GAC MAC SGA

2023 SUDBURY

Laurentian University
Université Laurentienne

HARQUAIL SCHOOL OF EARTH SCIENCES
ÉCOLE DES SCIENCES DE LA TERRE

MAY 24 - 27

PROGRAM · VOLUME 46

GEOLOGICAL ASSOCIATION OF CANADA
ASSOCIATION GÉOLOGIQUE DU CANADA

MINERALOGICAL ASSOCIATION OF CANADA
ASSOCIATION MINÉRALOGIQUE DU CANADA

SOCIETY for GEOLOGY APPLIED to MINERAL DEPOSITS

VALE

AGNICO EAGLE

GLENCORE

KINROSS

LAURENTIAN UNIVERSITY, SUDBURY, ONTARIO

https://event.fourwaves.com/Sudbury2023

Thanks to our Meeting Sponsors! • Merci à nos sponsors !

DIAMOND

VALE

PLATINUM

AGNICO EAGLE

GLENCORE

KINROSS

GOLD

ARCHER Exploration Corp.

CôtéGold

eldorado gold Québec

IAMGOLD CORPORATION

KGHM

OSISKO METALS

SILVER

Geoscience North

JUNO CORP

MAGNA MINING INC.

SPC NICKEL CORP

Sudbury Greater Grand

BRONZE

IMDEX

Transition Metals

WALLBRIDGE

WESDOME

MAJOR EVENT / SESSION SUPPORTERS

SGDG SUDBURY GEOLOGICAL DISCUSSION GROUP

Mineral Deposits Division Geological Association of Canada

SOCIETY FOR GEOLOGY APPLIED TO MINERAL DEPOSITS

EdGEO

MERC

EVENT / SESSION SUPPORTERS

JUNO CORP

Lightfoot GEOSCIENCE

ZEISS

GEOMATICS DIVISION

APEX GEOSCIENCE

VOLCANOLOGY & IGNEOUS PETROLOGY DIVISION

CGEN RCEG Canadian Geoscience Education Network Réseau canadien d'éducation géoscientifique

MMTS MODERN MINING & TECHNOLOGY SUDBURY

KINGSTON GEOSCIENCES

Table of Contents

WELCOME TO SUDBURY 2023 • BIENVENUE À SUDBURY 2023	2
SPONSORING SOCIETIES AND HOST	3
LOCAL ORGANIZING COMMITTEE	4
LAND ACKNOWLEDGMENT	4
DELEGATE INFORMATION	5
RESPIRATORY VIRUS POLICY	5
REGISTRATION	5
EXHIBITS	5
INTERNET ACCESS	5
CELL PHONES	6
MEALS	6
RECYCING/COMPOSTING	6
MEETING TRANSPORT	6
PARKING	7
UPLOADING PRESENTATIONS	7
CANCELLATIONS	7
SECURITY AND SAFETY	7
DISCLAIMER	7
EMERGENCY INFORMATION	7
MAPS	8
EXHIBITS	14
GAC-MAC AWARDS	16
FIELD TRIPS	24
PRE-CONFERENCE FIELD TRIPS	24
POST-CONFERENCE FIELD TRIPS	24
WORKSHOPS AND SHORT COURSES	25
SOCIAL EVENTS	25
SPECIAL EVENTS	26
PLENARY LECTURES	27
WEEK AT A GLANCE	28
TECHNICAL PROGRAM AT A GLANCE	29
TECHNICAL PROGRAM	32
ORAL SESSIONS	32
POSTER AND EXHIBIT SESSIONS	61
AUTHOR INDEX	70

Welcome to Sudbury 2023 • Bienvenue à Sudbury 2023

Welcome to the Joint Annual Meeting of the Geological Association of Canada (GAC), Mineralogical Association of Canada (MAC), and the Society for Geology Applied to Mineral Deposits (SGA). Laurentian University last hosted the meeting in 1999 and we are delighted to host the meeting again.

The theme of the meeting is *Discovering Ancient to Modern Earth,* reflecting the location of Sudbury at the intersection of the Archean Superior Province, Proterozoic Southern and Grenville Provinces, and Paleozoic-Quaternary cover sequences. The conference includes a diverse program of Symposia, Special Sessions, General Sessions, Field trips, Workshops, and Short Courses covering the spectrum of geoscience disciplines. It will be delivered in hybrid format with both on-site and virtual components. Abstracts, talks, and posters will be given in English or French.

Sudbury is a geological mecca. It is one of the world's largest, oldest, and best-exposed meteorite impact sites; it contains some of the largest Ni-Cu-PGE deposits on Earth and is the world's largest mineral exploration – mining – service cluster; it straddles the boundaries between Archean igneous/metamorphic rocks of the Superior Province, volcanic/sedimentary/glaciogenic rocks of the Huronian Supergroup, and Paleozoic platform carbonates; and it is only a few hours drive from some of the world's best-preserved Archean geology and largest Cu-Zn-(Au) massive sulfide and orogenic Au deposits.

The City of Greater Sudbury, the largest city in northeastern Ontario, lies amidst glacially-shaped ridges, green boreal forests, and contains 330 lakes > 10 hectares and 110 lakes > 100 hectares. The success of more than 50 years of environmental reclamation efforts has led to numerous national and international awards, including a Government of Canada Environmental Achievement Award, a United States, Chevron Conservation Award, and a United Nations Local Government Honours Award.

We hope that you will enjoy your visit, benefit from the broad, topical scientific program, and thank you for your contributions to the meeting.

Sudbury 2023
Local Organizing Committee

SPONSORING SOCIETIES AND HOST

The Geological Association of Canada (GAC®) is a national multi-disciplinary geoscience organization with representatives in all Canadian Territories and Provinces as well as the United States, Europe, and other parts of the world. The GAC® makes significant contributions to the promotion and development of the geological sciences in Canada through publications, awards, conferences, meetings, and exhibitions.

The Mineralogical Association of Canada (MAC) is a non-profit scientific organization that promotes and advances the knowledge of mineralogy and the allied disciplines of crystallography, petrology, geochemistry, and mineral deposits. It publishes The Canadian Journal of Mineralogy and Petrology.

The Society for Geology Applied to Mineral Deposits (SGA) is an international scientific society that promotes the science of mineral deposits geology. It publishes Mineralium Deposita.

The Harquail School of Earth Sciences (HES) offers one of the most comprehensive field- and laboratory-based BSc Geology programs in Canada, and high-quality MSc and PhD programs focussing on Precambrian Geology and Mineral Deposits. Its Mineral Exploration Research Centre (MERC) is one of the largest centres of its kind in the world, presently leading the $100M Metal Earth program, which is being funded by the Canada First Research Excellence Fund and several governmental/industry partners.

LOCAL ORGANIZING COMMITTEE

Chair:	Michael Lesher
Vice-Chair & AV Coordinator:	Douglas Tinkham
Vice-Chair & Webmaster:	Stéphane Perrouty
Meeting Manager:	Cathryn Nadjiwon
Field Trips:	Bruno Lafrance, Evan Hastie, Riley Mulligan
Exhibits & Posters:	Noëlle Shriver
Social Media:	Tobias Roth, Lynn Bulloch
Guest Program:	Olga Brinkman

LU Facilities:	Julie Ceming, Bill Sanders
LU Media Services & Printing:	Marie-Lynne Michaud, Lynn Laird, Jameson Fletcher
LU IT Services:	Luc Roy, Dan Robidoux

GAC Liaisons:	Deanne van Rooyen, Alwynne Beaudoin, Karen Dawes
MAC Liaisons:	Johanne Caron, Dan Marshall, Andrew Conley
SGA Liaisons:	Georges Beaudoin, Garth Graham
HES Liaisons:	Pedro Jugo, Roxane Mehes

LAND ACKNOWLEDGMENT

We would like to acknowledge the Robinson-Huron Treaty of 1850. We also further recognize that Laurentian University is located on the traditional lands of the Atikameksheng Anishnawbek and that the City of Greater Sudbury also includes the traditional lands of the Wahnapitae First Nation.

DELEGATE INFORMATION

The meeting will be on the Laurentian University campus, which is located at 935 Ramsey Lake Road.

Symposia, Special Sessions, and General Sessions will be in the Fraser Auditorium and Classroom Buildings. Posters and Exhibit Booths will be in the Parker Building Atrium.

Workshops, Short Courses, and selected Special Events will be held across the road in the Willet Green Miller Centre.

RESPIRATORY VIRUS POLICY

Laurentian University does not presently require masks, but we encourage you to bring one in case the situation changes or if you wish to wear one. There will be hand sanitizing stations near all sessions and events.

REGISTRATION

The Registration Desk will be open at the following locations and hours:

Wednesday, 24 May:	Fraser Auditorium Foyer, 11:00 – 16:00
Thursday, 25 May:	Fraser Auditorium Foyer, 07:30 – 16:00
Friday, 26 May:	Fraser Auditorium Foyer, 07:30 – 16:00
Saturday, 27 May:	C101 Classroom Building, 07:30 – 15:00

On-site registration will be done on Fourwaves, there will be a computer and assistance available if needed. Name badges are required to access conference and exhibit rooms. Please wear them at all times.

EXHIBITS

Most exhibits will be on the ground floor of the Parker Building Atrium, and will be staffed 09:00-18:00 on Thursday-Friday and 09:00-15:00 on Saturday.

Orogenex Minerals Inc. and Candian Ocean Literacy Coalition will have booths in the Fraser Auditorium Foyer from 09:00 - 17:00 on Thursday-Friday and 09:00 - 15:00 on Saturday.

INTERNET ACCESS

Free internet access is available on the LU campus and selected floors of the WGMC.

CELL PHONES AND PRIVACY

Please ensure that your phone is set to silent mode during all sessions. Photography is permitted only with prior permission of the presenter/participant.

MEALS

Because the Laurentian University campus is not close to any restaurants, registration fees include three coffee/tea/snack breaks and a buffet lunch, a BBQ and catered box lunch on each of the three days. If you have any dietary restrictions, make certain that you have provided that information *in the on-line registration form* and identify yourself to the servers.

Attendees will be responsible for their own breakfasts and dinners. A list of restaurants and pubs will be provided with your registration package and will be available at the Registration Desk.

If you need something more than is provided for breaks and lunches, the following will be open on campus:

Tim Hortons (Arts Bldg.)	Thursday-Friday	08:30-15:00
University Club (Fraser Bldg.)	Thursday-Friday	11:30-16:00

RECYCLING/COMPOSTING

The meeting will use primarily reusable, recyclable, and compostable products. Please use the appropriate bins to avoid any cross-contamination:

Blue Recycle bins:	clean paper, cardboard, aluminum cans, numbered hard plastics (except #3, #7), stretchable plastic bags, coffee cup lids.
Colour Compost bins:	Food scraps, napkins, paper plates, paper coffee cups.
Colour Garbage bins:	All other materials, including #3 and #7 and unnumbered hard plastics, non-stretchable plastic bags.

Reusable items (unwanted cloth meeting bags, notebooks, pens, water bottles) can be left at the Registration Desk (locations above) or the Meeting Office (C101 Classroom Building).

MEETING TRANSPORT

A Shuttle Service will be operated between designated South End hotels (Hampton Inn/ Homewood Suites, Comfort Inn, Super 8, Holiday Inn, Travelodge, Travelway Inn), downtown hotels (e.g., Radisson, Northbury), and the Laurentian University campus. Schedules are posted on the meeting website and available at the Registration Desk.

PARKING

Free parking is available in Lots P1 (in front of the Fraser Auditorium Bldg.), P4 (across the road from the Arts Bldg), and C and H (in front of West Residence. See green parking lots on Campus Map.

UPLOADING PRESENTATIONS

Oral presentations must be uploaded to the Fourwaves meeting management system the evening before morning presentations and the morning before afternoon sessions. Bring a copy on a USB drive to the Speaker Ready Room (C102 Classroom Building) if you have any problems. Poster presentations must be put up between 11:00 and 16:00 on Wednesday 24 May or between 07:00 and 08:00 on Thursday 25 May, and not taken down until 15:00 on Saturday 27 May.

CANCELLATIONS

If for any reason you need to cancel your presentation, please advise us immediately by sending a message to Sudbury2023@laurentian.ca. If you have uploaded a recording of your talk (which you have been asked to do in any case), then we can make arrangements to have it played in the session in your absence.

No posters will be permitted unless one of the authors is present, but if you have uploaded your poster and/or a speed talk, they will remain on the website. Cancellations and other notices will be sent to all Registrants at their e-mail address of record.

SECURITY AND SAFETY

Please do not leave bags and luggage unattended. There is no Coat Check, but you may leave things in the Meeting Office (C101 Classroom Building) for short periods if necessary.

DISCLAIMER

The GAC-MAC-SGA Secretariat cannot assume any liability for personal accidents, loss or damage to private property of conference participants and accompanying persons, either during or directly arising from the Sudbury 2023 GAC-MAC-SGA meeting. The registration fees to do not include insurance for participants, who should make their own arrangement with respect to health and travel insurance.

EMERGENCY INFORMATION

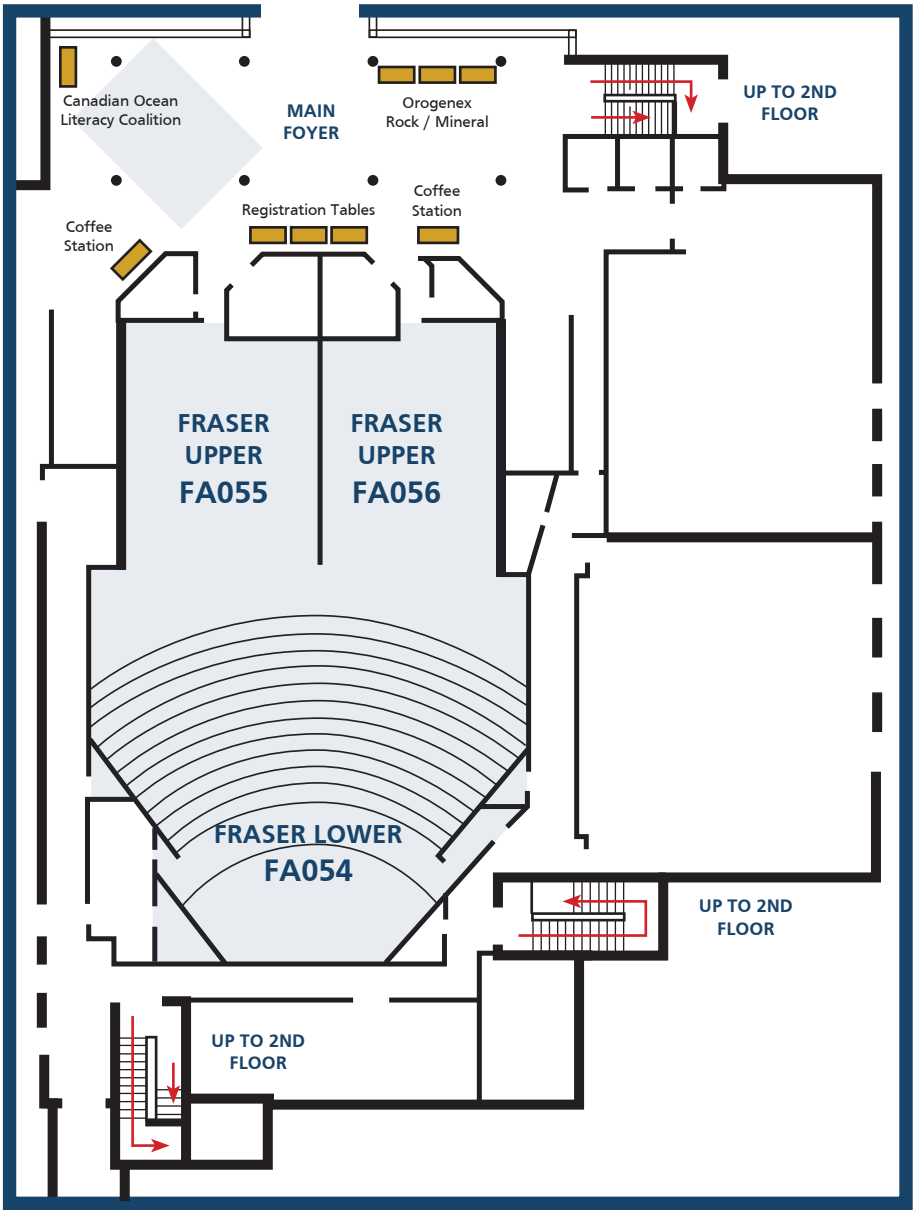
Meeting Secretariat	705-691-5755	Campus Security	705-673-6562
Heath Sciences North	705-523-7100	Emergency	911

