (AAG: 28th IAGS)
**MIN26:** Towards Big Data: Applications of Data Analytics in Geochemistry (AAG: 28th IAGS)
**MIN27:** Footprints of Giant Orebodies – Mineralogical, Spectral, and Geochemical Vectors to Discovery (AAG: 28th IAGS)
**MIN28:** Micro- to Macro-Biogeochemistry: Exploration, Processing, Remediation, and the Environment (AAG: 28th IAGS)
**MIN29:** Exploration Undercover - Techniques, Technology, and Strategy (AAG: 28th IAGS)
**MIN30:** Mineral Exploration in Extreme Environments (AAG: 28th IAGS)
**MIN33:** Mining for Clean Energy – the Role of Minerals and Metals in the Clean Energy Transition
**MIN35:** How Methodology Determines What is Critical
**MIN37:** Energy and Technology Metals: Rare Earth Elements, Lithium, and Related Advanced Materials – from Deposit Formation to Mining and Processing
**MIN38:** Recent Advances in the Study of Platinum Group Elements and Related Ultramafic Rocks
**MIN39:** Geoenvironmental Characteristics of Critical Metal Deposits
**MIN41:** Ensuring the Supply of Critical Materials to Meet the UN 2030 Sustainable Development Goals
**MIN42:** Classification of Anthropogene Resources
**MIN43:** Exploration under Deep Cover
**MIN44:** Asteroids as Sources of Economic Resources
**MIN45:** Marine Mineral Resources – Prospects and Challenges

**MIN46:** Quantitative Assessment and Prediction of Deeply Buried Mineral Resources in Covered Regions
**MIN47:** Hydrocarbons in the Exploration for Metalliferous and Non-Metalliferous Deposits (AAG: 28th IAGS)
**MIN50:** Mineral Prospectivity Modelling and Assessment of Undiscovered Mineral Resources
**MIN51:** Ore Fertility Indicators: Fingerprinting Magmatic Processes to Evaluate Resource Formation
**MIN53:** Quantitative Mineralogy: Application in Mineral Exploration
**MIN54:** Applied Mineralogy in the Mining Industry – Integration, Applications, and Future Development
**MIN55:** Analytical Technology in the Search for Minerals: Space to the Lab to the Field (AAG: 28th IAGS)
**MIN58:** Geometallurgy
**MIN62:** Innovations in Tailings Management and Utilization
**MIN64:** Mine Wastes and the Environment: Contamination, Management, and Reclamation
**MIN65:** Industrial Minerals for a Prosperous Future for All
**MIN66:** Isotope Geochemistry in a Mineral Systems Framework: Analytical and Application Advances

**RESOURCES AND SOCIETY**

Our challenge is to bring exploration and mining into the 21st Century—moving from responsible to sustainable. We will discuss the roles of industry, governments, and civil society, and the development opportunities for indigenous peoples as we strive to provide benefits for all. The ultimate goal is to develop resources and deliver products for Future Generations with environmental and social responsibility.

**THEME LEADERS:**
Oliver Bonham, Geoscientists Canada
Rob Stevens, Canadian International Resources and Development Institute
Stephen Morison, Geological Survey of Canada
Philip Hill, Geological Survey of Canada

**RS3:** Public Reporting on Natural Resources – A Key Geoscience Contribution to Future Generations
**RS6:** Social Geology Applied to Mineral Resources
**RS8:** Geothics and Responsible Conduct of Scientists (IAPG)
**RS9:** Geothics in GeoRisks Management for a Safer and More Resilient Society (IAPG)
**RS10:** Geothics in Geoscience Education, Communication and Citizen Science: Experiences, Approaches, and Concepts (IAPG)
**RS12:** Forensic Geology: Ethics, Communication, Regulation, and Opportunities (IAPG)
**RS13:** Geothics and Environmental and Social Responsibility: Doing the Right Thing to Develop Resources for Future Generations (IAPG)
**RS16:** The Role of Indigenous Perspectives / Traditional Ecological Knowledge in Natural Resources Projects: Exploration to Reclamation
**RS17:** Geoscience Information Technology for the Next Generation
**RS18:** Preserving Geoscience Data for Decision Making Tomorrow
**RS22:** The Changing Role of Geological Surveys
**RS24:** Global-Scale Geochemical Mapping: A Critical Component for Resourcing Future Generations
**RS26:** Future Role of Geological Mapping and Three-Dimensional Geological Modelling for Sustainable Resource Development
**RS27:** International Cooperation (in the Context of Geosciences’ Practice)
**RS29:** International Mechanisms for Addressing Mineral Supply for Global Environmental Change
**RS30:** Classification, Management, and Sustainable Development of the Global Resource Endowment – Unification and Standardization of Terminology and Practice
**RS31:** Resources and Sustainability: Dialogue, Design, and Developing Differently
PANEL DISCUSSION SESSIONS

A series of interactive panel discussions will be run during the technical sessions, discussing a variety of critical issues. Several are linked to technical sessions, but others are standalone events. The currently planned discussion sessions are listed below by theme and subtheme.

THE EARTH

SUBTHEME | EARTH SYSTEMS

**TITLE:** Mariscope – NCE Town Hall Meeting: Mobilization of Canada’s marine geoscience community for the development of a Network of Centres of Excellence focused on studies of the Canadian ocean floor.
**TIME REQUIRED:** 120 min
**PROPOSITIONS:** Michael Bostock, Mladen Nedimovic and John Jamieson

**SUBTHEME | STRUCTURE/TECTONICS**

**TITLE:** The Canadian Cordillera Array (CCArray), an Integrated Earth Systems Observatory
**TIME REQUIRED:** 90 min
**PROPOSITIONS:** Dave Eaton, University of Calgary and Jeff Freymueller, University of Alaska Fairbanks

EDUCATION AND KNOWLEDGE

**SUBTHEME | CAREER**

**TITLE:** Diversity in Earth Science and Resource Careers
**TIME REQUIRED:** Two 90-min sessions
**PROPOSITIONS:** Mona Forster, Libby Sharman and Kylie Williams

**TITLE:** The NSERC Discovery Grant Program
**TIME REQUIRED:** 120 min
**PROPOSITION:** Tiffany Lancaster, Program Officer, Research Grants, Natural Sciences and Engineering Research Council of Canada

**TITLE:** Professional Reliance – Navigating the Professional Aspect of your Career in Science
**TIME REQUIRED:** 60–90 min.
**PROPOSITIONS:** Lindsay Steele, P.Geo., Associate Director, Professional Practice, Engineers and Geoscientists BC. 3 others TBD

SUBTHEME | FUTURE

**TITLE:** The Changing World of Work
**TIME REQUIRED:** Two serial 90 min sessions
**PROPOSITION:** Jennifer Wright, MiHR
EVENING PUBLIC LECTURES

17:30-19:00 | Monday, June 18 and Wednesday, June 20 | Room 109

MONDAY | EARTH: THE POWER OF THE PLANET

IAIN STEWART, Professor of Geoscience Communication and the Director of the Sustainable Earth Institute at Plymouth University.

Iain is a geologist who spends much of his time writing and talking about our planet—how it works, its volatile history, and what all that means for those living on it. As an academic earth scientist, Iain specializes in recent geological change. As a talented communicator, he has presented major BBC film series on the nature, history, and state of the planet. Stewart was appointed Member of the Order of the British Empire in 2013 and awarded the European Federation of Geologists Medal of Merit 2016 for his outstanding contribution in elevating the profile of geology around the world.

WEDNESDAY | WATER: CAN WE END THE GLOBAL WATER CRISIS?

JAY FAMIGLIETTI, Senior Water Scientist at NASA’s Jet Propulsion Laboratory at the California Institute of Technology and incoming Canada 150 Research Chair, University of Saskatchewan

Famiglietti is a hydrologist who uses satellites and develops advanced computer models to track how freshwater availability is changing globally. He has published nearly 150 peer-reviewed research papers, as well as numerous reports. His team’s pioneering work on remote sensing of groundwater depletion has influenced water management decisions from California to India. A fellow of the American Geophysical Union and of the Geological Society of America, he is a frequent speaker and an avid writer, and he is committed to science communication. Famiglietti is a regular advisor to the U.S. Congress and the California Governor’s Office on water availability and water security issues. He has testified before the U.S. Congress, and has participated in numerous White House, U.S. State Department, Congressional, Pentagon, and California State Legislature briefings.