LaurentianUniversity
UniversitéLaurentienne

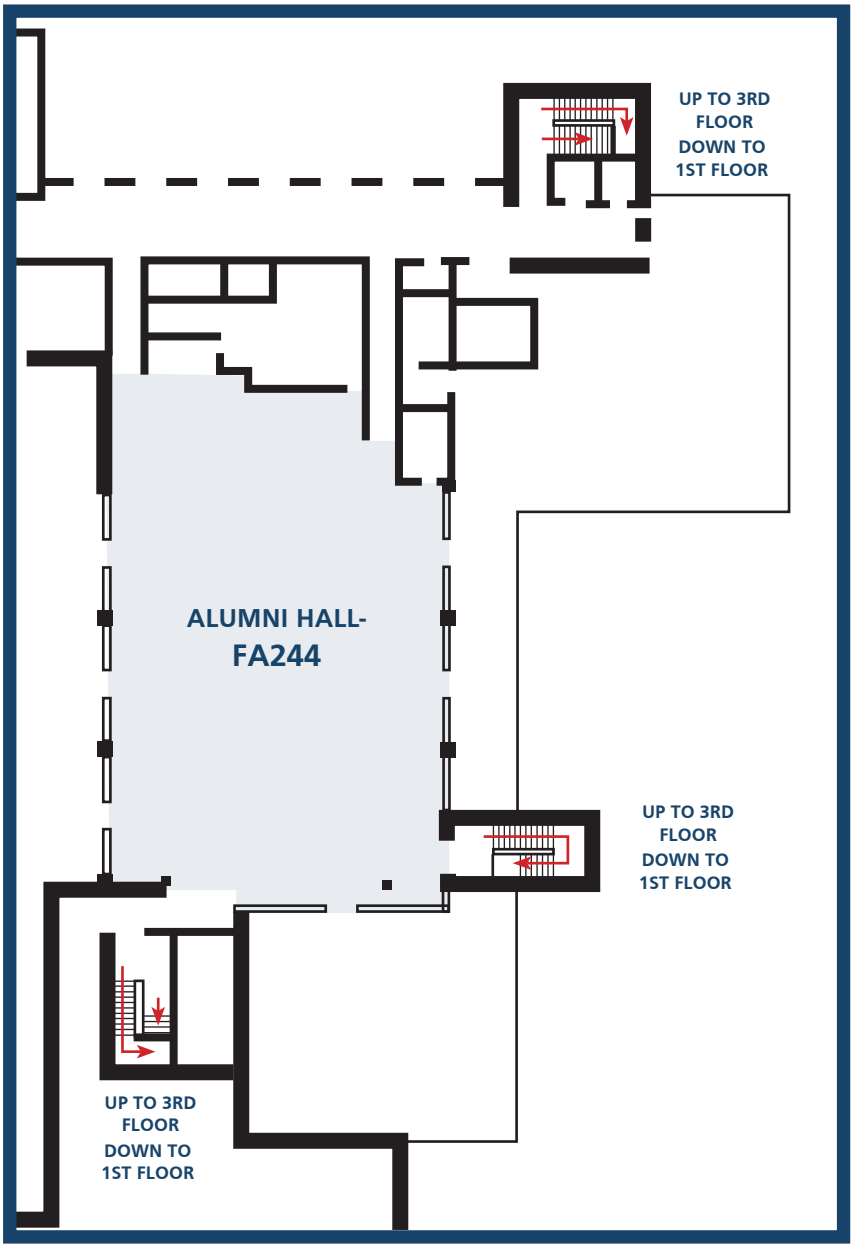
Campus map

laurentian.ca/campus-maps

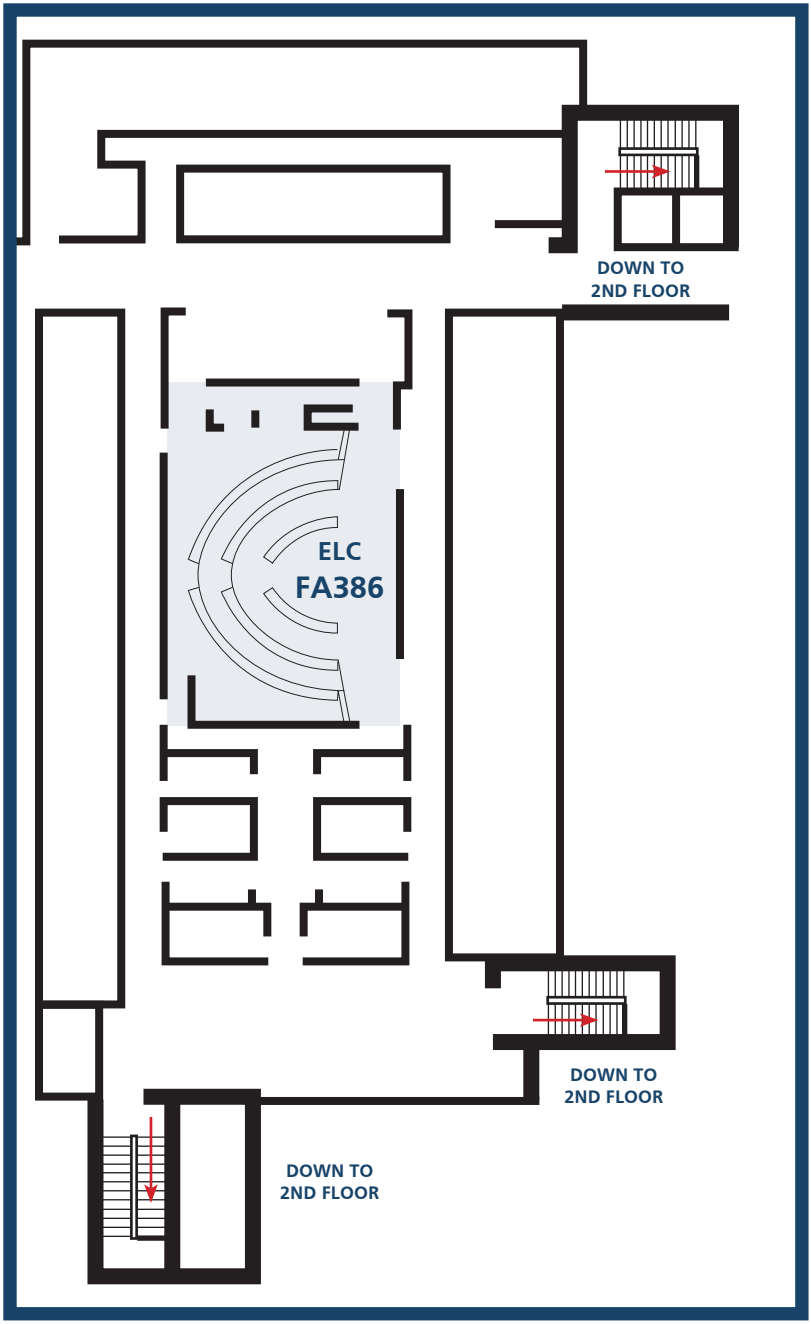
FRASER BUILDING – LEVEL 1
LOWER AND UPPER AUDITORIUMS



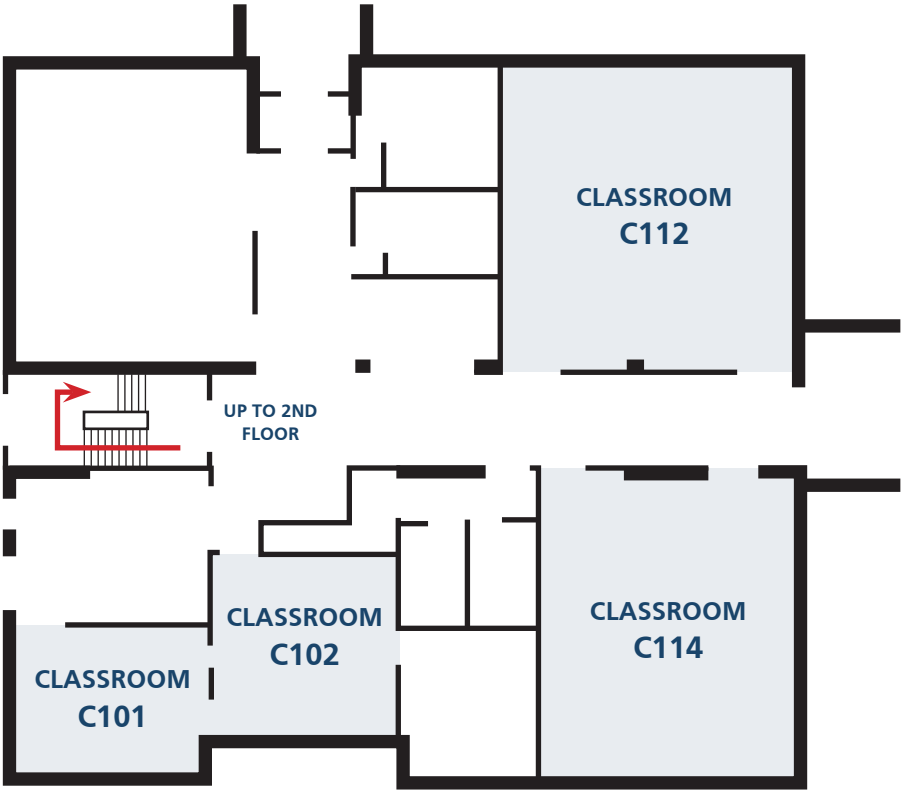
FRASER BUILDING – LEVEL 2
ALUMNI HALL AND UNIVERSITY CLUB



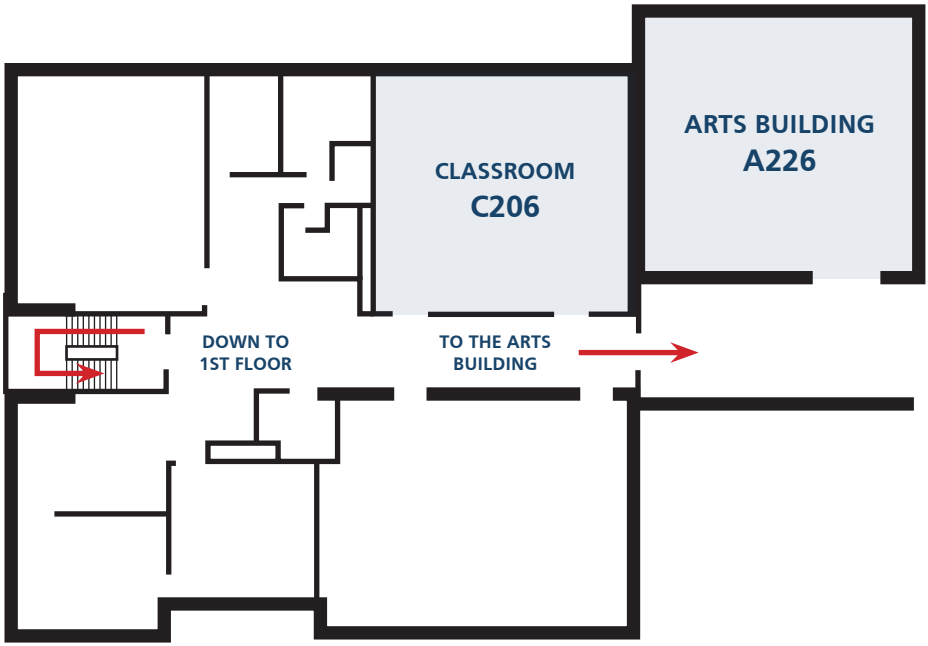
FRASER BUILDING – LEVEL 3
EXECUTIVE LEARNING CENTRE



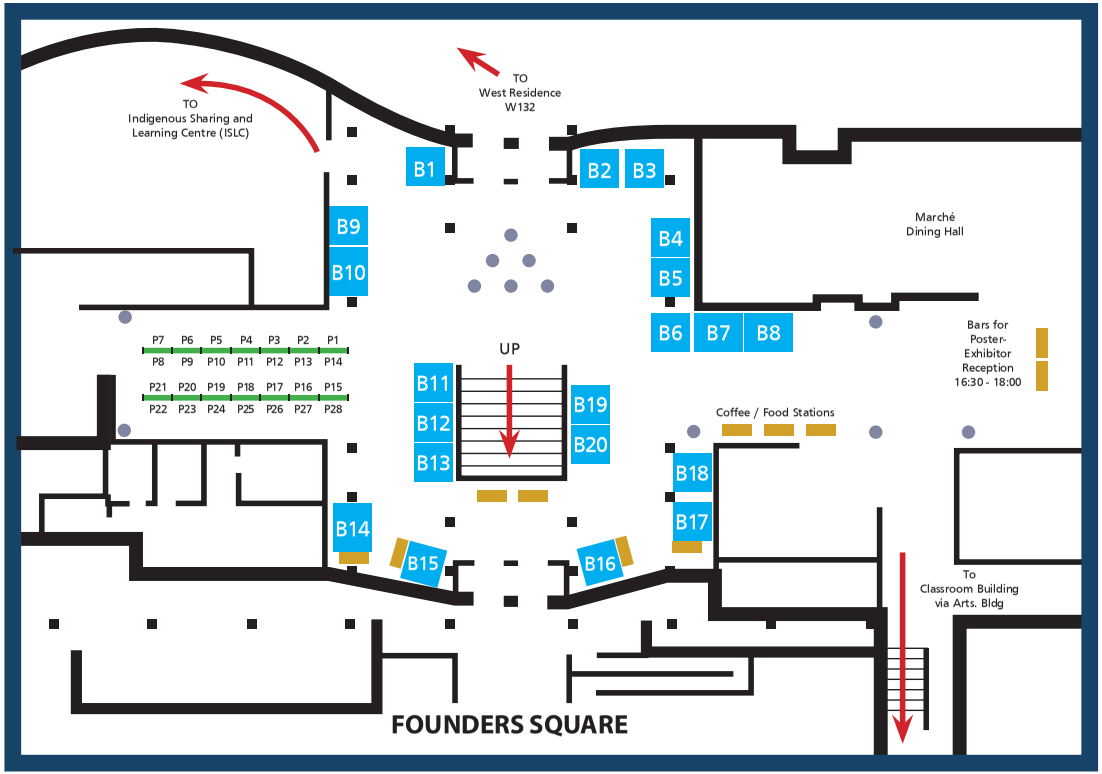
CLASSROOM BUILDING – LEVEL 1



CLASSROOM BUILDING – LEVEL 2



PARKER ATRIUM – LEVEL 1



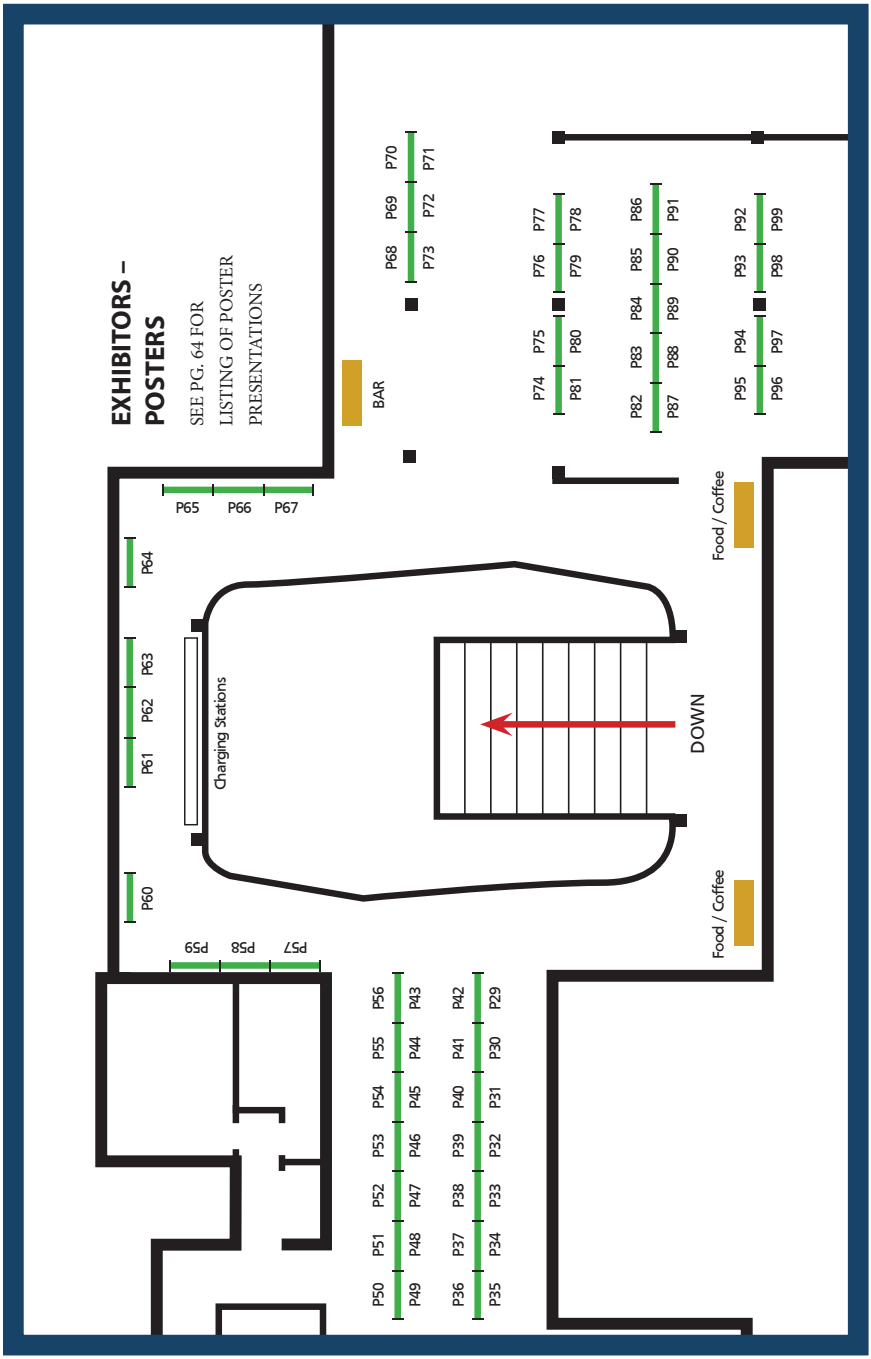
EXHIBITORS

Isomass	B1
Proto Manufacturing	B2
ODM	B3
OGS	B4, 5, 6
HES	B7
MERC	B8
GSC	B9
CoreLift	B10
GAC	B11
MAC	B12
SGA	B13
Vale	B14
IMDEX	B15
Iamgold	B16
Glencore	B17
Oreas	B18
Goodman School of Mines	B19
ACTLABs	B20

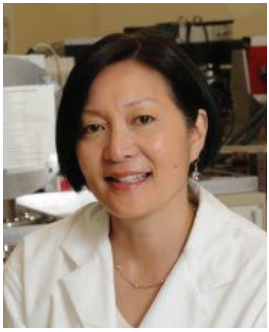
ALPHABETICAL LISTING

ACTLABs	B20
CoreLift	B10
GAC	B11
Glencore	B17
Goodman School of Mines	B19
GSC	B9
HES	B7
Iamgold	B16
IMDEX	B15
Isomass	B1
MAC	B12
MERC	B8
ODM	B3
OGS	B4, 5, 6
Oreas	B18
Proto Manufacturing	B2
SGA	B13
Vale	B14

PARKER ATRIUM – LEVEL 2



GAC AWARDS



Sandra Kamo (University of Toronto) – Logan Medal

The highest award of the Geological Association of Canada is presented to an individual for sustained distinguished achievement in Canadian earth science.

Dates and rates are everything in the science of Geology, and in understanding the evolution of our planet, the wider Solar System, and the evolution of life. Uranium-lead geochronology is the specialized field that provides the "gold standard" of dates and ages, particularly in deep time. The Canadian geoscience community is fortunate to be and have been at the forefront of this field, which took off with the "Krogh revolution". Sandra Kamo has been an integral part of that revolution and continues to lead as researcher and Director of the Jack Satterly Geochronology Laboratory, University of Toronto. Her sustained contributions to this field are enormous and involve numerous "firsts".

After obtaining a BSc from the University of Toronto, she immersed herself in isotope geology, with an MSc degree at McMaster University. This work resulted in the first precise, and accurate, U-Pb zircon ages for the iconic Barberton greenstone belt. She then joined the team at Jack Satterly Lab, where she was mentored by Tom Krogh and Don Davis, and quickly became Lab Manager. Collectively, this group developed the innovations that allowed, for the first time, million-year precision for ages of key geological events in deep time, in part made possible by world-leading sub-picogram laboratory blanks. Following the lab's move to the University of Toronto, Dr. Kamo became lab Director, while keeping up the pace of producing critical high-precision ages, published in well over 150 high-impact papers and reports. Recent innovations in the lab have permitted unprecedented age precision of <0.01%, i.e. a mere 100,000 years on a typical Proterozoic or Archean event.

Among the many important "firsts" are: Precise dating of shock breccias of the giant Vredefort impact structure, and the first documentation of shock microstructures in, and near-total resetting of zircon crystals, thus settling the debate on the origin of this structure; the first precise dating of Siberian Trap volcanism, showing it to be short-lived, intense, and contemporaneous with the Permo-Triassic mass extinction; in another seminal first, she identified and dated shocked zircons in the K-T boundary layer, in Italy, linking these zircons back to target rocks in the Yucatán Peninsula.

Finally, her many contributions to the community include mentoring and co-supervision of numerous students through the lab; production of expertly calibrated reference materials and spike solutions, used in labs worldwide; and development of new micro-analytical (FIB) dating techniques that promise to take this field to the next level.

GAC AWARDS

Jamie Kirkpatrick (McGill University) – W.W. Hutchison Medal

The W.W. Hutchison Medal is named after Dr. William W. Hutchison in recognition of his many contributions to Canadian and international geoscience. The medal is awarded to a young individual for recent exceptional advances in Canadian earth science research.

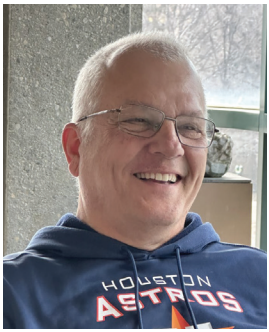
Jamie Kirkpatrick is a young structural geologist at McGill University who has made exceptional advances to our understanding of faults, fault rocks and earthquakes in recent years. His contributions are worthy of recognition by the GAC and the W.W. Hutchison Medal.

Jamie is a courageous researcher who breaks new ground by tackling long-standing difficult problems in creative new ways. His recent work on the rheology of fault rocks, the geometry of fault surfaces, and criteria for recognizing ancient fault rocks in the rock record represents an enormous contribution with many practical applications. His research is rigorous with attention to detail. Jamie combines quantitative theoretical research with field studies in critical settings to produce results that can be applied directly to real rock. The results of his research have direct implications for investigations as diverse as earthquake hazard mitigation, structural and tectonic field analysis, and exploration for orogenic gold deposits. Canadian Earth scientists in a variety of subdisciplines benefit from the advances made by Jamie's research. He has a well-funded research program that has resulted in a large number of publications and conference presentations.

An important aspect of the Hutchison Medal is the Distinguished Lecture Tour. Jamie is the perfect candidate for a nationwide lecture tour, as his research has implications for so many. In addition to being a star researcher, Jamie is an attentive teacher and mentor. He has taught and supervised student research at the doctoral, masters and undergraduate level, and knows how to share results and generate excitement about research with a diverse audience.

Jamie is an international leader in the earthquake science community and is pioneering the application of field observation and structural geology techniques to problems in tectonics, faults and shear zones. His advancement of quantitative methods and instrumentation applied to classic problems of understanding stress and strain is impressive and his effectiveness as a communicator and educator is ensuring that the geoscientists of tomorrow are well-prepared to address pressing societal issues. Jamie is rapidly establishing himself as one of the bright young lights in the fields of earthquake science and structural geology.

GAC AWARDS



Jeff Young (University of Manitoba) – E.R. Ward Neale Medal

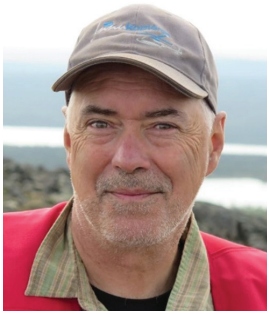
The Neale Medal, named after the legendary E.R. Ward Neale, is awarded to an individual for sustained outstanding efforts in sharing Earth science with Canadians.

Jeff Young is nominated for the E.R. Ward Neale Medal for his sustained outstanding efforts in geoscience education outreach. During his career as a Senior Instructor at University of Manitoba, Jeff has focussed his service work for the last 35 years on outreach, where he has become the mainstay in geological outreach in Winnipeg and across the province of Manitoba. His overall outreach goals are for people to appreciate our Earth and to foster awareness of the geosciences. He particularly extends efforts to engage with K-12 educators and students, to have them appreciate how geology impacts daily life, how geological processes shape the Earth, and the importance of geological resources. His enthusiastic personality and passion for geosciences connect Jeff easily with people from all backgrounds and ages, from young children to families to seniors.

The variety of activities he undertakes is itself noteworthy: Jeff answers the call, making himself available and fostering enthusiasm in those with whom he interacts. Among his most noteworthy activities, Jeff delivers professional development workshops and creates geoscience activities for primary and secondary school teachers, with a focus on hands-on experiences and practical examples to educate them about the Earth and foster the delivery of science and particularly Earth Science to their students. Jeff directly engages and educates young students, ranging from activity-laden trips at the museum in the Department of Earth Sciences, to career track activities for "at-risk" high school students.

He interacts with families at public events, identifying their rock and mineral samples, raising the profile of the geosciences, and discussing the viability of geoscience as a career choice with teens and their parents. Jeff initiates and fosters meaningful partnerships with educational institutions, government agencies, private industry, philanthropic organizations, community groups, and professional organizations with the goal of sharing Earth Sciences with the public. He is resourceful in delivering activities, looking for creative funding opportunities. He actively seeks opportunities to partner with platforms that educators, students, and the public recognize and use. Jeff is an engaging and enthusiastic geoscientist, who has spent his career communicating Earth Science to individuals of varied ages and backgrounds, and informing and educating generations of Canadian citizens about the Earth and its resources.

GAC AWARDS



David Corrigan – Howard Street Robinson Medal – Precambrian Division 2022

The Howard Street Robinson Medal recognizes a respected and well-spoken geoscientist who will further the scientific study of Precambrian Geology and/or Metal Mining through a presentation of a distinguished lecture across Canada.

David Corrigan was the 2022 recipient of the Howard Street Robinson Medal for the Precambrian Division of the Geological Association of Canada. The award alternates annually between the Precambrian Division and the Mineral Deposits Division.

David Corrigan's work epitomises the purpose of this award "for the furtherance of scientific study of Precambrian geology and metal mining". David's career has focused largely on studying various parts of the Canadian Shield, in particular the Proterozoic orogens that stitch its various pieces together. His graduate and post-doctoral research focused on the Grenville orogen. However, he really made his mark while working for the GSC across the Trans-Hudson orogen, including Saskatchewan and Manitoba, Nunavut, and most recently Labrador and Quebec. He has published landmark syntheses of the geological and tectonic development of this diverse and complex accretionary orogenic system that should be influential for many years to come. Throughout his career he has always been interested not only in tectonics, but has published numerous reports on the mineral potential of his various study areas in GSC Current Research and elsewhere.

David is also a good scientific citizen, contributing to multi-disciplinary projects including Lithoprobe (THOT & ECSOOT), and organising and contributing to various GSA and GAC sessions on Paleoproterozoic geology and tectonics. He has been a terrific mentor to students and young scientists – David really recognises potential when he sees it. During his time at the GSC he encouraged promising student field assistants to pursue graduate studies, and helped a number of early-career scientists establish field-based research programs through collaboration with the GSC. In short, David Corrigan's work has had an extremely wide-ranging and important impact on the study of Precambrian geology in Canada and his accomplishments are highly deserving of the Howard Street Robinson Medal.

GAC AWARDS

Eric Mountjoy Exchange Awards 2023 – Medhi Jouhari & Isabelle Therriault

The Eric Mountjoy Award is to encourage the exchange of young geoscientists between Quebec and other parts of Canada. The recipients for 2023 are Mehdi Jouhari (Université Laval) and Isabelle Therriault (UBC Okanagan).

Mary-Claire Ward Geoscience Award – PDAC, GAC, Watts Griffis McOuat Ltd. – Darius Kamal

The goal of this is to encourage and support a graduate student in Canada whose thesis is likely to increase our knowledge of the geological history of Canada through mapping. The 2023 recipient is Darius Kamal (University of British Columbia).

MAC AWARDS

The following awards will be presented during the MAC Annual Luncheon
Friday, May 26, 12:00-13:30, Room W132

Peacock Medal – Dr. David R. Lentz

The Peacock Medal is awarded to a scientist who has made outstanding contributions to the mineral sciences in Canada. There is no restriction regarding nationality or residency. The award will be presented to Dr. David R. Lentz, Research Chair in Economic Geology for the Department of Earth Sciences, University of New-Brunswick.

David received his BSc (1983) and MSc (1986) degrees in geology from the University of New Brunswick (UNB) in Fredericton. He completed a PhD (1992) at the University of Ottawa and then worked with the Geological Survey of Canada for three years. In 1994, Lentz joined the New Brunswick Geological Survey as their mineral deposit geologist. In 1999, he won the Harvey Gross Young Scientist Medal from the Geological Association of Canada (GAC). Since 2000, he has held the Research Chair in Economic Geology at UNB, with a research focus on the petrogenesis of ore deposits. He has been a P. Geo since 2001.

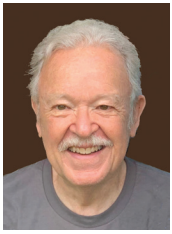
Dave has been honored with many awards: GAC's Distinguished Service Award; the New Brunswick Association of Professional Engineers & Geoscientists' Loring Bailey Geoscience Award; the Atlantic Geoscience Society's Gesner Medal; the Canadian Institute of Mining, Metallurgy and Petroleum's Julian Boldy Award; and the International Association on the Genesis of Ore Deposits' International Distinguished Lecturer Award. Dave is also a Fellow of Geoscientists Canada. Notably, he has edited three popular ore deposits– related books for the Geological Association of Canada and the Mineralogical Association of Canada and has published over 300 journal articles,

in addition to numerous government publications. Lentz is particularly well known for his short courses, workshops, and field trips. Currently, he is the associate editor for Journal of Geochemical Exploration, Ore Geology Reviews, Journal of Earth Science, and FACETS. He is subject Editor for the Economic Geology section of Frontiers in Earth Science.

Young Scientist Award – Dr. Carl Guilmette

The award will be presented to Pr. Carl Guilmette, Bachelor in Geology Programme Chair for the Département de géologie et de génie géologique, Faculté des sciences et de génie, Université Laval.

Carl received his BSc (2002) in geological Engineering and his MSc (2005) in Metamorphic Petrology at Université Laval, followed by a joint ULaval-Memorial PhD on Mesozoic high-pressure granulites of Tibet in 2010. He completed a post-doctoral fellowship in finite element numerical modeling at Dalhousie University between 2010-2012, then worked as Assistant Professor at University of Waterloo between 2012-2014. He joined Université Laval in May 2014 as holder of the Virginia-Gaumont chair in Tectonics and Structural Geology. Carl's research interests revolve around the investigation of the timing, duration and rates of tectonometamorphic processes in modern and ancient orogens through the application of geological mapping, phase equilibria modeling, and multi-system petrochronology, and their implications for global geodynamics and metallogeny. He is teaching Metamorphic Petrology, Structural Geology and Field School. At the moment, his research program is mainly focused in the Paleozoic Canadian Appalachian ophiolites, in the Paleoproterozoic Trans-Hudson orogen and in the Meso- to Neoarchean Superior Craton.



Hawley Medal

The Hawley Medal is awarded to Drs. Paula C. Piilonen and Glenn Poirier (Canadian Museum of Nature), William Lechner, Ralph Rowe (Canadian Museum of Nature), and Peter Richards (Oberlin College), for the best paper published in The Canadian Mineralogist in 2022 and entitled "Zeolite Minerals from Wat Ocheng, Ta Ang, Ratanakiri Province, Cambodia – Occurrence, Composition, and Paragenesis"

MDD AWARDS

Duncan Derry Medal – Stephen Piercey

Stephen J. Piercey has BSc(Hons) and MSc degrees from Memorial University of Newfoundland (Canada) and a PhD from the University of British Columbia (Canada). From 2001-2008 he was Assistant and Associate Professor in the Department of Earth Sciences and Mineral Exploration Research Centre at Laurentian University.

From 2007-2009 he was a full-time consulting geologist and the principal of SJPGeoConsulting. Since 2009 he has been at Memorial University where he was previously the NSERC-Altius Industrial Research Chair in Mineral Deposits (2009-2016) and currently holds the rank of University Research Professor. His research, teaching, and consulting interests involve integrated field- and laboratory-based studies focused on the genesis of mineral deposits and the tectonic evolution of mountain belts, with emphasis on volcanogenic massive sulfide (VMS), orogenic Au, and U deposits.

His recent and current research on VMS deposits has focused on their larger-scale tectonic and magmatic settings, with an emphasis on their volcanic, sedimentary, and hydrothermal reconstruction; sources of metals, fluids, and sulfur; isotopic tracer and mineral scale understanding of magmatism and its relationship to VMS deposit formation; and their relationship to the evolution of the lithospheric, hydrosphere, atmosphere, and biosphere. He has previously been awarded the Lindgren Medal (SEG), Gross Medal (MDD-GAC), Past President's Memorial Medal (CIM), Howard Street Robinson Medal (GAC), and Hutchison Medal (GAC), and is Fellow of Geoscientists Canada for his contributions to the geoscience profession in Canada. He is currently the President Elect of the Society of Economic Geologists.

William Harvey Gross Medal – Christopher Lawley

Lawley has been working as a research scientist at the Geological Survey of Canada since 2012. His research experience blends analytical method development with field studies to investigate the sources and drivers of mineral systems. More recently, Lawley has become interested in the application of machine learning to sustainable development issues. His research results have been applied across Canada, the United States, and Australia to support mineral exploration and strengthen the global supply chains of critical raw materials.

FIELD TRIPS

PRE-CONFERENCE FIELD TRIPS – Descriptions are on the meeting website.

FT03 - Geological Traverse of the Sudbury Impact Structure and Evolution of the Impact Melt

Leaders: Dustin Peters (dpeters@laurentian.ca), Sandra Baurier-Aymat (sbaurier_aymat@laurentian.ca), Shirley Peloquin (Shirley.Peloquin@ontario.ca), Caroline Gordon (caroline.gordon@ontario.ca)

Sponsor: MERC, Duration: 1 day, pre-meeting, A) 23 May, B) 24 May.

FT06 - Multiscale and Polyphase Deformation Structures in the Grenville Front Tectonic Zone near Sudbury,

Leaders: Dazhi Jiang (djiang3@uwo.ca), Changcheng Li (changcheng.li@uwaterloo.ca)

Sponsor: Western U, Duration: 1 day, post-meeting, 28 May.

POST-CONFERENCE FIELD TRIPS – Descriptions are on the meeting website.

FT01 - Base, Critical, and Precious Metals Mineralization in the Metasomatic Iron & Alkali-Calcic Systems of the Southern Province in the Sudbury Area

Leaders: Jean-Francois Montreuil (Jean-François Montreuil montreuil.jean.francois@gmail.com), Louise Corriveau (louise.corriveau@nrcan-rncan.gc.ca), Wyatt Bain (wmbain@lakeheadu.ca),

Sponsor: MacDonald Mines, Duration: 2 days, post-meeting, 28-29 May.

FT05 - Ice on the Rocks: Quaternary Geology of the Sudbury Region

Leaders: Andrea Marich (andrea.marich@ontario.ca), Riley Mulligan (riley.mulligan@ontario.ca), Abigail Burt (abigail.burt@ontario.ca), Grant Hagedorn (grant.hagedorn@ontario.ca),

Sponsor: OGS, Duration: 1 day, post-meeting, 28 May.

FT07 - Exploring Differential Metal Endowment: A comparison of the Eastern (Rouyn-Noranda) and Western (Swayze) Abitibi Greenstone Belt

Leaders: Harold Gibson (hgibson@laurentian.ca), Thomas Gemmel (thomas.gemmel@ontario.ca), Taus Jørgensen (tjoergensen@laurentian.ca), Evan Hastie (evan.hastie@ontario.ca), Marina Schofield (mschofield@laurentian.ca), Ras Haugaard (rnielsen@laurentian.ca).

Sponsor: MERC, Duration: 4 days, post-meeting, 28-29-30-31 May.

FT08 - Paleoproterozoic Glacial, Microbially Induced, Tidal, and Seismic Deposits of the Huronian Supergroup, Elliot Lake Region, Canada

Leaders: Patricia Corcoran (pcorcor@uwo.ca), Phil McCausland (pmccausl@uwo.ca), Sponsor: Western U, Duration: 2 days, pre-meeting, 23-24 May.

FT09 - Sudbury Offset Dikes and Associated Nickel-Copper-Platinum Group Element Mineralization

Leaders: Henning Seibel (hseibel@laurentian.ca), Michael Lesher (mlesher@laurentian.ca)

Sponsor: MERC, Duration: 3 days, post-meeting, 28-29-30 May.

WORKSHOPS AND SHORT COURSES

PRE CONFERENCE – Descriptions are on the meeting website.

W04 - Ore Microscopy

Leaders: Simon Kocher (skocher@mines.edu), Tobias Fusswinkel (tobias.fusswinkel@emr.rwth-aachen.de)

Sponsor: SGA, Duration: 2 days, pre-meeting, 23-24 May.

W01 - Curriculum Connections, Educator Professional Learning (K-12)

Leaders: Lesley Hymers (lhymers@miningmatters.ca), Deana Schwarz (dschwar3@uwo.ca), Veronica Klassen (veronicaklassen5@gmail.com)

Sponsors: Mining Matters/APGO Education Foundation/EdGEO/Canadian Geoscience Education Network, Duration: 1 day, post-meeting, 28 May.

POST CONFERENCE – Descriptions are on the meeting website.

SC01 - Mineral Prospectivity Mapping

Leader: Jeff Harris (603jharris@gmail.com), Sponsor: MERC, Duration: 1 day, post-meeting, 28 May.

SOCIAL AND SPECIAL EVENTS

SOCIAL EVENTS – Descriptions are on the meeting website.

GAC President's Reception

Wednesday 24 May, 16:00-18:00, Science North, by invitation only.

SE01 – Icebreaker Reception

Wednesday 24 May, 18:00-21:00, Science North.

SE02 - Geological Association of Canada Award Luncheon

Thursday 25 May, 12:00-13:30. GAC members annual luncheon and award ceremony for the Logan, Hutchison, Neale, and Ambrose medals.