MINERALS

SUBTHEME | CRITICAL MINERALS

TITLE: What are the priority actions now in order to provide secure and responsibly sourced energy and technology metals for future generations?
TIME REQUIRED: 60 min.
PROPOONENT: Kathryn Goodenough, Principal Geologist, British Geological Survey

TITLE: International Round Table on Materials Criticality
TIME REQUIRED: Two 90 min sessions
PROPOENTES: Alessandra Hool and Roland Gauss

RESOURCES AND SOCIETY

SUBTHEME | GLOBAL CHANGE AND SUSTAINABILITY

TITLE: The Impact of Climate Change on Financing for Mining and Oil Companies
TIME REQUIRED: 90 min.
PROPOENTES: Prof. Margaret Armstrong, Mr. Normand Champigny and Dr. Lavinia Hollanda

TITLE: International Mechanisms for Addressing Mineral Supply for Global Environmental Change
TIME REQUIRED: 90 min.
PROPOENTES: Edmund Nickless, Saleem Ali, Rene Kleijn, Benjamin McClennan and Oliver Bonham

SUBTHEME | SOCIAL AND ETHICAL VALUES

TITLE: Public Reporting on Natural Resources: The Petroleum Experience
TIME REQUIRED: 130 min. Following a brief introduction each of the five panelists will have 15 minutes to present their views. This would be followed by a 30-minute panel discussion.
PROPOENTES: Jim Gouveia and Hendrik Falck

SUBTHEME | ROLE OF GEOLOGICAL SURVEYS

TITLE: Looking Back and Forward: The Role of Big Data and Intelligent Technologies in the Geosciences
TIME REQUIRED: 90 min.
PROPOENT: Philip Hill, NRCan
PARTNERS’ LECTURES & ADDRESSES

MONDAY, JUNE 18 | ROOM 302
11:30-12:00  GAC Presidential Address, Stephen Morison, GAC President 2017-2018.
13:30-14:00  GAC Logan Medalist Address, Barbara Sherwood Lollar, University of Toronto.

TUESDAY, JUNE 19 | ROOM 302
11:30-12:00  Young Scientist Medalist Lecture, Matthew Steele-MacInnis, Assistant Professor, University of Alberta.
13:30-14:00  Peacock Medalist Lecture by Stearns A. Morse, Prof. Emeritus, University of Massachusetts.

THE GATHERING PLACE

TUESDAY, JUNE 19 | TRADE SHOW FLOOR STAGE, EXHIBIT HALL
The Gathering Place at RFG2018 will focus on examples of benefits and opportunities in the mineral exploration, development, and mining industry with a Canadian perspective. Join us to hear directly from Indigenous and non-Indigenous leaders on mutual benefits of working together in this critical industry.

Discussion on the following topics:
• Advancing Economic Development: Building Communities Through Mineral Exploration and Development Working Together to Achieve Social License
• Defining Sustainability in the Natural Resource Industry
• Traditional Knowledge and Western Science: A Powerful Combination
• Benefits of Utilizing Local Workforces and Supplies

INNOVATION STAGE PRESENTATIONS

MONDAY, JUNE 18 | TRADE SHOW FLOOR STAGE, EXHIBIT HALL
Sponsors and exhibitors will be invited to make short presentations of innovative products, technology and business solutions. The schedule of presentations will be posted at the entrance of the area as well as online.

POSTER SESSION

TRADE SHOW FLOOR, EXHIBIT HALL
More than 200 posters will be presented on the Trade Show floor from Sunday night to Wednesday. Meet the authors and discuss the latest technologies and projects under each Technical Program Theme.

POSTER HOURS:
Sunday, June 17  17:00 to 20:00  Monday, June 18  11:00 to 17:00
Tuesday, June 19  11:00 to 17:00  Wednesday, June 20  10:00 to 14:00
PRE-CONFERENCE ONE-DAY SHORT COURSES

SATURDAY, JUNE 16

Communicating Earth Science: Interactive Professional Development for Everyone

As the role of earth science in society grows, so too does the need for effective science communication. Unleash your inner science communicator and join our interactive short course to explore why we communicate science, who are our audiences, how to refine your earth science message, and pick up some tips communicating through different formats.

LOCATION: Simon Fraser University, Vancouver Campus (Harbour Centre), 515 West Hastings Street, Vancouver
TIME: 10:00-16:00
PRICE: $50. Includes luncheon.

SUNDAY, JUNE 17

The Use of Geochemical Data for Forensic Intelligence and Provenancing

The short course is aimed at senior students and geological professionals alike and aims to create awareness for the potential of geology and geochemistry in providing forensic intelligence in criminal cases, law enforcement, resource management, food authentication, endangered animals, and associated topics. The morning sessions will provide an introduction to the essential topics and the afternoon session will provide a hands-on experience using a mock crime scenario that will be solved by the participants using the open source R statistical software and dedicated scripts provided by the presenters.

SHORT COURSE ORGANIZER: National Centre for Forensic Studies, University of Canberra, Australia.
FACILITATOR(S)/INSTRUCTOR(S): Dr. Jurian Hoogewerff (Short Course Coordinator), Associate Professor Forensic Geochemistry, National Centre for Forensic Studies, University of Canberra; Dr. Patrice de Caritat, Senior Scientist, Geoscience Australia and Australian Federal Police, Canberra; Dr. Jennifer McKinley, Reader Geostatistics, School of Natural and Built Environment, Queens University, Belfast.
PRICE: $250. Includes course notes and coffee breaks (no lunch).
Drones, Digital Imaging, and their Geological Applications

This course takes advantage of digital imaging techniques to capture geological features and generate photo-realistic, texture-rendered models that can be output as 3D PDFs and high-resolution orthomages. The morning session will focus on methods and applications of capturing large- to small-scale geological features using drones and terrestrial photographic methods. The afternoon session will involve an interactive session where participants will capture objects with their camera (DSLR, point-and-shoot or mobile phone) and then produce their own 3D models and orthomosaic images in the classroom. This course will highlight the rapid and cost-effective nature of acquiring spatially referenced models, as well as their application in geosciences, including exploration, teaching, and academic studies.

**SHORT COURSE ORGANIZER:** TMVC and AusGeol.org

**FACILITATOR(S)/INSTRUCTOR(S):** Dr. Evan Orovan, Research Fellow, Centre for Ore Deposit and Exploration Science (CODES), University of Tasmania; Dr. Stephanie Sykora, global generative exploration and research geologist, First Quantum Minerals Ltd.; Erin Lawlis, PhD student, CODES.

**PRICE:** $350 for professionals. $380 for students. Includes coffee breaks and luncheon.

Mineral Chemistry: Applications to Mineral Exploration

Mineral chemistry methods have long been routinely and successfully employed in diamond exploration, and over the past decade have also been increasingly used in base and precious metal exploration. Some of these methods promise great potential to improve assessment of metallogenic fertility and vectoring to mineralization, and will undoubtedly see much wider application in exploration programs in the years to come.

**SHORT COURSE ORGANIZER:** Association of Applied Geochemists

**FACILITATOR(S)/INSTRUCTOR(S):** Dr. Christian Ihlenfeld, Anglo American for Greenfield Mineral Exploration; John Dilles (porphyry zircons); David Cooke (green rock and lithocaps, epidote, chlorite); George Beaudoin (magnetite chemistry); and R. Preston (diamond exploration).

**PRICE:** $350 for professionals. $175 for students. Includes course notes, coffee breaks and luncheon.

Mining 101: An Introduction to Mining and Mineral Processing

An introduction to the activities of a mining company: geology, exploration, open pit and underground mining, and mineral processing. Demonstration of the basic activities with many illustrations and videos, complemented by stories and anecdotes drawn from the speaker’s experience.