SE03 - Mineralogical Association of Canada Award Luncheon

Friday 26 May, 12:00-13:30. MAC members annual luncheon and award ceremony for the Peacock, Hawley, Young Scientist, and Berry medals.

SE04 - GAC Mineral Deposits Division Award Luncheon

Saturday 27 May, 12:00-13:30. MDD members annual luncheon and award ceremony for the Derry, Gross, and Robinson medals.

SE06 - MDD Student - Industry Networking Event

Friday, May 26, 18:00-21:00. This event offers students, academic and industry leaders a unique networking opportunity in the casual atmosphere of one of Sudbury's best mining landmarks.

SE07 - Transport to Downtown Dining Venues

Saturday 27 May, 18:00. Downtown Sudbury has a range of restaurants and pubs, which are very busy on Saturday nights (as the Stompin' Tom Connors song goes); reservations are recommended for most restaurants. A list of establishments and road maps will be included in all registration packages.

SPECIAL EVENTS – Descriptions are on the meeting website.

SP01 - Listening, Learning, and Respecting Builds Better Relationships with Indigenous Nations

Chair: David Pearson.

Friday 26 May, 17:00-19:00, Indigenous Learning Centre. Free but registration required, maximum 96 participants, open to GAC-MAC-SGA 2023 delegates and the general public.

SP02 - Women in the Geosciences

Chair: Ken Witherly.

Friday 26 May, 13:30-16:30, Willet Green Miller Centre Auditorium. Free but registration required, maximum 40 participants, open to GAC-MAC-SGA 2023 delegates and the general public.

Sponsor: Women Geoscientists in Canada

SP03 - Arctic - A Nexus of Resource Development, Climate Change, and Indigenous Wellbeing - Multiple Perspectives

Chairs: Anna Bidgood, Brendan Dyck, Philip Reiger, John Thompson.

Thursday 25 May, 15:10-17:00, FA386 Executive Learning Centre. Registration not required, open to GAC-MAC-SGA 2023 delegates.

SP04 - Tours of Ontario Geoscience Laboratories

Leader: Marcus Burnham.

Thursday 25 May and Friday 26 May, 12:30-13:30, Willet Green Miller Centre. Registration Required: Maximum 10 persons per day, must sign up at Registration Desk (locations and times above). Long pants and closed-top shoes are required.

SP05 – "Gem Detectives"

Organizers: Tobias Roth, Jacob Hanley.

Thursday 25 May, 18:00-20:00, open to the public. Sponsors: GAC-MAC-SGA-HES.

PLENARY LECTURES

A02 – GAC Logan Medalist

Saturday 17 May, 11:10 - 12:00. Room A226

Sandra Kamo: The time that Sir William Logan never had: a brief history of U-Pb dating at the Jack Satterly Geochronology Laboratory

A03 – CSRG Middleton Medal Award Ceremony and Lecture

Thursday 25 May, 11:10 - 12:00. Room A226

Brian Pratt: The quest for tsunami deposits in ancient shelf and epeiric seas: what are the telltale signatures?

A04 – MDD Derry Medalist Lecture

Thursday 25 May, 11:10 - 12:00. Room FA054

Stephen Piercey: Volcanogenic Massive Sulfide (VMS) Deposits: New Ideas and Future Research Directions

A05 – MDD Gross Medalist

Saturday 17 May, 11:10 - 11:35. Room FA054

Christopher Lawley: The time and place for orogenic gold deposits

A06 – MAC Peacock Medal Lecture

Friday 26 May, 11:10 - 12:00. Room FA054

David Lentz: Diagnosing Chalcopyrite Disease: is sphalerite really sick or just a disorder?

A07 – MAC Young Scientist Medalist

Saturday 17 May, 11:10 - 11:35. Room FA054

Carl Guilmette: TBA

WEEK AT A GLANCE - TUE 23 MAY - WED 31 MAY

Number	Name	Room	Building/ Departure Location	Tue 23 May	Wed 24 May	Thu 25 May	Fri 26 May	Sat 27 May	Sun 28 May	Mon 29 May	Tue 30 May	Wed 31 May
Inv Only	GAC President's Reception	Ramsey Room	Science North		1630-1800							
SE01	Icebreaker	L3-L4 Museum	Science North		1800-2100							
SE02	GAC Award Luncheon	W132	West Residence			1200-1330						
SE04	MAC Award Luncheon	W132	West Residence				1200-1330					
SE05	MDD Award Luncheon	W132	West Residence					1200-1330				
SE06	Student-Industry Networking	Lobby	Dynamic Earth				1800-2100					
SE07	Downtown Transport		Parker Atrium					1800-2200				
	Technical/Plenary Sessions	see Schedule				0800-1630	0800-1630	0800-1630				
SP01	Indigneous Relations	ISLC	Parker Building				1700-1900					
SP02	Women in Geosciences	Auditorium	WGMC				1330-1630					
SP03	Arctic	FA386	Fraser Auditorium Bldg			1510-1700						
SP04	Laboratory Tours	Geo Labs	WGMC			1230-1330	1230-1330					
SP05	Public Mineral ID Event	Lobby & Theatre	Dynamic Earth			1800-2000						
FT01	Metasomatic Fe		Fraser Parking Lot						0800-1700	0800-1700		
FT03A	Sudbury Traverse		Fraser Parking Lot	0800-1700								
FT03B	Sudbury Traverse		Fraser Parking Lot		0800-1700							
FT05	Sudbury Quaternary		Fraser Parking Lot						0800-1700			
FT06	Grenville Front		Fraser Parking Lot						0800-1700			
FT07	Noranda-Swayze		Fraser Parking Lot						0800-1700	0800-1700	0800-1700	0800-1700
FT08	Huronian Sedimentology		Fraser Parking Lot	0800-1700	0800-1700							
FT09	Sudbury Offsets		Fraser Parking Lot						0800-1700	0800-1700	0800-1700	
WS01	K-12 Educator	B8030	WGMC						0800-1700			
WS04	Ore Microscopy	B5062	WGMC	0800-1700	0800-1700							
SC01	Mineral Prospectivity Mapping	B8045	WGMC						0800-1700			

TECHNICAL PROGRAM AT A GLANCE – THURSDAY, MAY 25

Start	End	Duration	FA054	FA244	FA055	FA056	FA386	A226
		Room Number	**FA054**	**FA244**	**FA055**	**FA056**	**FA386**	**A226**
			SY01-1: Critical Minerals	**SS16-1:** Planetary Impacts	**SS21-1:** Exploration Footprints	**SY02-1:** Crustal Arch & Metal Endowment	**GS03-1**: Geochemistry	**SS11-1:** Env. Mine Waste
8:00	8:20	0:20	**OGS Director**	**Spray**	Ansdell	Hinchey	Polk	**Pakostova**
8:20	8:40	0:20	Kerr	**Spray**	Tunc	Gemmell	Li	**Pakostova**
8:40	9:00	0:20	Corriveau	Chinchalkar	Yang	Vice	Brookfield	**McCutcheon**
9:00	9:20	0:20	Fayek	Matterson	Bidgood	Tedeschi	Stanley	**McCutcheon**
9:20	9:40	0:20	**Break**					
			SY01-2: Critical Minerals	**SS16-2**: Planetary Impacts	**SS21-2**: Exploration Footprints	**SY02-2**: Crustal Arch & Metal Endowment	**SS02-1**: Isotopes	**SS11-2**: Env. Mine Waste
9:40	10:00	0:20	**Williams-Jones**	Saini	**Lypaczewski**	**Bethune**	Gregory	- - - -
10:00	10:20	0:20	**Williams-Jones**	McCausland	**Lypaczewski**	**Bethune**	Barré	Schudel
10:20	10:40	0:20	Beland	Tornabene	Girard	Bou	Edgeworth	Schaffer
10:40	11:00	0:20	Sappin	Brookfield	Fournier	Strongman		Lockhart
11:10	12:00	0:50	**MDD Derry Medalist:** Stephen Piercey					**CSRG Middleton Medalist**: Brian Pratt
12:00	13:30	1:30	**Lunch** (Founder's Square)					
			SY01-3: Critical Minerals	**SS16-3:** Planetary Impacts	**SS21-3:** Exploration Footprints	**SY02-3:** Crustal Arch & Metal Endowment	**SS02-2**: Isotopes	**SS11-3:** Env. Mine Waste
13:30	13:50	0:20	Linnen	Hostrawser	Pedemonte	**Lafrance**	Gosse	Wang
13:50	14:10	0:20	Launay	Jaimes Bermudez	Valentin dos Santos	**Lafrance**	Paige	Vessey
14:10	14:30	0:20	Santaguida	Genest	Leung	Li	Swing	Ardakani
14:30	14:50	0:20	Cawood	Brookfield	Román	Nymoen	Currie	Utting
14:50	15:10	0:20	**Break**					
			SY01-4: Critical Minerals	**SY05-1:** Sudbury Structure		**SY02-4:** Crustal Arch & Metal Endowment	**SP-03:** Arctic	**SS11-4:** Env. Mine Waste
15:10	15:30	0:20	Houlé	**King**		**Meng**	Loginova	Gnanapragasam
15:30	15:50	0:20	Gao	**King**		**Meng**	Itchuaqiyaq	Enright
15:50	16:10	0:20	Grammatikopoulos	Vayavur		Coldebella	**Lawley**	Lakanen
16:10	16:30	0:20	Seal	Haugaard		Montsion	Discussion	Starzynski
16:30	18:00	1:30	**Posters & Exhibits (Parker Atrium)**					

Start	End	Duration	C206	C114	C112	WR132
		Room Number	**C206**	**C114**	**C112**	**WR132**
			SS07-1: Grenville	**GS04-1:** Geophysics	**SS13-1:** Geobiology	
8:00	8:20	0:20	**Spencer**	Della Justina		
8:20	8:40	0:20	**Spencer**	Hume	Robbins	
8:40	9:00	0:20	Slagstad	Louwerse	**Stueeken**	
9:00	9:20	0:20	Hyndman	Prikhodko	**Stueeken**	
9:20	9:40	0:20	**Break**			
			SS07-2: Grenville		**SS13-2**: Geobiology	
9:40	10:00	0:20	Corrigan		Rainbird	
10:00	10:20	0:20	Indares		Coxon	
10:20	10:40	0:20	Lotout		Babechuk	
10:40	11:00	0:20	Kinney		Li	
11:10	12:00	0:50				
12:00	13:30	1:30	**Lunch** (Founder's Square)			**GAC Award Luncheon**
			SS07-3: Grenville	**SS10-1:** Cratons Kimberlites Diamonds	**SS13-3:** Geobiology	
13:30	13:50	0:20	Pattison	**Shirey**	**Lechte**	
13:50	14:10	0:20	van Rooyen	**Shirey**	**Lechte**	
14:10	14:30	0:20	Strowbridge	Graversen		
14:30	14:50	0:20	Li	Bowerman		
14:50	15:10	0:20	**Break**			
			SS07-4: Grenville	**SS10-2:** Cratons Kimberlites Diamonds	**SS25-1:** Precambrian Sedimentology	
15:10	15:30	0:20	Easton	de Carvalho	**Slotznick**	
15:30	15:50	0:20	Dickin	Koptev	**Slotznick**	
15:50	16:10	0:20	Chen	Fairhurst	Serna Ortiz	
16:10	16:30	0:20		Schulze	Brugman	
16:30	18:00	1:30	**Posters & Exhibits (Parker Atrium)**			

TECHNICAL PROGRAM AT A GLANCE – FRIDAY, MAY 26

Start	End	Duration	FA054	FA244	FA055	FA056	FA386	A226
			SY01-5: Critical Minerals	**SY05-2:** Sudbury Structure	**SY04-1:** Gold Deposits	**SS05-1:** VMS	**SS20-1:** Pegmatites	**SS11-5:** Env. Mine Waste
08:00	08:20	00:20	Marquis	Litza	**Dubé**	**Gibson**	Pfister	Marmier
08:20	08:40	00:20	Tait	Szumila	**Dubé**	**Gibson**	Diao	Marquez
08:40	09:00	00:20	Hastie	**Prevec**	Honsberger	DeWolfe	**Webber**	Jamieson
09:00	09:20	00:20	Smith	**Prevec**	Rodrigues dos Santos	Vite-Sanchez	**Webber**	Ali
09:20	09:40	00:20	**Break**					
			SY01-06: Critical Minerals	**SY05-3:** Sudbury Structure	**SY04-2:** Gold Deposits	**SS05-2:** VMS	**SS20-2:** Pegmatites	**SS11-6:** Env. Mine Waste
09:40	10:00	00:20	**Jowitt**	Seibel	Maw	Hanley	Breasley	Silva-Caceres
10:00	10:20	00:20	**Jowitt**	Peters	Bhalla	Naulot	Duguet	Coudert
10:20	10:40	00:20	Nadeau	Debono	Mongeau	Bluemel	Silva	McHale
10:40	11:00	00:20	Burnham	Prevec	Layne	Paiement	Nissen	Khorshidi
11:10	12:00	00:50	**MAC Peacock Medalist:** David Lentz					
12:00	13:30	01:30	**Lunch (Founder's Square)**					
			SY01-07: Critical Minerals	**SY03-1:** Magmatic Ores	**SY04-3:** Gold Deposits	**SS03-1:** Metal Ocean	**SS20-3:** Pegmatites	**SS11-7:** Env. Mine Waste
13:30	13:50	00:20	Osinski	**Maier**	**Goldfarb**	**Gibson**	**Teodoro**	Berryman
13:50	14:10	00:20	Easton	**Maier**	**Goldfarb**	**Gibson**	**Teodoro**	Flesch
14:10	14:30	00:20	Yakymchuk	Lesher	Beaudoin	**Galley**	Longuépée	Guatame-Garcia
14:30	14:50	00:20	Kerr	Peters	Ribeiro	**Galley**	Menuge	Mykytczuk
14:50	15:10	00:20	**Break**					
			SY01-08: Critical Minerals	**SY03-2:** Magmatic Ores	**SY04-4:** Gold Deposits	**SS03-2:** Metal Ocean	**SS20-4:** Pegmatites	**GS02:** Environ
15:10	15:30	00:20	Tekin	SJ Barnes	Fusswinkel	**Bethell**	Amyotte	Rausis
15:30	15:50	00:20	Concepcion	Houlé	Kolb	**Bethell**	Dias	Schmidt
15:50	16:10	00:20	Lawley	Kuster	Campos	Umbsaar	Müller	
16:10	16:30	00:20	Huston	Bain		Williamson	Cardoso-Fernandes	
16:30	18:00	01:30	**Posters & Exhibits** (Parker Atrium)					

Start	End	Duration	C206	C114	C112	WR132	ISLC	WGMC Auditorium
			SS09-1: CJES at 60	**SS22-1:** Cordillera	**SS25-2:** Precambrian Sedimentology			
08:00	08:20	00:20	Pehrsson	Cobbett	Maloney			
08:20	08:40	00:20	**S-J Barnes**	Zagorevski	Rainbird			
08:40	09:00	00:20	**S-J Barnes**	**Soucy La Roche**	Shawwa			
09:00	09:20	00:20	Mosher	**Soucy La Roche**	Hazen			
09:20	09:40	00:20	**Break**					
			SS09-2: CJES at 60	**SS22-2:** Cordillera	**SS17-1:** Paleozoic Basins			
09:40	10:00	00:20	**Russell**	**Rasmussen**	Osawa			
10:00	10:20	00:20	**Russell**	**Rasmussen**	Whitaker			
10:20	10:40	00:20	Kennedy	Hyndman	Sproat			
10:40	11:00	00:20	Paulen	Ovas	Bingham-Koslowski			
11:10	12:00	00:50						
12:00	13:30	01:30	**Lunch (Founder's Square)**			**MAC Award Luncheon**		
			SS09-3: CJES at 60	**SS06-1:** Quaternary Glaciology	**SS17-2:** Paleozoic Basins			**SP-02:** Women in Geosciences
13:30	13:50	00:20	Cutts	Ross	Matheson			Survey Results
13:50	14:10	00:20	**Halverson**	Normandeau	Bell			Survey Results
14:10	14:30	00:20	**Halverson**	Bello Rodriguez	Chen			Discussion
14:30	14:50	00:20		Gage	Bhattacharya			Discussion
14:50	15:10	00:20						
			GS07: Igneous Met-Volc	**SS06-2:** Quaternary Glaciology	**GS13:** Sedimentology			
15:10	15:30	00:20	Baker	Marich	Power			
15:30	15:50	00:20	Bilodeau	Mulligan	Silva			
15:50	16:10	00:20	Higgins	Gauthier	Bhattacharya			
16:10	16:30	00:20	Yousefil	Gao	Overare			
16:30	18:00	01:30	**Posters & Exhibits** (Parker Atrium)					
17:00	19:00	02:00					**SP-01:** Indigenous Relations	

TECHNICAL PROGRAM AT A GLANCE – SATURDAY, MAY 27

Start	End	Duration	FA054	FA244	FA055	FA056	FA386	A226
			SS26-1: Rare Metals	**SY03-3: Magmatic Ores**	**GS01-1: Economic Geology**	**SS18-1: Fe-Oxide Deposits**	**SS27-1: Hyperspectral**	**SS15-1: Geoscience Communication**
08:00	08:20	00:20	**Williams-Jones**	Djon	Cho	**Hanchar**	**Lypaczewski**	Maloney
08:20	08:40	00:20	**Williams-Jones**	Smith	Simmons	**Hanchar**	**Lypaczewski**	Hansen
08:40	09:00	00:20	Vasyukova	Good	Carter	Xu	Coint	Williams
09:00	09:20	00:20	Naber	Larsen	Choquette	Zhao	Percival	Santimano
09:20	09:40	00:20	**Break**					
			SS26-2: Rare Metals	**SY03-4: Magmatic Ores**	**GS01-2: Economic Geology**	**SS18-2: Fe-Oxide Deposits**	**SS27-2: Hyperspectral**	**SS15-2: Geoscience Communication**
09:40	10:00	00:20	**Linnen**	Holwell	Fouillard	Xu	Kondrasovas	Ansdell
10:00	10:20	00:20	**Linnen**	Godel	Cloutier	Montreuil	James	Gregory
10:20	10:40	00:20	Zhu	Savard	Sutton	Bain	Mundreon	Gomez Canzio
10:40	11:00	00:20	Halcrow	Jenkins	Estrella	Coint	Williamson	
11:10	12:00	00:50	**MDD Gross Medalist:** Christopher Lawley **MAC Young Scientist Awardee:** Carl Guilmette					**GAC Logan Medalist:** Sandra Kamo
12:00	13:30	01:30	**Lunch (Founder's Square)**					
			SS26-3: Rare Metals	**SY03-5: Magmatic Ores**	**GS01-3: Economic Geology**	**SS18-3: Fe-Oxide Deposits**	**SS27-3: Hyperspectral**	**SS15-3: Geoscience Communication**
13:30	13:50	00:20	**Lentz**	**O'Driscoll**	Stanley	**Anenburg**	**Bethell**	McLarty Halfkenny
13:50	14:10	00:20	**Lentz**	**O'Driscoll**	Rasmussen	**Anenburg**	**Bethell**	Hymers
14:10	14:30	00:20	Amuda	Boudreau	Macquistan		Cheung	Woodburn
14:30	14:50	00:20	Feteha Salem	Bédard	Reynolds			Hysert
14:50	15:10	00:20	**Break**					
			SS26-4: Rare Metals	**SY03-6**: Magmatic Ores	**GS01-4**: Economic Geology			**SS15-4**: Geoscience Communication
15:10	15:30	00:20	Magyarosi	S-J Barnes	Rieger			Jess
15:30	15:50	00:20	Hazen	Dare	Wallace			Boggs
15:50	16:10	00:20	Panel Discussion	Miloski	Chi			Hymers
16:10	16:30	00:20	Panel Discussion	Bautista	Onodenalore			McLarty Halfkenny

Start	End	Duration	C206	C114	C112	WR132
				SS04-1: Accretionary Tectonics	**SS08-1: Craton Assembly**	
08:00	08:20	00:20			**Bédard**	
08:20	08:40	00:20			**Bédard**	
08:40	09:00	00:20		**Lin**	Strong	
09:00	09:20	00:20		**Lin**	Stepner	
09:20	09:40	00:20	**Break**			
				SS04-2: Accretionary Tectonics	**SS08-2: Craton Assembly**	
09:40	10:00	00:20		Jouvent	**Davis**	
10:00	10:20	00:20		Zagorevski	**Davis**	
10:20	10:40	00:20		van Rooyen	Coueslan	
10:40	11:00	00:20		Archibald	Pedreira Pérez	
11:10	12:00	00:50				
12:00	13:30	01:30	**Lunch (Founder's Square)**			**MDD Award Luncheon**
				GS14-1: Structure Tectonics	**SS08-3: Craton Assembly**	
13:30	13:50	00:20		Wang	Rehm	
13:50	14:10	00:20		Deane	Malta	
14:10	14:30	00:20		Canam	Godet	
14:30	14:50	00:20		Orlóci-Goodison	Wu	
14:50	15:10	00:20	**Break**			
				GS14-2: Structure Tectonics	**SS08-4**: Craton Assembly	
15:10	15:30	00:20		Nielsen	Laughton	
15:30	15:50	00:20		Schwerdtner		
15:50	16:10	00:20				
16:10	16:30	00:20				
16:30	18:00	01:30				**Closing Reception & Poster Awards**

TECHNICAL PROGRAM – ORAL SESSIONS

THURSDAY 25 MAY 2023

GS03-1 Geochemistry, Geochronology – 08:00 - 09:20 – Room FA386
Chairs: Steve Piercey, Jacob Hanley

08:00 Raven Polk: Diffusion and Dissolution of Anhydrite within Mafic Melts Contributed to the End-Permian Extinction

08:20 Jie Li: Variability in sedimentary pyrite δ34S record caused by multiple factors: A case study of slope shales of the Green Point Formation in western Newfoundland, Canada

08:40 Michael Brookfield: Calibrating the Wisconsin: a revision of the chronostratigraphy of the Scarborough and Bowmanville Bluffs.

09:00 Clifford Stanley: Geochemical and mineralogical changes during soil development: Preliminary study of a brunisolic soil from Nova Scotia

GS04-1 Geophysics – 08:00 - 09:20 – Room C114
Chairs: Richard Smith, Rajesh Vayavur, Callum Walter

08:00 Fabiano Della Justina: The Incorporation of Geophysical, Petrophysical and Geological Constraints in Gravity Modeling to Resolve Structures at Depth

08:20 Brandon Hume: Understanding the Effects of Mineralizing Fluids on Petrophysical Properties: A Study of Electrical Properties in a Cu-Au System at Upper Beaver, Canada

08:40 Lukas Louwerse: Bushveld igneous complex as an analogue for mineralization on 4 Vesta and the V-type asteroids

09:00 Alexander Prikhodko: Electrical resistivity patterns of mineral systems

SS07-1 Anything but Boring: the Grenville Orogeny a Key into Mesoproterozoic Geodynamics – 08:00 - 09:20 – Room C206
Chairs: Aphrodite Indares, Caroline Lotout

08:00 Chris Spencer: What makes an orogeny? Tectonochemical insights from the Grenville Province **KEYNOTE**

08:40 Trond Slagstad: Constructing, deconstructing and reconstructing the SW Proterozoic Fennoscandian margin

09:00 Roy Hyndman: Understanding the Grenville Orogeny through modern analogues

SS11-1 Environmental Aspects of Mine Waste – 08:00 - 09:20 – Room A226
Chairs: Ian Power, Sasha Wilson, Matthew Lindsay

08:00 Eva Pakostova: Microbial processes in mining: Focus on environmental hazards and industrial applications **KEYNOTE**

08:40 Jenine McCutcheon: Reprocessing tailings for metal recovery and carbon dioxide removal: Challenges and opportunities **KEYNOTE**

SS16-1 Impact Processes on Solar System Bodies: A Special Session in Memory of Erin Walton – 08:00 - 09:20 – Room FA244
Chairs: Gordon Osinski, Livio Tornabene

08:00 John Spray: Shock veins in meteorites and terrestrial impact structures: Formation mechanisms and P-T-t constraints **KEYNOTE**

08:40 Neeraja Chinchalkar: Petrography and geochemistry of Discovery Hill impact melt pond, Kamestastin (Mistastin) Lake impact structure.

09:00 Trevor Matterson: Developing an albite shock calibration curve to quantify shock in type 3.6-6 ordinary chondrites and impacts into felsic terrestrial targets

SS21-1 Mineral Exploration Footprints – 08:00 - 09:20 – Room FA055
Chairs: Stéphane Perrouty Kevin Ansdell, Robert Lee

08:00 Kevin Ansdell: Unconformity-related uranium deposits associated with the Athabasca Basin, Canada: view on deposit footprints and relationship to genetic models and the uranium ore system

08:40 Jianwen Yang: Control of paleo-regoliths in the formation of uranium deposits: insights from reactive flow modeling

09:00 Anna Bidgood: Mobilising 'immobile' elements: implications for critical metal transport in saline systems in the Central African Copperbelt

SY01-1 Critical Minerals in Canada: Commodity Overviews, Exploration Tools, and Method Development – 08:00 - 09:20 – Room FA054
Chairs: Evan Hastie, Eric Potter, Steve Beneteau, Geneviève Marquis, Rob Cundari, Marcus Burnham

08:00 OGS Director: Critical Minerals in Ontario

08:20 Andrew Kerr: Critical Minerals in Canada: Concepts, challenges & contradictions

08:40 Louise Corriveau: Beyond an IOCG-centric classification for metasomatic iron-rich alkali-calcic mineral systems and their critical and precious metal deposits

09:00 Mostafa Fayek: Exploring for Uranium Deposits Using Novel Geochemical and Isotopic Techniques

SY02-1 Crustal Architecture & Metal Endowment – 08:00 - 09:20 – Room FA056
Chairs: Ross Sherlock, Bruno Lafrance, Stéphane Perrouty

08:00 Alana Hinchey: Voluminous post-collisional, ferroan, A-type granites and implications for crust formation and metallogenic tenor in the Paleoproterozoic

08:20 Thomas Gemmell: Volcanic evolution and base metal endowment of the Swayze area, Abitibi greenstone belt

08:40 Lianna Vice: Reassessing the supracrustal architecture of the eastern Michipicoten greenstone belt, southern Superior Province, Ontario

09:00 Michael Tedeschi: Lithostratigraphy of the Rhyacian Greenstone Belts of Northern Guyana and Suriname

SS13-1 Geobiology of the Late Archean to Early Paleoproterozoic Surface World and its Impacts on Proterozoic Evolution – 08:20 - 09:20 – Room C112
Chairs: Michael Babechuk, Leslie Robbins, Galen Halverson, Kurt Konhauser

08:20 Leslie Robbins: Manganese oxides and atmospheric oxygenation

08:40 Eva Stueeken: Exploring the role of lightning in biogeochemical cycles on the early Earth **KEYNOTE**

SS02-1 Advances in Isotope Science: Methods and Applications of Non-Traditional Isotopes – 09:40 - 10:40 – Room FA386
Chairs: James Kidder, Matthew Leybourne, Daniel Layton-Matthews

09:40 Daniel Gregory: The source of stratabound critical metal deposits in northwest Canada, a view from V isotopes

10:00 Guillaume Barré: Multiple sulfur isotopes used on VMS deposits to determine the isotopic signature of Archean oceanic sulfates

10:20 Ivan Edgeworth: A rewarding possibility: rhenium isotope signatures in molybdenites

SS07-2 Anything but Boring: the Grenville Orogeny a Key into Mesoproterozoic Geodynamics – 09:40 - 10:40 – Room C206
Chairs: Aphrodite Indares, Caroline Lotout

09:40 David Corrigan: Geodynamic setting of Proterozoic massif-type anorthosites in the eastern Canadian Shield

10:00 Aphrodite Indares: The Grenville Province: what makes it special

10:20 Caroline Lotout: No time to rest: garnet and zircon petrochronology in high-pressure granulite highlight a tectonometamorphic continuum between the Ottawan and Rigolet phases of the Grenville orogeny

10:40 Carson Kinney: The forgotten Frontenac: (U)HT metamorphism recorded in the southern Grenville Province

SS11-2 Environmental Aspects of Mine Waste – 09:40 - 11:00 – Room A226
Chairs: Ian Power, Sasha Wilson, Matthew Lindsay

09:40 Decla McParland: Biologically induced carbonate precipitation: Implications for engineered wetlands at mine sites for carbon dioxide removal

10:00 Zivi Schaffer: Enhanced weathering of kimberlite mine residues in field experiments: Implications for carbon accounting and verification

10:20 Justin Lockhart: Accelerating carbonation of brucite-bearing mine tailings using waste organics

SS13-2 Geobiology of the Late Archean to Early Paleoproterozoic Surface World and its Impacts on Proterozoic Evolution – 09:40 - 11:00 - Room C112
Chairs: Michael Babechuk, Leslie Robbins, Galen Halverson, Kurt Konhauser

09:40 Robert Rainbird: Primary evidence of early Earth's atmospheric evolution in the Huronian

10:00 Ian Coxon: The timing and origin of hematite in red beds of the upper Huronian Supergroup

10:20 Michael Babechuk: Three-dimensional (tetrahedral) major element analysis of redox-variable chemical weathering trends

10:40 Zhiquan Li: How does weathering influence geochemical proxies in Paleoproterozoic banded iron formations? A case study from outcrop samples of the 2.46 Ga Banded Iron Formation, Hamersley Basin

SS16-2 Impact Processes on Solar System Bodies: A Special Session in Memory of Erin Walton – 09:40 - 11:00 – Room FA244
Chairs: Gordon Osinski, Livio Tornabene

09:40 Radhika Saini: Petrography and Shock Metamorphism of Howardite Sariçiçek

10:00 Phil McCausland: A new, unusual IIE iron meteorite from an unusual iron parent body

10:20 Livio Tornabene: Continuous ejecta deposits oberved beyond layered ejecta ramparts on Mars

10:40 Michael Brookfield: Problems of dating impact craters: age of the Slate Islands impact crater, northern Lake Superior, Ontario, Canada.

SS21-2 Mineral Exploration Footprints – 09:40 - 11:00 – Room FA055
Chairs: Stéphane Perrouty, Kevin Ansdell, Robert Lee

09:40 Philip Lypaczewski: The use of hyperspectral imaging techniques to expand mineral footprints: review of data from the NSERC-CMIC Footprints program, and new initiatives **KEYNOTE**

10:20 Herbert Fournier: Predictive mapping for base and critical metal exploration using multivariate statistical analyses in the New Québec Orogen and within its Retty Zone, Québec, Canada

10:40 Rejean Girard: Anomaly threshold in detrital dispersion: from statistics to stochastic!

SY01-2	***Critical Minerals in Canada: Commodity Overviews, Exploration Tools, and Method Development – 09:40 - 11:00 – Room FA054*** *Chairs: Evan Hastie, Eric Potter, Steve Beneteau, Geneviève Marquis, Rob Cundari, Marcus Burnham*
09:40	Anthony Williams-Jones: Evil sprites (kobolds), batteries, magmas and fluids **KEYNOTE**
10:20	Caitlin Beland: Scandium: Ore deposits, mineralizing processes, and exploration targets
10:40	Anne-Aurélie Sappin: Overview on REE deposits associated with carbonatite to alkaline complexes in Canada
SY02-2	***Crustal Architecture & Metal Endowment – 09:40 - 11:00 – Room FA056*** *Chairs: Ross Sherlock, Bruno Lafrance, Stéphane Perrouty*
09:40	Kathryn Bethune: Evolution of the Pine Lake greenstone belt; insights into tectonic controls of Paleoproterozoic orogenic gold in the Seabee area of Glennie domain, Reindeer zone, Trans-Hudson orogen **KEYNOTE**
10:20	Esther Bou: Petrogenesis of the Neoarchean Barlow pluton (Superior Province, Canada): an intrusion between two subprovinces
10:40	Keaton Strongman: The influence of pre-existing crust on the metallogeny of Archean greenstone belts: Examples from the Onaman-Tashota greenstone belt, Northern Ontario
A03	***CSRG Middleton Medal Award Ceremony and Lecture – 11:10 - 12:00 – Room A226*** *Chair: Janock Bhattacharya*
11:10	Brian Pratt: The quest for tsunami deposits in ancient shelf and epeiric seas: what are the telltale signatures? **KEYNOTE**
A04	***MDD Derry Medalist Lecture – 11:10 - 12:00 – Room FA054*** *Chair: Daniel Gregory*
11:10	Stephen Piercey: Volcanogenic Massive Sulfide (VMS) Deposits: New Ideas and Future Research Directions **KEYNOTE**
SS02-2	***Advances in Isotope Science: Methods and Applications of Non-Traditional Isotopes – 13:30 - 14:50 – Room FA386*** *Chairs: James Kidder, Matthew Leybourne, Daniel Layton-Matthews*
13:30	John Gosse: A novel approach to measure crustal erosion over million-year timescales
13:50	Cody Paige: Automated induction heating of quartz for in situ cosmogenic C-14 measurements

14:10 Megan Swing: Measurement of sulfur isotopes using nanoscale techniques from sedimentary pyrite framboids

14:30 Bianca Currie: Radionuclide Production in Ancient Hypersaline Brines

SS07-3 Anything but Boring: the Grenville Orogeny a Key into Mesoproterozoic Geodynamics – 13:30 - 14:50 – Room C206
Chairs: Aphrodite Indares, Caroline Lotout

13:30 David Pattison: Problems with Barrovian metamorphism

13:50 Deanne van Rooyen: Timing of high-grade metamorphism and magmatism in the Indian Head Laurentian inlier, southwestern Newfoundland, Canada; correlation with the Blair River inlier in Nova Scotia and the Grenville Province in Quebec and southern Labrador.

14:10 Susan Strowbridge: Tonian (975 - 955 Ma) magmatism in the Pinware terrane and western Newfoundland: a distal link to the Asgard Sea?

14:30 Changcheng Li: Multiscale structural signatures of the Grenvillian Orogeny

SS10-1 Cratons, Kimberlites, and Diamonds – 13:30 - 14:50 – Room C114
Chairs: Thomas Stachel, Yana Fedortchouk, Maya Kopylova, Graham Pearson

13:30 Steven Shirey: Seismological, petrological, and isotopic evidence for modern diamond crystallization by deeply subducted fluids **KEYNOTE**

14:10 Kelsey Graversen: What inclusions in diamond tell us about the lithospheric mantle beneath Snap Lake kimberlite dyke (Northwest Territories, Canada)

14:30 Melissa Bowerman: How old are diamonds beneath Proterozoic cratons? Answers from the State Line Kimberlite District, western Laurentia

SS11-3 Environmental Aspects of Mine Waste – 13:30 - 14:50 – Room A226
Chairs: Ian Power, Sasha Wilson, Matthew Lindsay

13:30 Baolin Wang: Influence of specific mineralogy on accelerated weathering and mineral carbonation potential

13:50 Colton Vessey: Environmental and crystal chemical controls on the efficiency of carbon mineralization: Implications for CO_2 storage in mine tailings

14:10 Omid Ardakani: CO_2 interaction with fractured organic-rich shales: Implications for CO_2 storage

14:30 Nicholas Utting: Monitoring Groundwater and Surface Casing Vents at a CO_2 Injection Facility

SS13-3 Geobiology of the Late Archean to Early Paleoproterozoic Surface World and its Impacts on Proterozoic Evolution – 13:30 - 14:10 – Room C112
Chairs: Michael Babechuk, Leslie Robbins, Galen Halverson, Kurt Konhauser

13:30 Maxwell Lechte: Using oolitic ironstones to track continental weathering and nutrient cycling in the Proterozoic **KEYNOTE**

SS16-3 Impact Processes on Solar System Bodies: A Special Session in Memory of Erin Walton – 13:30 - 14:50 – Room FA244
Chairs: Gordon Osinski, Livio Tornabene

13:30 Jack Hostrawser: The Amundsen-Ganswindt basin: a pre-Nectarian peak-ring basin and volatile cold trap in proximity to the Artemis III exploration zone

13:50 Juan Jaimes Bermudez: The impact-generated hydrothermal system at the West Clearwater Lake impact structure, Quebec

14:10 Serge Genest: Mistassini-Otish Impact Structure IV: Significance of the shock metamorphism observed over 450 km in detrital sediments deposited prior to 2.17 Ga in the structural troughs developed within the Grenville foreland zone.