**SHORT COURSE ORGANIZER:** Geology & Mining Evaluation Consulting

**FACILITATOR/INSTRUCTOR:** George McIsaac, P.Eng., PhD, Mining Engineer, Mineral Economist, Consulting.

**PRICE:** $250. Includes course notes, coffee breaks and luncheon.

Introduction to Geothermal Heat Pump System Design

The design and installation of geothermal systems involve various expertise related to both the building and the subsurface. Geo-engineers and scientists are needed to characterize the subsurface and plan the installation of the boreholes that host the ground heat exchangers. The tasks to perform include the drilling of an exploration borehole, measurement of the subsurface thermal properties, making recommendations for the choice of material to fill the boreholes, and calculation of required ground heat exchanger length to fulfill the building energy needs. Basic knowledge to perform these tasks and understand the design of geothermal systems will be introduced to the participants during this course. Interactive exercises will help the participants develop the skills necessary to conduct geothermal projects.

**SHORT COURSE ORGANIZER:** INRS Université de Recherche

**FACILITATOR/INSTRUCTOR:** Professor Jasmin Raymond, Hydrogeologist and Teacher, Institut National de la Recherche Scientifique in Québec City.

**PRICE:** $350. Includes course notes (USB key), coffee breaks and lunch.

Exploration Geochemistry: From Fundamentals to the Field

Geochemistry remains one of the fundamental tools used in mineral exploration, along with geology and geophysics; however, underlying fundamentals that govern the behavior of chemical elements in the environment are often poorly understood by geologists, leading to inappropriate application. Modern analytical techniques often provide a wealth of trace element information for 50-plus elements at the sub-ppm level; however, few organizations maximize the value of this information in the context of target selection, prioritization, and geochemo-geological mapping.

**SHORT COURSE ORGANIZER:** Association of Applied Geochemists

**FACILITATOR/INSTRUCTOR:** Dr. Peter Winterburn, Exploration Geochemist, Mineral Deposit Research Unit.

**PRICE:** $350 for professionals. $175 for students. Includes course notes, coffee breaks and lunch.

Your Career and Public Reporting - A QP Short Course for Students

Geoscientists Canada last year developed a one day short course specifically for students to improve basic awareness at the university level about resources reporting and the role of the QP. The course covers all resources reporting mining, energy and also speak to water resources and environmental reporting. It is designed to be of benefit to all students regardless of their subsequent career direction.

The course consists of 4 quarter-day modules each with an accompanying breakout group exercise involving discussion and plenary exchange.

**SHORT COURSE ORGANIZER:** Geoscientists Canada

**FACILITATOR/INSTRUCTOR:** Garth Kirkham, President, Kirkham Geosystems Ltd.

**PRICE:** Free of charge for student delegates and $150 for professionals. Includes coffee breaks (no lunch).
PRE-CONFERENCE TWO-DAY SHORT COURSES

SATURDAY AND SUNDAY, JUNE 16-17

Three-Dimensional Geological Mapping

The 1815 William Smith geological map of England and Wales, seen as the first formal geological map, was 3D to the extent that it was accompanied by cross-sections. Since then, geological mapping has become fundamental to all geoscience and its application to energy, minerals, water, engineering, and hazards. In the late 1990s, geological survey agencies began to more comprehensively map the thickness and properties of multiple strata and selected deformed structures in a 3D GIS environment. Developments were driven by progress in digital methods, large databases, and geophysical methods, concurrent with escalating societal needs. 3D models are quickly becoming the standard for assessing resource potential and geological risk for both industry and government agencies, and are frequently used to assist with stakeholder engagement and communication.

SHORT COURSE ORGANIZER: Minnesota Geological Survey
PRICE: $240. Includes course notes, coffee breaks, and 2 luncheons.

Geometallurgy

Environmental and socio-economic demands in the exploitation of future mineral resources require a comprehensive collection and evaluation of mineralogical, geochemical, lithological, physical, and metallurgical attributes about ore bodies, along with their inherent variability. Geometallurgy is the scientific discipline that integrates all of the mineralogical, geological, mining, and processing data into an accurate ore body model that forms the basis for optimization of production and environmental management during the entire life of the project. This course will address: (1) The principles of geometallurgy and critical evaluation of sampling, mineralogical, and geochemical methods; and (2) Selected case studies of applications of geometallurgy involving: innovative evaluation of mineral deposits, mineral exploration, resource estimation, applications and implementation of quantitative mineralogical and geochemical data, mining and ore processing, and energy use, treatment of tailings and waste rock and remediation, and implementation of geometallurgical models in mining and plant operations.

SHORT COURSE ORGANIZER: Mineralogical Association of Canada
FACILITATOR(S)/INSTRUCTOR(S): Tassos Grammatikopoulos, SGS; Julie Hunt, Mineral Deposit Research Unit, University of British Columbia; Pim Van Geffen, Vancouver Geochemistry; Brian Hart, University of Western Ontario; Norman Lotter, Flowsheets Metallurgical Consulting; David Hatton, SGS; Julian Ortiz, Queen’s University; and Roussos Dimitrakopoulos, McGill University.
PRICE: $600 for professionals. $200 for students. Includes course notes, coffee breaks, and 2 luncheons.
Pre-Conference Two-Day Short Courses

Saturday and Sunday, June 16-17

Project Risk Management: How to Manage Sustainability Risks

This interactive and action-packed training workshop leaves participants with the ability to ensure a higher level of success in their own projects, especially when those risks pertain to energy, minerals, water, and the earth. An array of project risk management techniques will be explored and tested, resulting in an improved understanding of how to identify and manage both technical and non-technical project risks, leading to improved outcomes and greater project success.

Short Course Organizer: Satarla
Facilitator/Instructor(S): Sarah Gordon, Managing Director, Satarla; Ollie de Boer, Associate, Satarla; John F. Gravel, Managing Director, Bedrock-Service; Craig Rice, Director & Principal Consultant, Redteam Projects.
Price: $750. Includes course notes, coffee breaks, and 2 luncheons.

Best Practices in Mineral Deposit Evaluation

Mineral deposit evaluation involves various studies and projects aimed at estimation of mineral resources, characterizing the ore body and assessing the risks and opportunities in the process of development of the project. The processes followed for the development of the mineral deposits in the world differ due to many conditions. However there are also similarities at a higher level. For example, the sequence of studies and various projects in a study are common in various parts of the world.

This short course will focus on i) best practices followed in project development and sequence of studies, ii) best practices in resource estimation and classification, ii) international reporting standards, iv) assessment of risks due to geological controls of mineralization, and v) tips for writing a good technical report.

Short Course Organizer: GeoGlobal, LLC
Facilitator/Instructor: Dr. Abani R. Samal, Principal, GeoGlobal, LLC
Price: $750. Includes course notes, coffee breaks, and 2 luncheons.

Applied Isotope Geochemistry (1 And 1/2 Day)

Isotope geochemistry is an integral part of the earth sciences, particularly in revealing the fourth dimension of our science (time), revealing the processes involved in natural systems, and tracing the flux of elements through geosphere-hydrosphere-biosphere systems. As such, isotope geochemistry is built on a platform of pure and theoretical science, but is primarily an applied science that adds value to mineral exploration, environmental stewardship, whole earth ecology, timing and causes of evolution, paleoclimates, and even food authentication. As an applied science, isotope geochemistry has expanded from traditional light stable isotopes and long-lived decay systems studied by a few experts into studies involving most elements in the periodic table, additional geochronometers, and enhanced integration with other aspects of earth science by a broad range of users. This course addresses the recent applications of isotope geochemistry in the earth sciences and how integration with other disciplines represents a paradigm shift in our understanding of the processes that operate in natural systems. Those involved in the course include the top isotope geochemists in Canada.

Short Course Organizer: Mineralogical Association of Canada
Facilitator/Instructor(S): Bruce Eglington, University of Saskatchewan; Fred Longstaffe, University of Western Ontario; Ian Clark, University of Ottawa; Bruce Taylor, GSC; Simon Jackson, GSC; Galen Halverson, McGill University; Daniele Pinti, UQAM; Mostafa Fayek, University of Manitoba; Dominique Weiss, University of British Columbia; Prosenjit Ghosh, Queen’s University.
Price: $550 for professionals. $200 for students. Includes course notes, coffee breaks and lunch on Saturday.