14:30 Michael Brookfield: The Ordovician Meteorite Event (OME) in North America

SS21-3 Mineral Exploration Footprints – 13:30 - 14:50 – Room FA055
Chairs: Stéphane Perrouty, Kevin Ansdell, Robert Lee

13:30 Giovanni Pedemonte: Chemical characterisation of tourmaline and chlorite along 900 m of Au mineralised shear zones in the Triangle orogenic gold deposit (Val d'Or, Quebec): application for ore shoot vectoring

13:50 Eduardo Valentin dos Santos: Assessing tourmaline as an indicator mineral using multivariate statistics

14:10 Derek Leung: Protolith and alteration controls on the mineral chemistry of Cr- and V-bearing phyllosilicates at the Kerr-Addison gold deposit, Virginiatown, ON: implications on the mobility of Cr versus V and mineral exploration

14:30 Nelson Román: Raman spectroscopy on carbonaceous matter applied to the graphitic schists at Lone Star, Klondike gold district, Yukon

SY01-3 Critical Minerals in Canada: Commodity Overviews, Exploration Tools, and Method Development – 13:30 - 14:50 – Room FA054
Chairs: Evan Hastie, Eric Potter, Steve Beneteau, Geneviève Marquis, Rob Cundari, Marcus Burnham

13:30 Robert Linnen: An overview of the formation of lithium pegmatites

13:50 Gaetan Launay: Canadian Sn-W resource potential: A review of the metallogeny and exploration methods

14:10 Frank Santaguida: Zinc commodity overview: Canada's place in the critical metal world

14:30 Tarryn Cawood: Commodity overview of critical minerals in VMS deposits

SY02-3 Crustal Architecture & Metal Endowment – 13:30 - 14:50 – Room FA056
Chairs: Ross Sherlock, Bruno Lafrance, Stéphane Perrouty

13:30 Bruno Lafrance: Differential gold endowment during the development of accretionary and dome-and-keel greenstone architectures: A case study from the eastern Archean Wabigoon subprovince, Canada **KEYNOTE**

14:10 Wenxuan Li: Paleoproterozoic tectonic evolution from subduction to collision of the Khondalite Belt in North China: Evidence from multiple magmatism in the Qianlishan Complex

14:30 Kristine Glomsaas Nymoen: Integrating whole-rock geochemistry, isotopic mapping and phase equilibria: implications for architectural controls on mineral systems in Wawa

SP03 Optimizing Geological, Environmental, and Social Criteria for Exploration in the Arctic – 15:10 - 16:30 – Room FA386
Chairs: Anna Bidgood, Brendan Dyck, Philip Rieger, John Thompson

15:10 Julia Loginova: Environmental, social and governance complexity of critical minerals in the Arctic

15:30 Cana Uluak Itchuaqiayq: Justice-oriented science communication for Inuit self advocacy related to mining water treatment

15:50 Christopher Lawley: Balancing critical mineral exploration with biodiversity and conservation values in Canada's Arctic **KEYNOTE**

SS07-4 Anything but Boring: the Grenville Orogeny a Key into Mesoproterozoic Geodynamics – 15:10 - 16:10 – Room C206
Chairs: Aphrodite Indares, Caroline Lotout

15:10 Michael Easton: Who were you? Insights into the lithological character of the Grenville Front Tectonic Zone near Wanup, Ontario

15:30 Alan Dickin: Nd isotope mapping: the misunderstood key to Grenville geology

15:50 Fenglin Chen: Meso-Neoproterozoic mafic magmatism indicates tectonic transition from continental rifting to subduction in the southwestern Yangtze Block, South China, during Rodinia assembly

SS10-2 Cratons, Kimberlites, and Diamonds – 15:10 - 16:30 – Room C114
Chairs: Thomas Stachel, Yana Fedortchouk, Maya Kopylova, Graham Pearson

15:10 Luísa de Carvalho: Subduction-related diamond substrates along the SW margin of the São Francisco Craton, Brazil

15:30 Egor Koptev: Tectonic controls on the patterns of the Mesozoic intraplate magmatism in Central Canada: insights from plate kinematic modeling

15:50 Lydia Fairhurst: Kimberlite emplacement conditions as told by experimentally produced reaction coronae on ilmenite macrocrysts.

16:10 Dan Schulze: Cr-rich megacrysts from kimberlite

SS11-4 Environmental Aspects of Mine Waste – 15:10 - 16:30 – Room A226
Chairs: Ian Power, Sasha Wilson, Matthew Lindsay

15:10 Nirmal Gnanapragasam: Underground hydrogen storage - an economic option for future hydrogen infrastructure

15:30 Allison Enright: In situ sensor-based electrode measurements to identify and characterize dynamic biogeochemical processes

15:50 Max Lakanen: What lichen can tell us about the Sudbury smelter emissions - a story of reductions with a new focus on critical minerals

16:10 Hannah Starzynski: Geochemistry and mineralogy of acid-generating tailings at the abandoned South Bay mine, Ontario

SS25-1 Precambrian Depositional and Environmental Systems 15:10 - 16:30 – Room C112
Chairs: Maxwell Lechte, Nabil Shawwa, Mollie Patzke

15:10 Sarah Slotznick: Reconstructing the paleoenvironment of the Mesoproterozoic Nonesuch Formation and its record of life **KEYNOTE**

15:50 Santiago Serna Oritz: Stratal evolution and provenance of a Precambrian delta in a tectonically active terrane: the lower Signal Hill Group, Avalon Zone, Newfoundland

16:10 Melinda Brugman: Snowball Earth and cap carbonate deposits in southeastern British Columbia: where are they?

SY01-4 Critical Minerals in Canada: Commodity Overviews, Exploration Tools, and Method Development – 15:10 - 16:30 – Room FA054
Chairs: Evan Hastie, Eric Potter, Steve Beneteau, Geneviève Marquis, Rob Cundari, Marcus Burnham

15:10 Michel Houlé: Overview of magmatic Ni-Cu-(PGE) and chromite deposits associated with mafic and ultramafic ore systems in Canada

15:30 Cunhai Gao: Reginal till sampling for critical minerals: A case study in Ontario's Ring of Fire area

15:50 Tassos Grammatikopoulos: The role of process mineralogy in beneficiation and geometallurgy of critical minerals

16:10 Robert Seal: Opportunities and challenges related to the critical mineral potential of mine waste

SY02-4 Crustal Architecture & Metal Endowment – 15:10 - 16:30 – Room FA056
Chairs: Ross Sherlock, Bruno Lafrance, Stéphane Perrouty

15:10 Xuyang Meng: Formation of oxidized sulfur-rich magmas in Neoarchean subduction zones **KEYNOTE**

15:50 Bruna Coldebella: The pyrite to pyrrhotite devolatilization reaction across metamorphic zones from the Neoarchean Pontiac subprovince (Superior craton): implications for orogenic gold fluid generation

16:10 Rebecca Montsion: Validation of magmatic, volcanogenic, and orogenic mineral system models with novel geologically representative feature maps

SY05-1 Sudbury Impact Structure – 15:10 - 16:30 – Room FA244
Chairs: Gordon Osinski, Michael Lesher

15:10 Alan King: A tour of the large scale structure and controls on mineralization of the Sudbury area from regional 3D inversions and integrated modeling **KEYNOTE**

15:50 Rajesh Vayavur: 3D depth to basement geometry modelling near the north-east range of Sudbury impact crater

16:10 Rasmus Haugaard: Crustal architecture and deep basement structures in the North Range of the Sudbury impact crater

Posters and Exhibits – 16:30 - 18:00 – Parker Attrium (Levels 1 and 2)

TECHNICAL PROGRAM – ORAL SESSIONS

FRIDAY 26 MAY 2023

SS05-1 Advances in VMS Deposits: Genetic Models and Approaches to Mineral Exploration – 08:00 - 09:20 – Room FA056
Chairs: Frank Santaguida, Harold Gibson

08:00 Harold Gibson: Volcanogenic Massive Sulfide Deposits: Through Metal Earth's Eyes **KEYNOTE**

08:40 Michelle DeWolfe: Volcanic and tectonic settings of volcanogenic massive sulfide deposits in the Slave craton

09:00 Octavio Vite-Sanchez: VMS fertility in the Abitibi greenstone belt: Geochemical comparison between the well-endowed Blake River Group and the poorly endowed Stoughton-Roquemaure assemblage

SS09-1 Canadian Journal of Earth Sciences at 60: Celebrating Canadian Geoscience and Geoscientists – 08:00 - 09:20 – Room C206
Chairs: Sally Pehrsson, Brendan Murphy

08:00 Sally Pehrsson: CJES at 60: Celebrating Canadian Geoscience and Geoscientists

08:20 Sarah-Jane Barnes: Minor and trace element concentrations in chromite from layered intrusions: Implications for the formation of massive chromite layers **KEYNOTE**

09:00 David Mosher: Canada's maritime frontier: mapping Canada's continental margin for the UN convention on the Law of the Sea

SS11-5 Environmental Aspects of Mine Waste – 08:00 - 09:20 – Room A226
Chairs: Ian Power, Sasha Wilson, Matthew Lindsay

08:00 Vincent Marmier: Prediction of contaminated neutral drainage: Case study of desulfurized Lac Tio tailings

08:20 Eduardo Marquez: Influence of tailings weathering history on hydrogeochemical evolution of reclaimed oil sands froth treatment tailings

08:40 Heather Jamieson: Mineralogical controls on the mobility of critical minerals in mine waste

09:00 Jaabir Ali: Relevance of aqueous thiolated arsenic in mine waste systems

SS20-1 Lithium in Pegmatites: Mineralogy, Petrogenesis and Classic to Innovative Exploration Techniques – 08:00 - 09:20 – Room FA386
Chairs: Tania Martins, Axel Muller, Joana Cardoso-Fernandes, Encarnacion Roda-Robles, Lee Groat

08:00 Jérémie Pfister: Stable isotopes (O, H) track subsolidus fluid:rock interaction and open-system behavior in the LCT-type Little Nahanni Pegmatite Group (NWT, Canada)

08:20 Xi Diao: The role of magmatic versus metasomatic processes in Ta-Nb mineralization at the Jiabusi Deposit, China: Evidence from Textural and Chemical Features of Rare Metal Minerals and Mica

08:40 Karen Webber: Pegmatite formation by direct anatexis: Oxford County Pegmatite Field, Maine **KEYNOTE**

SS22-1 New Insights on Cordilleran Magmatism and Tectonics: from Rifted Margin to Continental Arc Systems – 08:00 - 09:20 – Room C114
Chairs: Rosie Cobbett, Luke Beranek, Justin Strauss, David Moynihan

08:00 Rose Cobbett: Late Ordovician magmatism along the Dawson fault corridor: Evidence for reactivation of lithospheric-scale structures

08:20 Alex Zagorevski: Re-evaluation of the Paleozoic Stikinia and implications for the Paleozoic within-plate magmatic crisis in the Canadian Cordillera

08:40 Renaud Soucy La Roche: Paleozoic evolution of the Yukon-Tanana terrane of the Northern Cordillera, NW British Columbia **KEYNOTE**

SS25-2 Precambrian Depositional and Environmental Systems 08:00 - 09:20 – Room C112
Chairs: Maxwell Lechte, Nabil Shawwa, Mollie Patzke

08:00 Katie Maloney: Systematic paleontology of macroalgal fossils from the Tonian Mackenzie Mountains Supergroup

08:20 Robert Rainbird: Shunga from the Tundra: ca. 2.15-2.05 Ga unusually organic-rich shales from northern Canada

08:40 Nabil Shawwa: Post-glacial, alluvial-fluvial dynamics of upper Huronian strata from the eastern Cobalt Basin, Lake Timiskaming region, Ontario and Quebec

09:00 Robert Hazen: An evolutionary system of mineralogy: classifying minerals based on process and time

SY01-5 Critical Minerals in Canada: Commodity Overviews, Exploration Tools, and Method Development – 08:00 - 09:20 – Room FA054
Chairs: Evan Hastie, Eric Potter, Steve Beneteau, Geneviève Marquis, Rob Cundari, Marcus Burnham

08:00 Geneviève Marquis: Critical Minerals Geoscience and Data

08:20 Kimberly Tait: The mineralogical diversity and sources of Canada's critical minerals

08:40 Evan Hastie: Critical minerals in gold deposits and their by-product potential

09:00 Peter Smith: Ore-forming processes of the Outpost Island gold-tungsten deposit, Northwest Territories

SY04-1 Orogenic Gold Deposit Metallogeny: A Symposium Honouring Dr Benoît Dubé – 08:00 - 09:20 – Room FA055
Chairs: Jochen Kolb , Georges Beaudoin, Nicolas Thébaud

08:00 Benoît Dubé: Controls on gold through time and space in the Abitibi greenstone belt **KEYNOTE**

08:40 Ian Honsberger: The orogenic gold belt of central Newfoundland and possible correlations along strike

09:00 Rita Rodrigues dos Santos: Chemical and textural signatures of hydrothermal sulfides as tracers of the protracted gold mineralization history at the Augmitto-Bouzan segment of the Cadillac-Larder Lake Tectonic zone

SY05-2 Sudbury Impact Structure – 08:00 - 09:20 – Room FA244
Chairs: Gordon Osinski, Michael Lesher

08:00 Nicolas Litza: Modeling the impact process and crystallization sequence of the Sudbury Igneous Complex: implications for Hadean crust formation

08:20 Ian Szumila: Analyses of zircon grains from the Sudbury impact structure: geochemistry and machine learning approaches

08:40 Stephen Prevec: Injection of melt sheet into impact crater footwall: implications from offset dykes of the Sudbury Igneous Complex, Canada **KEYNOTE**

SS05-2 Advances in VMS Deposits: Genetic Models and Approaches to Mineral Exploration – 09:40 - 11:00 – Room FA056
Chairs: Frank Santaguida, Harold Gibson

09:40 Jacob Hanley: Emerging themes from melt inclusion studies in VMS-mineralized Archean volcanic rocks in the Abitibi Subprovince, Canada

10:00 Rémi Naulot: Vectoring towards VMS-type mineralization in the Selbaie mining camp (Abitibi, Québec) using pyrite chemistry from semi-concordant Mattabi-type carbonate alteration

10:20 Britt Bluemel: Using AI to advance VHMS Exploration

10:40 Jean-Philippe Paiement: Integrated 3D modelling and associated machine learning targeting: the Jaguar Greenstone Belt example in Australia

SS09-2 Canadian Journal of Earth Sciences at 60: Celebrating Canadian Geoscience and Geoscientists – 09:40 - 11:00 – Room C206
Chairs: Sally Pehrsson, Brendan Murphy

09:40 Kelly Russell: Pleistocene volcanism in the Canadian Cordillera **KEYNOTE**

10:20 Kirsten Kennedy: The Giants of Georgian Bay: Geoheritage of an aspiring UNESCO Geopark

10:40 Roger Paulen: Aerial photographs to LiDAR: evolution of Quaternary geological mapping in Canada

SS11-6	***Environmental Aspects of Mine Waste – 09:40 - 10:40 – Room A226*** *Chairs: Ian Power, Sasha Wilson, Matthew Lindsay*
09:40	Matias Silva-Caceres: Incomplete sulfide oxidation under sub-oxic conditions: implications for aqueous sulfur speciation in mine waste systems
10:00	Lucie Coudert: Effect of salinity on arsenic mobilization from desulfurized and filtered mine tailings
10:20	Sean McHale: Arsenic in Yellowknife garden soils
SS17-1	***Integrated Studies in Paleozoic Basins: Life, Environments, Resources – 09:40 - 11:00 – Room C112*** *Chairs: Nikole Bingham-Koslowski, Michelle Coyne*
09:40	Hatena Osawa: Early annelid evolution revisited in light of new discoveries from the Cambrian Burgess Shale
10:00	Anna Whitaker: Introduced biases in the Silurian Eramosa Lagerstätte of southern Ontario
10:20	Colin Sproat: Holtedahlina (Brachiopoda) associated with unusual phosphatic tube-shaped fossils from the Upper Ordovician at William Lake, Manitoba
10:40	Nikole Bingham-Koslowski: Waste mining: investigating the elemental composition of late Carboniferous coprolites from the Joggins Formation
SS20-2	***Lithium in Pegmatites: Mineralogy, Petrogenesis and Classic to Innovative Exploration Techniques – 09:40 - 11:00 – Room FA386*** Chairs: Tania Martins, Axel Muller, Joana Cardoso-Fernandes, Encarnacion Roda-Robles, Lee Groat
09:40	Catriona Breasley: Trace element geochemistry, quantitative analyses, and origins of spodumene and quartz intergrowth textural groups at the Tanco pegmatite, Manitoba
10:00	Manuel Duguet: Structural control of the Georgia Lake lithium-cesium-tantalum-type pegmatite, a field and lineament analysis perspective, Quetico Subprovince, Ontario
10:20	David Silva: Preliminary observations on emplacement controls and Li mineral partition of pegmatite dikes from the Wekusko Lake pegmatite field, central Manitoba
10:40	Adam Nissen: In situ mica Rb-Sr geochronology, chemistry, and fluid inclusion microthermometry of the Brazil Lake Pegmatite, Yarmouth County, Nova Scotia

SS22-2 New Insights on Cordilleran Magmatism and Tectonics: from Rifted Margin to Continental Arc Systems – 09:40 - 11:00 – Room C114
Chairs: Rosie Cobbett, Luke Beranek, Justin Strauss, David Moynihan

09:40 Kirsten Rasmussen: Magma source rocks in the northern Canadian Cordillera: implications for metallogeny and basement **KEYNOTE**

10:20 Roy Hyndman: Some comments on the current and past Cordillera hot backarc

10:40 Alexander Ovas: Gold Mineralization Associated With Protracted Accretionary History Of The Caribbean Large Igneous Province

SY01-6 Critical Minerals in Canada: Commodity Overviews, Exploration Tools, and Method Development – 09:40 - 11:00 – Room FA054
Chairs: Evan Hastie, Eric Potter, Steve Beneteau, Geneviève Marquis, Rob Cundari, Marcus Burnham

09:40 Simon Jowitt: Byproduct critical metals - how can we unlock the potential? **KEYNOTE**

10:20 Olivier Nadeau: Critical metals at porphyry Cu deposits

10:40 Marcus Burnham: Analytical Challenges of Critical Mineral Exploration - Reference Materials and the Demonstration of Accuracy

SY04-2 Orogenic Gold Deposit Metallogeny: A Symposium Honouring Dr Benoît Dubé – 09:40 - 11:00 – Room FA055
Chairs: Jochen Kolb , Georges Beaudoin, Nicolas Thébaud

09:40 Liam Maw: Geology of the South Zones, Goldex mine: A pre-main deformation gold deposit in the Val-d'Or mining camp

10:00 Shalaila Bhalla: Characterization of the Ormaque deposit in Val-d'Or, Quebec

10:20 Philippe Mongeau: Multiple sulfur isotopes analysis identifies an Archean sulfur input to auriferous fluids at the Paleoproterozoic Meliadine gold district, Nunavut, Canada

10:40 Graham Layne: The Valentine Gold Project: Paleozoic Orogenic Gold Deposition in the Central Newfoundland Gold Belt

SY05-3 Sudbury Impact Structure – 09:40 - 11:00 – Room FA244
Chairs: Gordon Osinski, Michael Lesher

09:40 Henning Seibel: Flow Differentiation Modelling and Field Characteristics of Offset Dikes in Sudbury

10:00 Dustin Peters: Petrological and geochemical variations in the Main Mass along the North Range of the Sudbury Igneous Complex - insights into initial melt sheet characteristics and its differentiation history

10:20 Lindsay Debono: The Upper Contact Unit (roof rocks) of the Sudbury Igneous Complex, North Range, Sudbury Impact Structure

10:40 Stephen Prevec: Shocked and juvenile zircons in impact crater footwall, Sudbury, Canada: partial melting of a reactivated footwall mylonite zone

A06 ***MAC Peacock Medal Lecture – 11:10 - 12:00 – Room FA054***
Chair: Dan Marshall

11:10 David Lentz: Diagnosing Chalcopyrite Disease: is sphalerite really sick or just a disorder?

SS03-1 ***Advances in Marine Geology and Geodynamics and their Application to Understanding Ancient Metallogenic Terranes – 13:30 - 14:50 – Room FA056***
Chairs: Erin Bethell, Chris Galley, Alan Baxter, Mark Hannington

13:30 Harold Gibson: Exploring Seafloor Massive Sulfide Deposits along the Central and Southeastern Indian Ridge: The INDEX Program **KEYNOTE**

14:10 Chris Galley: Crustal Scale Modelling of Gravity Data used to Identify Rifting/ Seafloor Spreading in Modern and Ancient Seafloor Settings **KEYNOTE**

SS06-1 ***All that Glitters is Cold: Advances in Quaternary Glacial Investigations – 13:30 - 14:50 – Room C114***
Chairs: Jessey Rice, Tyler Hodder, Riley Mulligan

13:30 Martin Ross: Glacial sediment provenance analysis in the context of ice flow shifts, drumlinization, and glacial lake inundation

13:50 Philippe Normandeau: Till geochemistry and indicator minerals applied to critical minerals exploration: Examples from the Slave Geological Province, Northwest Territories, Canada.

14:10 Juan Bello Rodriguez: Assessing the role of cryoturbation on indicator minerals in till

14:30 Henry Gage: Modern Imagery Platforms in Support of Integrated Glacier Research

SS09-3 ***Canadian Journal of Earth Sciences at 60: Celebrating Canadian Geoscience and Geoscientists – 13:30 - 14:30 – Room C206***
Chairs: Sally Pehrsson, Brendan Murphy

13:30 Jamie Cutts: A new model for the tectonic evolution of Thelon tectonic zone, Canada, based on petrological modeling linked with Lu-Hf garnet and U-Pb accessory mineral geochronology

13:50 Galen Halverson: The Mesoproterozoic-Neoproterozoic transition in northern Canada **KEYNOTE**

SS11-7 Environmental Aspects of Mine Waste – 13:30 - 14:50 – Room A226
Chairs: Ian Power, Sasha Wilson, Matthew Lindsay

13:30 Eleanor Berryman: Fugitive dust monitoring and characterization near an active gold mine

13:50 Mark Flesch: Investigation of tungsten release & mobility in scheelite mine tailings through column experiments

14:10 Adriana Guatame-Garcia: Improved understanding of mineral weathering dynamics in waste rock through advanced mineralogy

14:30 Nadia Mykytczuk: Bioleaching of mine wastes: scaling up "new" tools for critical mineral recovery

SS17-2 Integrated Studies in Paleozoic Basins: Life, Environments, Resources – 13:30 - 14:50 – Room C112
Chairs: Nikole Bingham-Koslowski, Michelle Coyne

13:30 Edward Matheson: Changing climate and potash deposition in the Devonian Prairie Evaporite Formation: insights from the sedimentology and 7Å clay mineral authigenesis

13:50 Natasha Bell: Local or global ocean redox signal? Comparison of thallium with the molybdenum and uranium isotope systems in the Upper Devonian Kettle Point Formation, Ontario

14:10 Fangge Chen: Sedimentary manganese deposits as a record of Late Paleozoic oceanic anoxia

14:30 Janok Bhattacharya: Reconstructing Permo-Triassic source to sink systems in the Ivishak Sandstone, Alaska and the tectonic implications

SS20-3 Lithium in Pegmatites: Mineralogy, Petrogenesis and Classic to Innovative Exploration Techniques – 13:30 - 14:50 – Room FA386
Chairs: Tania Martins, Axel Muller, Joana Cardoso-Fernandes, Encarnacion Roda-Robles, Lee Groat

13:30 Ana Teodoro: The role of remote sensing in mineral exploration **KEYNOTE**

14:10 Hugues Longuépée: Coupling EDS and EBSD (SEM) to identify LCT-pegmatite minerals in tills

14:30 Julian Menuge: Stream sediment analysis for spodumene pegmatite exploration in Ireland and Austria

SY01-7 Critical Minerals in Canada: Commodity Overviews, Exploration Tools, and Method Development – 13:30 - 14:50 – Room FA054
Chairs: Evan Hastie, Eric Potter, Steve Beneteau, Geneviève Marquis, Rob Cundari, Marcus Burnham

13:30 Gordon Osinski: Extraterrestrial sources for critical minerals

13:50 Michael Easton: Critical Mineral potential of the western, Grenville Province, Ontario: an overview

14:10 Chris Yakymchuk: Extra-large flake graphite: A metamorphic-hydrothermal model

14:30 Andrew Kerr: Critical mineral resources in Newfoundland and Labrador: From established commodities to new exploration targets

SY03-1 Magmatic Ore Deposits Associated with Mafic - Ultramafic Systems: A Tribute to the Career of Prof. Sarah-Jane Barnes – 13:30 - 14:50 – Room FA244
Chairs: Michel Houlé, Sarah Dare, Anne-Aurélie Sappin

13:30 Wolfgang Maier: The state of the art in magmatic ore deposits: The contributions of Professor Sarah-Jane Barnes **KEYNOTE**

14:10 Michael Lesher: Genesis of Ni-Cu-PGE mineralization in the Sudbury Igneous Complex

14:30 Dustin Peters: Impact melt homogeneity in the Sudbury Igneous Complex and relevance for Ni-Cu-(PGE) ore formation

SY04-3 Orogenic Gold Deposit Metallogeny: A Symposium Honouring Dr Benoît Dubé 13:30 - 14:50 – Room FA055
Chairs: Jochen Kolb , Georges Beaudoin, Nicolas Thébaud

13:30 Richard Goldfarb: Did your gold deposit form below 3 km? - It is not magmatic **KEYNOTE**

14:10 Georges Beaudoin: The source of auriferous fluids along the Cadillac Larder Lake Fault Zone

14:30 Diogo Ribeiro: Metal and ligand mobility during prograde metamorphism of metasedimentary belts in the Superior Province: Implications for Au endowment

GS02 Environmental Geology – 15:10 - 15:50 – Room A226
Chairs: David Pearson, Alan Lock

15:10 Kwon Rausis: Enhanced weathering and mineralization: Negative emissions or CO_2 avoidance?

15:30 Jamie Schmidt: Geochemical controls on mercury methylation and sulphur cycling in Prairie Pothole Region wetland complexes

GS07 Igneous and Metamorphic Geology, Volcanology – 15:10 - 16:30 – Room C206
Chairs: Doug Tinkham, Manuel Duguet

15:10 Don Baker: The kinetics of melt inclusion preservation during cooling of magmatic systems

15:30 Maude Bilodeau: Quantification of quartz, feldspar, sillimanite and corundum nucleation delay in a peraluminous granitic melt

15:50 Michael Higgins: Development of Ediacaran ultramafic lamprophyre dykes in the Saguenay City region, Quebec.

16:10 Fazilat Yousefi: Relation between Adakite Genesis and Slab Break-off with implications for generating fertile Cu-Au porphyry systems

GS13-1 Sedimentology, Stratigraphy – 15:10 - 16:10 – Room C112
Chairs: Maxwell Lechte, Nabil Shawwa

15:10 Ian Power: Environmental and mineralogical controls on biosignature preservation in magnesium carbonate systems analogous to Jezero Crater, Mars

15:30 Ricardo Silva: A stratigraphic framework for Early Jurassic organic matter preservation intervals (OMPI) and carbon cycle perturbations

15:50 Janok Bhattacharya: Evaluating backwater versus upstream tectonic controls on the gravel-sand transition, Cretaceous Dunvegan Formation, Western Canada Sedimentary Basin

SS03-2 Advances in Marine Geology and Geodynamics and their Application to Understanding Ancient Metallogenic Terranes – 15:10 - 16:30 – Room FA056
Chairs: Erin Bethell, Chris Galley, Alan Baxter, Mark Hannington

15:10 Erin Bethell: Back-arc basins: A comparison between the modern ocean and purported examples from Venus and the Archean Earth **KEYNOTE**

15:50 Jonathan Umbsaar: The hydrothermal history of the VOLPA Seafloor Massive Sulfide Deposit, SW Pacific

16:10 Marie-Claude Williamson: Age and composition of gabbro samples dredged from the Alpha Ridge, Arctic Ocean

SS06-2 All that Glitters is Cold: Advances in Quaternary Glacial Investigations 15:10 - 16:30 – Room C114
Chairs: Jessey Rice, Tyler Hodder, Riley Mulligan

15:10 Andrea Marich: Drumlins, De Geers and Deltas - Lidar and landform interpretations within the Lake Nipissing Basin, Northeastern Ontario

15:30 Riley Mulligan: The Younger Dryas in central Ontario: unraveling the links between glacial Great Lakes and the Champlain Sea

15:50 Michelle Gauthier: Postglacial to interglacial MIS 7 sediments near Gillam, Manitoba, Canada

16:10 Cunhai Gao: Final drainage of glacial Lake Agassiz-Ojibway: A closer look

SS20-4 Lithium in Pegmatites: Mineralogy, Petrogenesis and Classic to Innovative Exploration Techniques – 15:10 - 16:30 – Room FA386
Chairs: Tania Martins, Axel Muller, Joana Cardoso-Fernandes, Encarnacion Roda-Robles, Lee Groat

15:10 Ethan Amyotte: Investigation of Biochemical methods to assist in exploration for Lithium-Cesium-Tantalum (LCT) pegmatites

15:30 Filipa Dias: Li-exploration and processing: The case study of spodumene from the Barroso-Alvão field, Northern Portugal

15:50 Axel Müller: The GREENPEG Horizon2020 project: Exploration for pegmatite minerals to feed the energy transition

16:10 Joana Cardoso-Fernandes: GREENPEG's European spectral library - contributes to pegmatite exploration

SY01-8 Critical Minerals in Canada: Commodity Overviews, Exploration Tools, and Method Development – 15:10 - 16:30 – Room FA054
Chairs: Evan Hastie, Eric Potter, Steve Beneteau, Geneviève Marquis, Rob Cundari, Marcus Burnham

15:10 Ozgur Tekin: Investigating the burial path of Vanadium in hyper-enriched black shales of the Selwyn Basin by examining its speciation via micro-focused X-ray Absorption Near-Edge Spectroscopy (μ-XANES)

15:30 Daryll Bien Concepcion: The Formation of Stratabound V-rich Mineralization at the Rod Property, Yukon Territory

15:50 Christopher Lawley: International collaboration for continent-scale prospectivity modelling of critical raw materials

16:10 David Huston: Identifying potential sources of critical minerals in mineral systems using the Critical Minerals in Ores (CMiO) database

SY03-2 Magmatic Ore Deposits Associated with Mafic - Ultramafic Systems: A Tribute to the Career of Prof. Sarah-Jane Barnes – 15:10 - 16:30 – Room FA244
Chairs: Michel Houlé, Sarah Dare, Anne-Aurélie Sappin

15:10 Stephen Barnes: New concepts in genetic models for the Norilsk-Talnakh Ni-Cu-PGE deposits

15:30 Michel Houlé: Geological attributes of the Cr-Ni-Cu-PGE and Fe-Ti-V-P mineralized Ring of Fire Intrusive Suite, McFaulds Lake greenstone belt, Superior Province, Northern Ontario, Canada

15:50 Klaus Kuster: Spatial and genetic relationships of co-associated Cr and Ni-Cu-(PGE) mineralization in the Esker Intrusive Complex, McFaulds Lake greenstone belt, Superior Province, Canada

16:10 Wyatt Bain: Parental magmas, tectonic setting, and magmatic evolution of the Lac Des Iles Intrusive Suite

SY04-4 Orogenic Gold Deposit Metallogeny: A Symposium Honouring Dr Benoît Dubé – 15:10 - 16:10 – Room FA055
Chairs: Jochen Kolb , Georges Beaudoin, Nicolas Thébaud

15:10 Tobias Fusswinkel: Halogen (Cl-Br-I) systematics of metamorphic fluids through time - a powerful fluid provenance tracer in orogenic gold systems

15:30 Jochen Kolb: Retrograde terrane exhumation and related complex hydrothermal evolution, Nalunaq gold deposit, South Greenland

15:50 Ian Campos: Structural controls on gold mineralization, Magino gold mine, Wawa Subprovince, Northern Ontario

Posters and Exhibits – 16:30 - 18:00 – Parker Atrium (Levels 1 and 2)

TECHNICAL PROGRAM – ORAL SESSIONS

SATURDAY 27 MAY 2023

GS01-1 Economic Geology – 08:00 - 09:20 – Room FA055
Chairs: Daniel Gregory, Merilie Reynolds

08:00 Vivian Cho: Volatile compositions of fluid inclusions from the Discovery-Ormsby property in the Yellowknife Greenstone Belt, NWT

08:20 Jack Simmons: The Great Bear gold deposit: A gold-endowed Archean lava dome associated with a crustal-scale fault in the Red Lake Greenstone Belt

08:40 Joy Carter: Unraveling the Geological History of the Fenelon Gold Deposit, Québec

09:00 Brandon Choquette: Genesis and current understanding of the ca. 2697 Ma intrusion-related Windfall Au deposit, Urban-Barry greenstone belt, Québec, Canada

SS08-1 Archean Craton Assembly – 08:00 - 09:20 – Room C112
Chairs: Antoine Godet, Carl Guilmette, Doug Tinkham

08:00 Jean Bédard: Transition from Archaean Unstable Stagnant Lid cycle to Plate Tectonics during the Proterozoic : Do Massif anorthosites record destruction of fossil Archaean oceanic lithosphere? **KEYNOTE**

08:40 Jacob Strong: Crustal growth and reworking in the Winnipeg River terrane ca. 3.3 - 3.25 Ga: Isotope evidence for the survival of an Archean super-craton

09:00 Dan Stepner: Evidence for reworking of variable Hadean sources recorded by the Archean crust from the Superior Province

SS15-1 Geoscience Education and Communication – 08:00 - 09:20 – Room A226
Chairs: Lesley Hymers, Deana Schwarz, Veronica Klassen, Beth McLarty Halfkenny, Courtney Onstad

08:00 Katie Maloney: Geotrails: Making geoscience accessible to the public

08:20 Joseph Hansen: The geoscientific foundation of Niagara wines: development of an open access Niagara Winery Geotrail.

08:40 Janice Williams: Ocean, Freshwater and Us: Fostering ocean connections using augmented reality

09:00 Tasca Santimano: The role of 3D teaching objects in Geoscience education

SS18-1 Iron-rich Au, Ag, Bi, Co, Cu, F, Mo, Nb, P, Pb, REE, U, Zn, PGE Mineralization: Genetic Processes and Feedback Mechanisms between Magmatism and Metasomatism – 08:00 - 09:20 – Room FA056
Chairs: Wyatt Bain, Louise Corriveau, Jean-Francois Montreuil

08:00 John Hanchar: What can the chemistry of magnetite tell us about the origin of magnetite-apatite deposits? **KEYNOTE**

08:40 Xinyue Xu: Melt inclusion evidence for limestone assimilation producing calc-silicate melts and "magmatic skarn"

09:00 Liandang Zhao: Carboniferous to Triassic igneous rocks in the Aqishan-Yamansu belt, Eastern Tianshan: Implications for tectonic and crustal evolution

SS26-1 Rare Metals in Igneous Systems – 08:00 - 09:20 – Room FA054
Chairs: Zsuzsanna Magyarosi, Nadia Mohammadi, Zeinab Azadbakht, Tarryn Cawood, Anne-Aurélie Sappin

08:00 Anthony Williams-Jones: Carbonatites, superconductivity and niobium **KEYNOTE**

08:40 Olga Vasyukova: Uncovering the secrets of niobium ore-formation - clues from the St Honoré carbonatite

09:00 Tiera Venesse Naber: The petrogenesis of Neoproterozoic magmatism and associated fenitization in southeastern Yukon Territory

SS27-1 Spectroscopic Mineral Analysis – 08:00 - 09:20 – Room FA386
Chairs: Philip Lypaczewski, Derek Wilton, Gary Thompson

08:00 Philip Lypaczewski: Hyperspectral imaging as a research and mineral exploration technique in a Newfoundland and Labrador drill core digitization initiative - First data release in support of new geoscience **KEYNOTE**

08:40 Nolwenn Coint: Assessing REE-mineralization in the Fen alkaline-carbonatite complex (Telemark, Southern Norway) using VNIR-SWIR hyperspectral imaging.

09:00 Jeanne Percival: Developing an Exploration Guide for REE-bearing Minerals using Reflectance Spectroscopy

SY03-3 Magmatic Ore Deposits Associated with Mafic - Ultramafic Systems: A Tribute to the Career of Prof. Sarah-Jane Barnes – 08:00 - 09:20 – Room FA244
Chairs: Michel Houlé, Sarah Dare, Anne-Aurélie Sappin

08:00 Lionnel Djon: Lac des Iles PGE-Cu-Ni deposit: Current state of knowledge

08:20 William Smith: Discovery of olivine in the southern Lac des Iles Complex - significance and implications

08:40 David Good: A classification strategy for igneous rocks in the Midcontinent Rift, Canada

09:00 Rune Larsen: Formation of PGE-Cu-Ni deposits in the deep-seated parts of giant ultrabasic conduit systems during the Ediacaran CIMP event: Observations from the Seiland Igneous Province, Norway

SS04-1 Advances in the Study of Accretionary Tectonics in the Paleozoic: From the Appalachians to Zagros – 08:40 - 09:20 – Room C114
Chairs: Deanne van Rooyen, Donnelly Archibald

08:40 Shoufa Lin: Promontory/small continent collision, collisional orogens and Early Paleozoic Wuyi-Yunkai orogeny in eastern South China. **KEYNOTE**

GS01-2 Economic Geology – 09:40 - 11:00 – Room FA055
Chairs: Daniel Gregory, Merilie Reynolds

09:40 Gabrielle Fouillard: The Archean Hammond Reef deposit: the formation of an orogenic gold deposit in a contractional step-over-zone along a major strike-slip fault system

10:00 Michael Cloutier: Petrogenesis of syn- to post-Timiskaming granitoids from the Kirkland Lake region: implications for magmatic-hydrothermal mineralization in the Abitibi

10:20 Jonathan Sutton: Geology and mineral paragenesis of the Archean Upper Beaver oxidized intrusion-related Au-Cu deposit, Kirkland Lake, Ontario

10:40 Maria Paula Estrella: Characterization of mineralizing fluids and melts in alkalic porphyry deposits - Mount Polley, British Columbia, Canada.