Post-Conference One-Day Short Courses

Friday, June 22, 2018

Lithogeochemistry: Theory and Application from Project Generation to Operation

Lithogeochemical studies form a central component of many exploration and research initiatives, however are often poorly understood and applied. Lithogeochemistry has applications ranging from regional mineral exploration to around mine and deposit extension studies, in addition to geomallurgy and mine waste management. A proper understanding of its application can provide fundamental insights into the chemistry and mineralogy and trace-element-mineralogy associations often buried in complex whole rock datasets.

Short Course Organizer: Association of Applied Geochemists
Facilitator/Instructor: Dr. Ian Dalrymple, Senior Geochemist, Teck Resources; Bob Loucks, Sarah Gleeson, Joseph Magnall, Simon Gatehouse, Tim Ireland, Christian Ilhenfeld and Cliff Stanley
Price: $350 for professionals. $175 for students. Includes course notes, coffee breaks, and luncheon.

Regolith in Deeply Weathered Terrains

Deeply weathered landscapes occur over wide areas in a range of present-day climatic conditions, from rainforest to semi-arid and from tropical to temperate. They include many highly weathered prospective regions in Australia, South America, Africa, and SE Asia and present both problems and opportunities for exploration. The challenge is to explore these areas effectively. Effective geochemical exploration can only be achieved by understanding the regolith and landscape and metal dispersion processes that have occurred within it in different climatic regions.

Short Course Organizer: Association of Applied Geochemists
Facilitator/Instructor: Ravi Anand, Chief Research Scientist, CSIRO and Adjunct Professor in regolith geology and geochemistry, Curtin University of Technology, Perth, Western Australia.
Price: $350 for professionals. $175 for students. Includes course notes, coffee breaks, and luncheon.

Indigenous people peeling maize while overlooking Quito from El Panecillo, Ecuador.
Diego Delso, delso.photo, License CC-BY-SA
**Integration of Exploration Geochemical and Mineralogical Data**

Geochemical and mineralogical data are now routinely collected on the same sample material, but the interpretation of these data sets is often done separately. Geochemical data may include assays or multi-element data collected from crushed rock or from surficial material. Mineralogical data may include hyperspectral analyses, semi-quantitative X-ray diffraction, or heavy mineral separates. Integration of complementary data sets such as these on a single interpretive platform allows for a better understanding of geochemical and mineralogical processes associated with hydrothermal mineralization and secondary dispersion.

**SHORT COURSE ORGANIZER:** Association of Applied Geochemists  
**FACILITATOR(S)/INSTRUCTOR(S):** Dennis Arne has 35 years’ experience as a geologist specializing in geochemistry and economic geology in a wide range of environments in both the minerals and the petroleum industries, as an academic, and in geological surveys.  
**PRICE:** $350 for professionals. $175 for students. Includes course notes, coffee breaks, and luncheon.

**Structural Controls On The Genesis And Modification Of Ore Deposits**

Contributions will cover all scales of structural controls on ore deposits from vein systems to regional structures in presentations lasting 45–60 minutes. Presentations will range from regional syntheses to individual case studies on gold, volcanogenic massive sulfide (VMS), Ni-Cu magmatic sulfide, unconformity-type uranium, and porphyry deposits.

**SHORT COURSE ORGANIZER:** Mineral Deposits Division and Structural and Tectonic Division of the GAC  
**FACILITATOR(S)/INSTRUCTOR(S):** Bruno Lafrance, Professor, Structural Geology, Laurentian University and Associate Director Metal Earth; Shoufa Lin, Professor, Structural Geology, University of Waterloo.  
**PRICE:** $225. Includes coffee breaks, and luncheon.

**Advanced Concepts in Evaluating and Interpreting Geochemical Data**

Over the last decade, in almost every industry, there has been rapid growth in the application of data analytics to business decisions. Consequently, to be successful, the mining industry will have to rapidly adopt and apply the power of data analytics to the ever-growing volume of geochemical data sets that will be amassed over the next 10 years. Participants in this workshop will learn several data analytic methods applicable to geochemical data analysis that will serve them well in the future.

**SHORT COURSE ORGANIZER:** Association of Applied Geochemists  
**FACILITATOR(S)/INSTRUCTOR(S):** Natalie Caciagli, Juan Carlos Ordóñez-Calderón; Qiuming Cheng; Eric Grunsky; June Hill; Jennifer McKinley; Ute Mueller; Cliff Stanley; and Raimon Tolosana-Delgado.  
**PRICE:** $350 for professionals. $175 for students. Includes course notes, coffee breaks, and luncheon.

**Exploration Geochemistry: Field Analysis and Characterization**

On-site geochemistry and mineralogy underwent a fast development with mineral exploration and mine site management in the last decade. This brings field teams the opportunity of immediate decisions and dynamic targeting, with significant benefits in time and costs. Systematic field measurements can provide reliable information for laboratory sample screening and for target selection, prioritization, and geochemical-geological mapping. However, discrepancies between field measurements and laboratory analyses may happen and cast doubt on the former. This cannot be solved without good analytical practice and quality assurance/quality control, and with a sufficient geochemical knowledge.

**SHORT COURSE ORGANIZER:** Association of Applied Geochemists  
**FACILITATOR(S)/INSTRUCTOR(S):** Dr. Bruno Lemière, BRGM group (French Geological Survey).  
**PRICE:** $350 for professionals. $175 for students. Includes course notes, coffee breaks, and luncheon.

**Analytical Quality Control: Data Integrity for the Advancement of Science**

Regardless of the field of study, accurate information is essential to maintaining the integrity of research and making correct business decisions. A wide range of technical data is collected for geological, environmental, and mining projects and in all cases, the accuracy and precision of the information must be measured and understood. Poor quality data results for a research project may result in the inability to repeat and validate the study. For mineral exploration and mining applications, distorted findings can result in wasted resources.

**SHORT COURSE ORGANIZER:** Association of Applied Geochemists  
**FACILITATOR(S)/INSTRUCTOR(S):** Lynda Bloom, P. Geo, Analytical Solutions Ltd.; R. Mohan Srivastava, Principal Geostatistician, FSS Consultants; Michelle Ramshaw, Global Quality Manager, Geochemistry, ALS Global; Allison Laidlow, Geoscientist, BC Ministry of Transportation & Infrastructure; Dennis Arne, Principal Geochemist, CSA Global; and Pim Van Geffen, President, VanGeochem.  
**PRICE:** $350 for professionals. $175 for students. Includes course notes, coffee breaks, and luncheon.

**Mine Water Management and Stewardship**

An overview of mine water management covering integrated water resource management, water balances, sources, water use optimization, water quality and treatment, and long term stewardship.

**TARGET AUDIENCE:** Mining company representatives, regulators and academics  
**SHORT COURSE ORGANIZER:** University of British Columbia  
**FACILITATOR(S)/INSTRUCTOR(S):** Nadja Kunz, Assistant Professor, Liu Institute for Global Issues and Norman B Keevil Mining Engineering, University of British Columbia; Ben Klein, Professor of Mining Engineering at the Norman B. Keevil Institute of Mining Engineering, University of British Columbia.  
**PRICE:** $750. Includes coffee breaks and luncheon.
**POST-CONFERENCE ONE-DAY SHORT COURSES**

**FRIDAY, JUNE 22, 2018**

**Large Igneous Province Research Frontiers**  
(Including Resource Exploration and Climate Change)

This one-day short course will provide ‘state of the art’ training in all aspects of Large Igneous Provinces (LIPs) with a focus on research frontiers related to resource exploration and environmental / climate change. The basics will be covered in the morning sessions: continental and oceanic flood basalts and their plumbing systems (layered intrusions, sills, dykes, and deep crustal underplating). There will be an overview of additional topics: Archean LIPs, planetary analogues, associated Silicic LIPs (SLIPs), carbonatites and Kimberlites, origin (plume and alternatives), links to continental breakup and the supercontinent cycle, geochemistry, associated topographic effects (regional uplift and basin formation), and associated compressional tectonics. The afternoon sessions will first focus on links with resource implications (metallogeny, oil/gas and aquifer systems). The links with a broad range of commodity types are captured in our 5-part classification system and we will also present our latest strategies for using the LIPs record in multi-commodity, multi-scale exploration targeting. The second afternoon focus will be on the rapidly developing links with dramatic environmental and climate change, including mass extinction events. We summarize the latest research on the role of LIPs (and SLIPs) in dramatically changing atmospheric and oceanic composition through time, including global warming, glaciations, anoxia, step-wise oxygenation, acid rain/ocean acidification, enhanced hydrothermal and terrestrial nutrient fluxes, and mercury poisoning.

**SHORT COURSE ORGANIZER:** Geological Association of Canada  
**FACILITATOR(S)/INSTRUCTOR(S):** Dr. Richard E. Ernst and Dr. Simon M. Jowitt  
**PRICE:** $250. Includes coffee breaks and lunch.

**Building Lasting Asset Value – Practical Ways to Integrate Corporate Social Responsibility into Mineral Exploration and Development Projects**

Recognizing that corporate social responsibility (CSR) begins at the exploration stage, and not just when a mine is approved and built, this collaborative, intimate workshop is designed for project geologists, managers, and staff on the ground. The course will follow an interactive workshop format, designed to give participants a solid practical introduction to three cornerstones that support successful CSR—demonstrating how mineral explorers can integrate and operationalize CSR within their projects and corporate culture.

**SHORT COURSE ORGANIZER:** Association for Mineral Exploration (AME) Integrated Social Responsibility (ISR) Committee  
**FACILITATOR/INSTRUCTOR:** Tracey Sexton, AME  
**PRICE:** $300. Includes course notes, coffee breaks and lunch.
FIELD TRIPS

RFG 2018 is offering a large variety of pre- and post-conference field trips. Explore our offerings and see how far RFG can take you!

PRE-CONFERENCE FIELD TRIPS

The Cretaceous-Cenozoic Coast-Cascade Orogen: The Chilliwack Valley Harrison Lake Connection

LOCATION: Chilliwack, British Columbia
DURATION: 2 days – Thursday and Friday, June 14 and 15, 2018
PRICE: $460. Includes transportation, meals, accommodation, and guidebook.

The Chilliwack - Harrison Lake region occupies an important position in a mid-Cretaceous to Cenozoic (100-45 Ma) orogen whose southern extent geographically coincides with the Coast and Cascade Mountains of southwestern British Columbia, and the Cascade Ranges of Washington State. We informally refer to this orogen as the "Coast-Cascade orogen". In this region, there is excellent preservation of the allochthonous terranes that were sandwiched between terranes to the east previously accredited to the pre-Cordilleran continental margin of North America in the Jurassic, and Wrangellia terrane to the west that underlies most of Vancouver Island. The Coast-Cascade orogen is characterized by mid-Cretaceous to early Cenozoic granitic intrusions, associated metamorphic rocks, and by folds, thrust, and reverse faults that diverge eastward and westward from an axis within the present mountains. The southern part of the CCO is overprinted by late Eocene through Neogene (~34-0 Ma in this region) volcanic rocks and plutons of the Cascade Magmatic Arc, whose volcanic rocks bury the CCO south of about latitude 47°N.

FIELD TRIP SPONSOR: Canadian Tectonics Group Division of the Geological Association of Canada (GAC)
CONTACTS: Dan Gibson, Simon Fraser University; and Jim Monger, Geological Survey of Canada

MDRU Southern BC Porphyry Field Trip

LOCATION: Princeton and Kamloops, British Columbia
DURATION: 7 days – Saturday, June 9 to Friday, June 15, 2018
PRICE: $2,250. Includes transportation, luncheons, accommodations, and guide.

This seven-day field trip focuses on the porphyry Cu-Au systems in the prolific Late Triassic Quesnel Terrane (Quesnellia) of southern British Columbia. It will provide participants with exposure to various types of porphyry deposits, mineralization and alteration styles, mining methods, and background lectures. In particular, participants will see alteration types associated with alkaline porphyry systems. Participants will also be exposed to the Anaconda Mapping Method, which can be variably practiced at surface and bench mapping scales, as well as a MDRU-modified approach for core-loggign. Participants will include a mix of industry and MDRU graduate students and researchers. For University of British Columbia students, this trip is part of a course requirement.

FIELD TRIP SPONSOR: Mineral Deposits Research Unit (MDRU)
CONTACTS: Craig Hart and Jeanne Liu
PRE-CONFERENCE FIELD TRIPS

Karst Hydrology of Central Vancouver Island
LOCATION: Nanaimo and Campbell River, British Columbia
DURATION: 2 days – Thursday and Friday, June 14 and 15, 2018
PRICE: $338. Includes transportation to Vancouver Island, meals, accommodations, and guidebook.
Examine the karst landscapes and associated surface and subsurface waters of Central Vancouver Island. Participants would be picked up in Nanaimo at the Departure Bay Ferry Terminal on the morning of Thursday June 14, 2018, spend the day in the Horne Lake Area and overnight in Campbell River. On Friday June 15, they will travel to Quadra Island and return to Nanaimo for an evening ferry to Vancouver.
FIELD TRIP SPONSOR: Geological Association of Canada
CONTACT: Tim Stokes

Upper Fir Carbonatite-Hosted Nb-Ta deposit
LOCATION: Blue River area, East-Central British Columbia
DURATION: 3 days – Friday, June 22 to Sunday, June 24
PRICE: $1,160. Includes transportation, meals, accommodations, and guidebook.
This MAC-sponsored field trip visits the Upper Fir carbonatite-hosted Nb-Ta deposit in the Blue River area, east-central British Columbia. The area is within the Omineca belt of the Canadian Cordillera, at the northeastern margin of the Shuswap metamorphic complex, in the Monashee Mountains. Metacarbonatites and associated ultramafic and alkaline rocks of at least two age groups (ca. 500 and 360-330 Ma) and the enclosing (semi)pelites and amphibolites of the Mica Creek assemblage (750-550 Ma) in the Blue River area underwent multiple deformational phases, anatexis at peak metamorphism, and exhumation during the Cordilleran orogeny.
FIELD TRIP SPONSOR: Geological Association of Canada
CONTACT: Alexei S. Rukhlov

Navigating a Porphyry Cu Hydrothermal System: Alteration and Geochemical Dispersion Mapping
LOCATION: Yerington, Nevada, USA
DURATION: 2.5 days – Friday, June 22 to Sunday, June 24, 2018
PRICE: $470. Includes transportation, luncheons, and accommodation.
This 2.5-day field trip will examine the geology, hydrothermal alteration mineralogy, and geochemical dispersion around Yerington, Nevada. Yerington is a classic locality where porphyry Cu deposits, high level Fe-oxide deposits, and volcanic and plutonic complex have been tilted 80° on to their side so that a complete 3-D picture of a zoned magmatic-hydrothermal system is exposed. Day 1 of the field trip will focus on the geology of the porphyry Cu system, beginning 3 km beneath to the level of copper precipitation. Day 2 will focus on the upper 3 km of the porphyry Cu system. Each day will link the geology of the tilted system with the alteration mineralogy together with the whole rock major and trace element geochemical changes in rocks that can be mapped using modern exploration methodology. Short hikes of up to 2 hours in duration are involved each day.
FIELD TRIP SPONSOR: Association of Applied Geoscientists
CONTACTS: Richard Tosdal and John Dilles

Seabreeze Farm Renewable Natural Gas Plant Tour
LOCATION: Delta, British Columbia
DURATION: 1 day – Friday, June 22, 2018
PRICE: $85. Includes transportation and luncheon.
This tour of the Seabreeze Farm Renewable Natural Gas Plant will provide an overview of the process that converts organic waste into renewable natural gas, a sustainable source of clean energy, for injection into the local pipeline distribution grid.
FIELD TRIP SPONSOR: Canadian Biogas Association
CONTACTS: Antonio Saavedra and Marco Mazaferro
This field trip will examine the magmatic evolution, mapped alteration, hyperspectral response, and lithogeochemical and C isotope footprints around the Highland Valley Porphyry Cu (HVC) deposits hosted in the Guichon Creek batholith in southcentral British Columbia. The review of the district will focus on integration of the disparate data sets to better define the extent of the porphyry related hydrothermal alteration. Additionally, we will visit some key surficial geology sites and discuss the composition and mineralogy of till and its relationship to dispersion from the porphyry centers.

**FIELD TRIP SPONSOR:** Association of Applied Geochemists  
**CONTACTS:** Kevin Byrne, University of Alberta; Guillaume Lesage, Mineral Deposit Research Unit; Alain Plouffe, Geological Survey of Canada; and Robert Lee, Mineral Deposit Research Unit

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**Geochemistry Lab 101**

**LOCATION:** Vancouver Minerals Lab Tours, Metro Vancouver, British Columbia  
**DURATION:** 1 day – Friday June 22, 2018  
**COST:** $60. Includes lunch and return transportation to lab.

This Vancouver-area day tour will feature a morning technical seminar and afternoon laboratory tour at one of two sponsoring Vancouver mineral laboratories (Bureau Veritas or SGS). The trip is envisioned as a theoretical and practical learning experience for participants new to the industry or unfamiliar with geochemical analytical science.

**FIELD TRIP SPONSOR:** Association of Applied Geochemists  
**LEADER:** Stephen Cook. Co-Leaders: Jamil Sader, Bureau Veritas Minerals; Bernadette LeBoeuf, SGS Minerals; and Hugh De Souza, SGS Minerals

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**The Tulameen Alaskan-Type Ultramafic-Mafic Intrusion: Architecture, Emplacement Mechanisms, and CR-PGE vs CU-PGE “Reef-Style” Mineralization in a Convergent Margin Setting**

**LOCATION:** Hope, Princeton, Tulameen  
**DURATION:** 3 days – Thursday, June 21 (evening travel) to Sunday, June 24, 2018  
**PRICE:** $800. Includes transportation, limited meals, and accommodations.

The Tulameen ultramafic-mafic complex is a classically zoned Alaskan-type intrusion emplaced in a Late Triassic supra-subduction zone setting. This field trip will examine the lithological zoning and temporal evolution of the complex and contrasting styles of well-documented chromitite-platinum group element (PGE) mineralization in the dunite core and derivative placers versus newly discovered Cu-PGE sulphide mineralization in the more differentiated ultramafic rocks. Highlights include examination of “magmatic avalanche” deposits exposed in the Tulameen River bed, and a 700 m zone of Cu-PGE mineralization similar to occurrences documented from layered intrusions in extensional tectonic settings.

**FIELD TRIP SPONSOR:** Mineralogical Association of Canada  
**CONTACTS:** Graham Nixon and Dejan Milidragovic
Geology and Natural Hazards of the Sea-to-Sky Corridor

LOCATION: Howe Sound, West Vancouver to Squamish, South-coastal British Columbia
DURATION: 1 day – Friday, June 22, 2018
PRICE: $65. Includes transportation and luncheon.

This bus trip will describe and highlight geological features along the Sea to Sky Highway. Participants will learn about the geology of Howe Sound, as well as natural hazards along the scenic transportation corridor between West Vancouver and Squamish. Highlights include: an underground tour of the Britannia Mine (once the largest copper mine in Canada); Howe Sound fjord, which bears the effects of Pleistocene glacial erosion, rockfall, and debris flow hazards and their remediation; Mt. Garibaldi, a dormant volcano near the head of Howe Sound; and land-use planning in Squamish, a community subject to flood and debris flow hazards.

FIELD TRIP SPONSOR: Geological Association of Canada
CONTACT: John Clague

Torrents, Terrains, and Tuyas – Waterfalls and Volcanoes of South Central British Columbia

LOCATION: Vancouver, Coquihalla, Kamloops, Clearwater/Wells Gray, Cache Creek, Lillooet, and Whistler
DURATION: 4 days – Friday, June 22 to Monday, June 25, 2018
PRICE: $550. Includes transportation, luncheons, accommodations, and guidebook.

This trip will take participants eastward through the Fraser Valley to the town of Clearwater. During the trip we will be crossing a number of terranes brought together by collision and translation along the continental margin, amalgamating to form the present day British Columbia. There will be the opportunity to observe the precipitous cliffs, waterfalls, and rugged mountains of the Coast Ranges formed of these collisions as the tour climbs through the heart of these mountains. From Clearwater, the tour will investigate a zone of transition between the Cariboo and Monashee mountain ranges where deep crustal faults have provided pathways for mafic magmas producing the Wells Gray–Clearwater volcanic field. Here, the interaction between volcanism and multiple glaciations over a three million year period have created rugged terrain and other unique subglacial landforms. More than 25 cubic kilometers of lava have poured out and at least 21 eruptive centers have been identified, several of them subglacial landforms called Tuyas. Over the vertical cliffs fall many torrents of water, including Canada’s fourth highest waterfall—Helmcken Falls.

FIELD TRIP SPONSOR: Geological Association of Canada
CONTACT: Catherine Hickson
### SATURDAY, JUNE 16

**North Shore Tour**

- **TIME:** 9:00 to 14:00
- **PRICE:** $130. Lunch not included.
- **PLACE:** Group meets at the RFG information desk in the registration area

During this tour, experience the natural beauty of Vancouver’s North Shore and spectacular city, mountain, and ocean views. A deluxe motor coach will take participants via Stanley Park and the impressive Lions Gate Bridge to the North Shore, winding up the Capilano Canyon to the Capilano Suspension Bridge and Nature Park. Built in 1888, this bridge was the first of its kind, spanning 450 feet (137 m) across and 230 feet (70 m) above the Capilano River. The suspension bridge is surrounded by towering Douglas firs and walking trails. Enjoy the Capilano cliff walk, Treetops Adventure and fabulous one of a kind gift shop! Head down to the popular Lonsdale Quay Market, home to over 80 locally owned and operated businesses on the North Shore, featuring a fresh food market with local products, an international food court, specialty shops featuring local designers, restaurants, and breweries. Enjoy some free time here, then it is a quick drive to the Lynn Canyon Park to experience the second suspension bridge of the day! Several trails throughout the park allow for a leisurely hike through the forest to see breathtaking waterfalls.

### SUNDAY, JUNE 17

**Sea to Sky Gondola**

- **TIME:** 9:00 to 14:00
- **PRICE:** $125. Lunch not included.
- **PLACE:** Group meets at the RFG information desk in the registration area

Experience the spectacular views of Howe Sound, where the ocean meets the mountains in the Sea-to-Sky country. Guests will be treated to a stop at Shannon Falls, one of North America’s highest waterfalls with a vertical of more than 1,000 feet (300 m). The tour then proceeds to the spectacular Sea to Sky Gondola, located in Squamish, the heart of the world-famous Sea-to-Sky Corridor. When you reach the summit of the gondola ascending Mount Habrich, you are greeted with breathtaking panoramic views of the coastal mountain range, the Stawamus Chief, and Howe Sound. Meet the friendly guide as you step off the gondola for a public tour. At the summit, a host of amenities and adventure activities will be available: a spectacular suspension bridge, interpretive trails, jaw dropping viewing platforms, climbing areas, snowshoeing, biking trails, and other naturally inspired activities. A West Coast inspired lodge serving a high-quality locally produced menu with a spectacular outside deck will be the perfect way to end your adventure.
### SOCIAL PROGRAM & PARTNER EVENTS

#### SUNDAY, JUNE 17

**Opening Ceremony and Icebreaker Reception**

<table>
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<tr>
<th>Time</th>
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<tr>
<td>16:30-17:00</td>
<td>OPENING CEREMONY IN THE BALLROOMS FOYER</td>
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<tr>
<td>17:00-20:00</td>
<td>ICEBREAKER RECEPTION</td>
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<td>Level 1 Trade Show on the Exhibit Hall</td>
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</table>

Open to all registered participants. Complimentary drink ticket to registered delegates.

Come and enjoy Canadian products that have a very important place in our plates. Every region of our beautiful country has its own specialties that enrich the current Canadian gastronomy. Maple products, farmed meats, cheeses, ciders, beers, we cannot name them all, but our local products are as delicious as they are abundant. Entertainment, musicians... everything in place for an exciting reception!

The Icebreaker will be your chance to have a first look at the RFG2018 Trade Show!

### FOOD CONCESSIONS IN THE EXHIBIT HALL

Food concessions in the Exhibit Hall will offer a variety of lunch items for purchase daily. Having lunch on the Trade Show floor will help the RFG community network and get to the afternoon sessions on time.

#### MONDAY, JUNE 18

**GAC Awards Luncheon**

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<th>Time</th>
<th>Event</th>
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<tr>
<td>12:00-13:30</td>
<td>GAC Awards Luncheon</td>
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<td>Room 306</td>
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Open to all RFG2018 attendees.

**Reception at the Trade Show (Meeting Hub)**

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<th>Time</th>
<th>Event</th>
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<tr>
<td>15:30-17:00</td>
<td>Reception at the Trade Show (Meeting Hub)</td>
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<td>Meeting Hub (Trade Show floor), Exhibit Hall</td>
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</tbody>
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Complimentary drink ticket to registered delegates. Enjoy a beer with peer delegates on the Trade Show floor, visit the exhibitors, and discuss the day's technical content with colleagues from all walks of natural resources.

#### TUESDAY, JUNE 19

**MAC Awards Luncheon**

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<th>Time</th>
<th>Event</th>
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<tr>
<td>12:00-13:30</td>
<td>MAC Awards Luncheon</td>
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<td>Room 306</td>
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Open to all RFG2018 attendees.

**Reception at the Trade Show (Meeting Hub)**

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<td>Meeting Hub (Trade Show floor), Exhibit Hall</td>
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Complimentary drink ticket to registered delegates. Enjoy a beer with peer delegates on the Trade Show floor, visit the exhibitors, and discuss the day's technical content with colleagues from all walks of natural resources.

**Student Pub Crawl**

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<th>Time</th>
<th>Event</th>
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<tr>
<td>19:00-21:00</td>
<td>Student Pub Crawl</td>
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<td></td>
<td>Group meets at the RFG information desk in the registration area</td>
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</tbody>
</table>

Explore Vancouver's night-life, network with new colleagues, and win prizes. Participant must be between 19 to 30 years old and are responsible for all beverages and food purchased during the event.
SOCIAL PROGRAM & PARTNER EVENTS

WEDNESDAY, JUNE 20

MDD Awards Luncheon

**TIME:** 12:00 to 13:30  
**PRICE:** Professionals - $85 | Students - $35  
**PLACE:** Room 306

Open to all RFG2018 attendees.

Vancouver Art Gallery Tour

**TIME:** 19:00 to 21:00  
**PRICE:** $30  
**PLACE:** Group meets at the RFG information desk in the registration area

Guided tour of iconic Canadian and contemporary art exhibits.

AAG Gala dinner (at the Vancouver Aquarium)

**TIME:** Buses leave at 18:15 and 18:45  
**PRICE:** $120  
**PLACE:** Group meets at the RFG information desk in the registration area

The Association of Applied Geochemists invites you to a Gala Dinner on Wednesday, June 20, 2018 for a truly one-of-a-kind experience, dining amongst the 50,000 inhabitants in the halls and galleries of the spectacular Vancouver Aquarium. The evening will include travel by private coach to scenic Stanley Park. A welcome reception will be followed by a tour of the aquarium’s outdoor exhibits and the AAG awards ceremony. Dinner will be prepared by executive chef Ned Bell and local Okanagan wine will be served. Then tour the aquarium’s interior exhibits or take in presentations by the aquarium’s science staff on research conducted in the high-arctic and Pacific Northwest. You will have a menu request for your choice of meal and seating companions once registered. **Open to all RFG2018 attendees.**

**THURSDAY, JUNE 21**

Vancouver Brewery & Distillery Tour

**TIME:** 18:30 to 22:00  
**PRICE:** $165  
**PLACE:** Group meets at the RFG information desk in the registration area

Vancouver has one of the strongest craft beer cultures in the world. Vancouver’s distilleries are also making waves with some amazing locally crafted spirits. On this tour, we’ll make three stops over three and a half hours: two Vancouver craft breweries and one Vancouver craft distillery. Nicknamed the Vancouver Distillery Tour, this tour gives you the best of both worlds.

SOCIAL PROGRAM & PARTNER EVENTS

FRIDAY, JUNE 22

Minerals Tour: Britannia Mine Museum

**TIME:** 9:00 to 13:00  
**PRICE:** $105  
**PLACE:** Group meets at the RFG information desk in the registration area

In its seventy-year life, the Britannia Mine had a fascinating history. With over 60,000 people living and working here, you can imagine that there are a few stories to tell! Pioneering work on ore extraction technologies, peak production rates that made it the then biggest copper mine in the British Empire, dictatorial and benevolent managers, fire, floods, a tragic rock slide, and much more. The 45-minute guided tour starts with a train ride into the atmospheric early-haulage mine tunnel. The mine interpreter explains miners’ working conditions and demonstrates drills and equipment used in the early 20th Century. The tour continues into the Mill, an impressive structure with a dramatic industrial interior and built into the mountain-side, one of the last gravity-fed Mills in North America. Learn how the Mill operated, how rocks were transported and crushed, and how minerals were extracted.

Energy Tour: Stave Falls

**TIME:** 9:00 to 15:00  
**PRICE:** $100  
**PLACE:** Group meets at the RFG information desk in the registration area

In the north central Fraser Valley is BC Hydro’s Stave River hydroelectric project. The Stave Lake reservoir is bounded by the Stave Lake Dam. Here guests will enjoy a 2-hour guided tour of the Stave Falls visitor centre! The Powerhouse at Stave Falls has a way of engaging a wide variety of visitors, from individuals to families and school groups. With an amazing Tesla coil electricity demonstration and many interactive and historic displays, guests can take a walk back through time to see how power has helped build our province. This 100-year-old power generating facility is also a National Historic Site of Canada, where guests can comb through archival photos and artifacts and explore the original mechanical and electrical components installed over a century ago.

Museum of Anthropology & University of British Columbia

**TIME:** 9:00 to 14:00  
**PRICE:** $120  
**PLACE:** Group meets at the RFG information desk in the registration area

Drive through the world-famous Stanley Park and visit the Totem Poles at Brockton Point, which are one of British Columbia’s most visited tourist attractions. The tour proceeds along Vancouver’s beautiful waterfront beaches with spectacular views of the North Shore Mountains and arrives at the Museum of Anthropology at the University of British Columbia.

The Museum of Anthropology houses one of the world’s finest displays of Northwest Coast First Nations art in a spectacular Arthur Erickson designed building overlooking the mountains and ocean. It also features extensive collections from around the world, as well as a wide range of temporary exhibitions; guided tours; and other public events.

The tour takes a short drive to the Centre for Interactive Research on Sustainability (CIRS) for a private tour. CIRS was developed in response to the challenge of creating a more sustainable built environment. Its intention is to be an internationally recognized research institution that accelerates the adoption of sustainable building technologies and sustainable urban development practices in society. Research within the Centre engages issues related to, and which shape, sustainable buildings and urban development patterns.
EARLY CAREER PROGRAM

The Resources for Future Generations 2018 Conference will be the ultimate opportunity for you to network and meet with professionals and peers in your field, as well as with managers throughout the industry. Beyond the full and diverse technical program, you will have opportunities to learn, network, and acquire skills to meet the challenges of the sustainable and ethical supply of Earth's resources.

The Early Career program will ensure the RFG2018 conference is both informative and educational. It will enable you to put your best foot forward and make a lasting impression. And it is one of the greatest opportunities to make new friends with your peers from around the world.

The Early Career program is available for Post-secondary Students and Geoscientists in their first 15 years of professional practice, including post-graduate study. Self-identify at the time of registration and indicate your interest in participating in each of the elements.

Delegate Mentoring Program

PRICE: Included with delegate registration.
Please let us know of your interest when registering for the conference.
Novice Post-Secondary Students and Early Career Delegates are matched with an experienced Mentor to help them navigate and derive the greatest benefit from the Conference. Mentees and Mentors will be matched prior to the Conference and encouraged to meet at the Opening Icebreaker.

Panel Discussion

Professional Reliance – Navigating the Professional Aspect of your Career in Science
Most students and young scientists are focused on the nature of the work they are or will be doing; the responsibility we as scientists have to society is often overlooked. Geoscientists, engineers, and other scientists have a duty of care to the public and typically must be registered with the professional association in the area they are working. Being registered as a professional is only one part of being accountable to the public. The bigger issue is: how do we as scientists ensure that we are practicing at the high standards that society expects? This panel session will explore the perspectives of various individuals experienced in professional reliance and regulation and will include a Q&A session.

PANEL MEMBERS: Lindsay Steele, P.Geo., Associate Director, Professional Practice, Engineers and Geoscientists BC; 3 others TBD
Date and time will be confirmed in May.

SUSTAINABILITY SUNDAY

10:00-14:00 | SUNDAY, JUNE 17

SCHEDULE: Sunday, June 17, 10:00 to 14:00
PRICE: Free, Open to the Public
Sustainability Sunday will feature a variety of displays and interactive exhibits designed to intrigue, delight and inform! All ages welcome to this family friendly, public event in the Foyer area of the West Convention Centre.

EDUCATION, OUTREACH & YOUNG LEADERS

Resources for Future Generations Earthcache Exploration

WHEN: Self-directed. Your choice.
PLACE: Vancouver area
PRICE: Free
Earthcaches are sites of geological interest that have been identified as interesting and important. Learn about earth science and about some of the unique geological features in the Vancouver area by exploring a series of Earthcaches.

WHY on Earth do you care? Video Competition

We know that every day, in their own way, young leaders are innovating, researching, and inspiring CHANGE that will lead to a sustainable future for the residents of planet earth. These are our EARTH CHAMPIONS. Now it's time to hear their stories...

Stop at the Early Career Lounge on the trade show floor to watch the videos of the winners.
TEACHERS’ PROGRAM

These elements of the program are available to participants without the requirement of registering for the conference. To register, please visit RFG2018.org and click on Teacher’s Program.

Communicating Earth Science:
Interactive Professional Development for Everyone

WHEN: Saturday, June 16, 10:00 to 16:00
PLACE: Simon Fraser University Vancouver Campus (Harbour Centre), 515 West Hastings Street Vancouver

As the role of earth science in society grows, so too does the need for effective science communication. Unleash your inner science communicator and join our interactive short course to explore why we communicate science, who our audiences are, how to refine your earth science message, and pick up some tips for communicating through different formats.

Earth Science Educator Professional Learning Workshop

WHEN: Saturday, June 23, 9:00 to 15:00
PLACE: Simon Fraser University, Burnaby Campus, 8888 University Drive, Burnaby

Join members of the Earth Science Education and Outreach Community for an interactive professional development workshop that focuses on hands on learning about the earth, minerals, water, and energy. The session will include opportunities for networking, discussions, resources for the classroom, and more! Lunch is included.

Educators’ Sea to Sky Geotour Field Trip

WHEN: Sunday, June 17, 6:30 to 17:00
PLACE: Group meets at the RFG information desk in the registration area

This expert-led, 1-day field trip will highlight teaching in the field and the variety of accessible geological features that appear along Highway 99, ranging in age from Jurassic to Pleistocene. It includes a visit to the historic Britannia Mine. Participants are asked to check in at 6:30 AM at the Vancouver Convention Centre. The bus will depart promptly at 7:00 AM, returning to Vancouver no later than 17:00 the same day.
THE MEETING HUB – EXHIBIT HALL

The RFG2018 Trade Show floor is renamed the Meeting Hub as this is where the action is! It places you at the forefront of all networking activities. The trade show will be at the heart of the various elements bringing delegates together daily: the poster session, Gathering Place, Innovation Site presentations, food concessions, daily receptions, learning and young leaders’ lounge, rest areas, and creativity hub. Be there, be seen!

All Events and Activities at the Meeting Hub will Follow Trade Show Hours

| SUNDAY, JUNE 17 | 17:00 - 20:00 | MONDAY, JUNE 18 | 11:00 - 17:00 | TUESDAY, JUNE 19 | 11:00 - 17:00 | WEDNESDAY, JUNE 20 | 10:00 - 14:00 |
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Trade Show

Exhibiting at RFG2018 gives you the opportunity to interact with global companies, universities, and institutions in the minerals, water, Earth and energy world. If building your brand’s reputation in front of this audience is important to your strategic goals, RFG2018 is the right investment for you!

Who’s Exhibiting (as of April 13, 2018)

Booth 300 36th International Geological Congress
Booth 406 Activation Laboratories Ltd. (Actlabs)
Booth 507 ALS Geochemistry
Booth 409 American Geosciences Institute
Booth 505 Association of Applied Geochemists
Booth 315 BGC Engineering Inc.
Booth 408 British Geological Survey
Booth 304 Canadian Geoscience Education Network
Booth 506 Canadian Science Publishing
Booth 309 CIM
Booth 401 Corescan
Booth 215 Early Career Lounge
Booth 601 Exploration Consultants Associated
Booth 404 GAC / MAC
Booth 501 Geological Association of Canada
Booth 609 Geoscience Laboratories
Booth 305 Irish Centre for Research in Applied Geosciences
Booth 500 Isomass Scientific Inc.
Booth 316 Keyence Canada Inc.
Booth 615 Komatsu
Booth 206 LoCoSu Project - Institute of Mineral Resources Engineering - RWTH Aachen University
Booth 509 MDPI AG (Basel, Switzerland)
Booth 501 Mineralogical Association of Canada
Booth 314 Ministry of the Economy, Government of Saskatchewan
Booth 415 Olympus America Inc.
Booth 414 Ore Research & Exploration
Booth 515 Overburden Drilling Management Limited
Booth 516 Process Mineralogical Consulting Ltd.
Booth 405 Proto
Booth 302 Queen’s University. Master of Earth and Energy Resources Leadership
Booth 200 REFLEX
Booth 509 Resources
Booth 215 RFG2018
Booth 603 Royal Roads University
Booth 206 RWTH Aachen University - Institute of Mineral Resources Engineering
Booth 214 Saskatchewan Research Council
Booth 302 Secretariat of the International Union of Geological Sciences (IUGS)
Booth 317 Seequent
Booth 504 SGS
Booth 508 SkyTEM Canada
Booth 204 Society for Geology Applied to Mineral Deposits
Booth 417 Society of Economic Geologists
Booth 301 TerraCore
Booth 303 The Geological Society of America
Booth 208 The Geological Society of London
Booth 517 UBC - Master of Engineering Leadership
Booth 403 WSU Tricities
Booth 407 ZEISS Microscopy

Innovation Stage Presentations

**DAY:** Monday, June 18  
**PLACE:** Trade Show floor stage, Exhibit Hall

Sponsors and exhibitors will be invited to make short presentations of innovative products, technology and business solutions. The schedule of presentations will be posted at the entrance of the area as well as online.

The Gathering Place Presentations

**DAY:** Tuesday, June 19  
**PLACE:** Trade Show floor stage, Exhibit Hall

The Gathering Place at RFG will focus on examples of benefits and opportunities in the mineral exploration, development, and mining industry with a Canadian perspective. Join us to hear directly from Indigenous and non-Indigenous leaders on mutual benefits of working together in this critical industry.

Early Career Lounge

Join your fellow Early Career Delegates for an opportunity to mix and mingle at the Early Career Lounge. This is great meeting place for mentors and mentees to chat—potential employers and candidates too. Friends will put their feet up, take a break, exchange knowledge, network, and just relax!

Poster Session

More than 200 posters will be presented on the Trade Show floor from Sunday night to Wednesday. Meet the authors and discuss the latest technologies and projects under each Technical Program Theme.

Lunch Time

Food concessions will offer a variety of lunch items for purchase daily. Having lunch on the trade show floor will keep the RFG community network and get to the afternoon sessions on time.

Daily Receptions

The Icebreaker reception kicks it all off on the Sunday, from 17:00 to 20:00. Be among the first to look at the RFG2018 Trade Show exhibits!

Grab a beer on Monday and Tuesday, from 15:30 to 17:00. Peers and friends will gather on the Trade Show floor, visit the exhibitors, and discuss the day’s technical sessions.

Premium Sponsors

These loyal partners believe in and support the RFG2018 mission and purpose.
SEE YOU IN

JUNE 16-21, 2018 | #RFG2018

For more information and to register, visit:

RFG2018.org