SS04-2 Advances in the Study of Accretionary Tectonics in the Paleozoic: From the Appalachians to Zagros – 09:40 - 11:00 – Room C114
Chairs: Deanne van Rooyen, Donnelly Archibald

09:40 Marine Jouvent: Assembly of the Variscan orogenic wedge: the P-T-t record of the metasediments of Erzgebirge (Saxothuringian Domain, Bohemian Massif)

10:00 Alex Zagorevski: The provenance and tectonic history of Dashwoods and the Baie Verte margin

10:20 Deanne van Rooyen: Ordovician to Silurian sedimentation and metamorphism in the central Aspy terrane of Cape Breton Island, Nova Scotia, Canada: a new stratigraphic paradigm.

10:40 Donnelly Archibald: Age and petrogenesis of Devonian plutonic rocks in the eastern Meguma terrane, Nova Scotia, Canada

SS08-2 Archean Craton Assembly – 09:40 - 11:00 – Room C112
Chairs: Antoine Godet, Carl Guilmette, Doug Tinkham

09:40 Donald Davis: Assembly of the Superior province: the beginning of plate tectonics? **KEYNOTE**

10:20 Chris Coueslan: The Pikwitonei Granulite Domain, Manitoba: a large-hot orogen along the northwestern margin of the Superior craton

10:40 Rocío Pedreira Pérez: Tectonometamorphic evolution and crustal recycling in the eastern Superior Province: insights from U-Pb and Nd isotopic signatures from the La Grande, Nemiscau and Opatica subprovinces

SS15-2 Geoscience Education & Communication – 09:40 - 10:40 – Room A226
Chairs: Lesley Hymers, Deana Schwarz, Veronica Klassen,
Beth McLarty Halfkenny, Courtney Onstad

09:40 Kevin Ansdell: Geoscience of Green Energy and the Digital Economy: Overview of a new course at the University of Saskatchewan

10:00 Daniel Gregory: An assessment of the use of flipped classrooms in upper level Earth Science courses

10:20 Beatriz Gomez Canizo: Adapting community education and engagement in a changing environment to complement groundwater and water management

SS18-2 Iron-rich Au, Ag, Bi, Co, Cu, F, Mo, Nb, P, Pb, REE, U, Zn, PGE Mineralization: Genetic Processes and Feedback Mechanisms between Magmatism and Metasomatism – 09:40 - 11:00 – Room FA056
Chairs: Wyatt Bain, Louise Corriveau, Jean-Francois Montreuil

09:40 Xinyue Xu: High temperature inclusions reveal a key role of magmatic processes in the formation of iron oxide-apatite deposits

10:00 Jean-Francois Montreuil: Base, Critical, and Precious Metals Mineralization in the Metasomatic Iron and Alkali-Calcic Systems of the Southern Province in the Sudbury and Temagami Areas

10:20 Wyatt Bain: REE, Th, and HFSE Mobilization via Circulation of Secondary Carbonate-Sulfate-Chloride Aqueous Solutions: A Key Process for Upgrading of Critical Metal Mineralization in Iron Oxide-Apatite Systems

10:40 Nolwenn Coint: The role of silicate-liquid immiscibility in the petrogenesis of Fe-Ti-P-rich rocks and nelsonites associated with the monzonitic to syenitic Raftsund intrusion, Vesterålen-Lofoten AMCG suite, Northern Norway.

SS26-2 Rare Metals in Igneous Systems – 09:40 - 11:00 – Room FA054
Chairs: Zsuzsanna Magyarosi, Nadia Mohammadi, Zeinab Azadbakht, Tarryn Cawood, Anne-Aurélie Sappin

09:40 Robert Linnen: The lithium cycle and constraints on the generation of lithium pegmatites **KEYNOTE**

10:20 Yiting Zhu: Extremely fractionated granitic systems controlled rare-metal mineralization: evidence from various petrogeochemical signatures

10:40 Graham Halcrow: Rare-metal endowment in the Kedron Granite, southwestern NB: use of petrogeochemical signatures to assess crystal versus fluid fractionation

SS27-2 Spectroscopic Mineral Analysis – 09:40 - 11:00 – Room FA386
Chairs: Philip Lypaczewski, Derek Wilton, Gary Thompson

09:40 Halina Kondrasovas: An atlas of alteration associated with auriferous mineralization in Newfoundland and Labrador, through the use of hyperspectral imaging in drill core mapping

10:00 Tramaine James: Investigating multiple metallogenic episodes at the Proterozoic Toroparu Au-Cu(-Ag) deposit setting, Guyana, South America

10:20 Sean Mundreon: Refining hydrothermal alteration footprints using hyperspectral imaging at the Hammond Reef gold deposit in Ontario, Canada

10:40 Marie-Claude Williamson: Fine-scale compositional variations in the Roof Zone of the Muskox Intrusion, Nunavut

SY03-4 Magmatic Ore Deposits Associated with Mafic - Ultramafic Systems: A Tribute to the Career of Prof. Sarah-Jane Barnes – 09:40 - 11:00 – Room FA244
Chairs: Michel Houlé, Sarah Dare, Anne-Aurélie Sappin

09:40 David Holwell: Unconventional magmatic sulfide systems: in search of the next Ni-Cu-Co-PGE discovery

10:00 Belinda Godel: 3D Microscale characterisation of magmatic mafic-ultramafic ore deposits: past, present, and future

10:20 Dany Savard: New mapping protocol for Laser Ablation Coupled to a Time-of-Flight Mass Spectrometer (LA-FF-ICP-TOF-MS) for the fast quantification of multiple minerals from magmatic ore deposits

10:40 Christopher Jenkins: Using micro-XRF to image small features in large rocks from the Stillwater Complex, Montana, USA

A02 GAC Logan Medalist – 11:10 - 12:00 – Room A226
Chair: Deanne van Rooyen

11:10 Sandra Kamo: The time that Sir William Logan never had: a brief history of U-Pb dating at the Jack Satterly Geochronology Laboratory

A05	***MDD Gross Medalist – 11:10 - 11:35 – Room FA054*** *Chair: Daniel Gregory*
11:10	Christopher Lawley: The time and place for orogenic gold deposits
A07	***MAC Young Scientist Medalist – 11:35 - 12:00 – Room FA054*** *Chairs: Dan Marshall*
11:35	Carl Guilmette: TBA
GS01-3	***Economic Geology – 13:30 - 14:50 – Room FA055*** *Chairs: Daniel Gregory, Merilie Reynolds*
13:30	Cliff Stanley: Petrology & lithogeochemistry of the Wildcat Brook Mo-W deposit, Charlotte County, New Brunswick, Canada: Insights into log-ratio analysis
13:50	Kirsten Rasmussen: Magmatic evolution of granites associated with tungsten skarn deposits in the northern Canadian Cordillera: a U-Pb, Lu-Hf and morphological study of antecrystic and autocrystic zircon
14:10	Mary Macquistan: Potential new minerals and paragenesis of the Gun barium silicate locality, the Yukon, Canada
14:30	Merilie Reynolds: Towards quantifying the contribution of anaerobic oxidation of methane to the sulfur budget of the Howards Pass Zn-Pb deposits, Canadian Cordillera of Yukon and the Northwest Territories
GS14-1	***Structural Geology, Tectonics – 13:30 - 14:50 – Room C114*** *Chairs: Deanne van Rooyen, Nikole Bingham-Koslowski*
13:30	Lijun Wang: Yangtze and Cathaysia blocks of South China: their separate positions in Gondwana until early Paleozoic juxtaposition
13:50	Jordan Deane: They do exist! A first look at volcanic rocks of the Taltson arc preserved within the Waugh Lake group, southern Taltson orogen
14:10	Rebecca Canam: Multiple periods of structurally-controlled exhumation in the Nonacho Lake area of the southwestern Rae craton, Northwest Territories
14:30	Ruth Orlóci-Goodison: Structural history of the Upper Beaver Au-Cu deposit, Ontario
SS08-3	***Archean Craton Assembly – 13:30 - 14:50 – Room C112*** *Chairs: Antoine Godet, Carl Guilmette, Doug Tinkham*
13:30	Adrian Rehm: Style and timing of tectonometamorphic events in the Neoarchean Quetico metasedimentary belt (Superior Province): insights from isograd mapping and U-Pb monazite petrochronology

13:50 Isaac Malta: Neoarchean crustal architecture of the northern Pontiac subprovince (Superior craton, Canada): new insights from phase equilibria modelling and multi-method petrochronology

14:10 Antoine Godet: Garnet in S-type granite: Lu-Hf dating and trace element distribution

14:30 Qihang Wu: Field and numerical analysis of the deformation pattern in the Swayze greenstone belt: implications for Neoarchean crustal dynamics

SS15-3 Geoscience Education and Communication – 13:30 - 14:50 – Room A226
Chairs: Lesley Hymers, Deana Schwarz, Veronica Klassen, Beth McLarty Halfkenny, Courtney Onstad

13:30 Beth McLarty Halfkenny: Celebrating UNESCO International Geodiversity Day; plugging into this new opportunity for Earth Science Education

13:50 Lesley Hymers: The Geologist in Residence - A Canadian Geoscience Education and Communication Project

14:10 Gavin Woodburn: Nanoki'ksila: Indigenous Science, Indigenous Youth and Perspectives

14:30 Melany Hysert: Social Media Best Practices for Earth and Science Communicators

SS18-3 Iron-rich Au, Ag, Bi, Co, Cu, F, Mo, Nb, P, Pb, REE, U, Zn, PGE Mineralization: Genetic Processes and Feedback Mechanisms between Magmatism and Metasomatism – 13:30 - 14:10 – Room FA056
Chairs: Wyatt Bain, Louise Corriveau, Jean-Francois Montreuil

13:30 Michael Anenburg: Carbonatite and salt melts can do weird things like IOAs, IOCGs, and ferrocarbonatites **KEYNOTE**

SS26-3 Rare Metals in Igneous Systems – 13:30 - 14:50 – Room FA054
Chairs: Zsuzsanna Magyarosi, Nadia Mohammadi, Zeinab Azadbakht, Tarryn Cawood, Anne-Aurélie Sappin

13:30 David Lentz: Building robust models for extreme fractionation in rare-metal granites and pegmatites: a case for estimating bulk D using the Rayleigh fractionation-distillation law from low-T magma series **KEYNOTE**

14:10 Basma Feteha Salem: Analysis of the role of fractional crystallization and hydrothermal alteration in the evolution of Um Naggat A-type granites, central eastern Desert, Egypt: implications for rare metal mineralization

SS27-3 Spectroscopic Mineral Analysis – 13:30 - 14:30 – Room FA386
Chairs: Philip Lypaczewski, Derek Wilton, Gary Thompson

13:30 Erin Bethell: Remote predictive mapping of gossans in the Muskox feeder dyke, Nunavut **KEYNOTE**

14:10 Ka Long Cheung: Distribution of radiation-induced defects in quartz at the ACKIO uranium project, Athabasca Basin, Saskatchewan: tracing uranium-bearing fluids

SY03-5 Magmatic Ore Deposits Associated with Mafic - Ultramafic Systems: A Tribute to the Career of Prof. Sarah-Jane Barnes
13:30 - 14:50 – Room FA244
Chairs: Michel Houlé, Sarah Dare, Anne-Aurélie Sappin

13:30 Brian O'Driscoll: Sulfur isotope disequilibrium in the Rum Layered Suite, NW Scotland **KEYNOTE**

14:10 Alan Boudreau: Formation of PGE- and sulfide-bearing chromitites and associated anorthositic rocks in layered intrusion by infiltration of reactive, Cl-rich fluid

14:30 Jean Bédard: A new type of ophiolitic chromite deposit?

GS01-4 Economic Geology – 15:10 - 16:30 – Room FA055
Chairs: Daniel Gregory, Merilie Reynolds

15:10 Philip Rieger: Identifying Controls on Ore Formation in Highly Complex Basin-Hosted Mineral Systems by 3D Geological Modelling: A Case Study from the Black Angel Zn-Pb mine Area (Greenland)

15:30 Chaneil Wallace: Rhythmic geochemical fluctuations during Zn mineralisation at Daniel's Harbour, Newfoundland, revealed from LA-ICP-MS analysis of gangue and sulphide phases

15:50 Guoxiang Chi: What controlled the formation and localization of world-class unconformity-related U±REE mineralization in the Athabasca Basin? - toward a unified source-path-trap model

16:10 Ofure Onodenalore: Geochemistry of detrital corundum recovered by heavy mineral surveys: a potential new method for finding ruby and sapphire deposits in Canada

GS14-2 Structural Geology, Tectonics – 15:10 - 15:30 – Room C114
Chairs: Deanne van Rooyen, Nikole Bingham-Koslowski

15:10 Julia Nielsen: Influence of fracture aperture on thermal weathering processes in fractured sedimentary rockwall

SS08-4 Archean Craton Assembly – 15:10 - 15:30 – Room C112
Chairs: Antoine Godet, Carl Guilmette, Doug Tinkham

15:10 Joshua Laughton: The northernmost Canadian Shield: Late Neoarchean terrane and Paleoproterozoic orogenic zone of Devon and Ellesmere islands

SS15-4 Geoscience Education and Communication – 15:10 - 16:30 – Room A226
Chairs: Lesley Hymers, Deana Schwarz, Veronica Klassen, Beth McLarty Halfkenny, Courtney Onstad

15:10 Scott Jess: Demographics of Canadian Academic Geoscience: results from a survey of the Great White North

15:30 Katherine Boggs: The role of education and outreach programs (EOPs) for changing the narrative around the geosciences in Canada

15:50 Lesley Hymers: Mining Matters and Critical Minerals - The Critical Minerals Workshop and Critical Connections Poster Projects

16:10 Beth McLarty Halfkenny: Canadian Geoscience Education Network (CGEN): charting a course for the future

SS26-4 Rare Metals in Igneous Systems – 15:10 - 16:30 – Room FA054
Chairs: Zsuzsanna Magyarosi, Nadia Mohammadi, Zeinab Azadbakht, Tarryn Cawood, Anne-Aurélie Sappin

15:10 Zsuzsanna Magyarosi: Rare-earth-element mineralization associated with the peralkaline Fox Harbour Volcanic Belt

15:30 Robert Hazen: On the evolution of the igneous minerals: an informatics approach to rare-element minerals

15:50 Panel Discussion

SY03-6 Magmatic Ore Deposits Associated with Mafic - Ultramafic Systems: A Tribute to the Career of Prof. Sarah-Jane Barnes – 15:10 - 16:30 – Room FA244
Chairs: Michel Houlé, Sarah Dare, Anne-Aurélie Sappin

15:10 Sarah-Jane Barnes: Minor and trace element contents of chromite from komatiites and picrites as petrogenetic indicators.

15:30 Sarah Dare: Apatite from mafic layered intrusions: From the recording of magmatic processes to their use for exploration of Fe-Ti-P mineralization

15:50 Pedro Miloski: Oxide-apatite mineralization associated with Proterozoic massif-type anorthosites in the Central Grenville Province, Quebec: Insights from trace-element geochemistry of the Lac Mirepoix Fe-Ti-P mineralization

16:10 Sergio Bautista: Geochemistry and paragenesis of magnetite-bearing gabbros from the Lac des Iles mine, northern Ontario

Closing Reception and Poster Awards – 16:30-18:00 – WR132 (West Residence)

TECHNICAL PROGRAM - POSTER PRESENTATIONS

Posters and Exhibits will be open in the Parker Atrium continuously between 09:00 on Thursday and 15:00 on Saturday.

A dedicated time slot is allocated for Posters and Exhibits at 16:30-18:00 on Thursday and Friday. All Presenters and Exhibitors will be at their posters/exhibits during this time interval. Poster Awards will be given between 16:30-18:00 on Saturday.

P01 – SY01 –	*Cunhai (George) Gao, Surficial sampling in Ontario: Past, present, and future*
P02 – SY01 –	*Danielle McGill, Geology and geochemistry of the shale-hosted vanadium mineralization at the Van property, Northwest Territories*
P03 – SS26 –	*Pedro Alves, REE-mineralized and barren granitic pegmatites in the area between northwestern Trois-Rivières and Lac Saint-Jean, central Grenville Province - preliminary results*
P04 – SS26 –	*Saeid Baghban Asgharinezhad, Distribution of rare earth elements and yttrium in the various mineralized zones of the Mount Pleasant W-Mo-Bi & Sn-Zn-In-Cu deposits, SW New Brunswick*
P05 – SS26 –	*Nadia Mohammadi, Molybdenite mineralization in the Burnthill Brook area, New Brunswick, Canada: an Implication of multi-pulsed magmatism during the Neoacadian Orogeny*
P06 – SS20 –	*Sofia Chinaglia, New field observations from Brazilian pegmatites: Structural Control and Related Mineralogy*
P07 – SS20 –	*Nicholas Parr, Lithium distribution at the regional and microscopic scale: Georgetown Inlier, Northern Queensland, Australia.*
P08 – SS18 –	*Nolwenn Coint, The Kodal Fe-Ti-P deposit in the Permo-Carboniferous Larvik Plutonic Complex, Oslo Rift, Norway: using the distribution of trace elements in apatite and Fe-oxides to constrain ore-forming processes*
P09 – SS18 –	*Fernando Tornos, Limitations in using magnetite and actinolite chemistry as tracers of temperature and origin in IOA-IOCG systems*
P10 – GS01 –	*Nikole Bingham-Koslowski, Phosphatic, manganiferous ironstones of the Rapid Creek Formation (Northwest Territories), a preliminary study*

P11 – GS01 –	*Jorge Alejandro Guevara Alday, New structural and geochronological age constraints (U-Pb) on the Miguel Auza Ag-Zn (Pb) epithermal deposit, Mexican silver belt, Mexico*
P12 – GS01 –	*Alexandre Guillerez, Trace Element Signatures of Magnetite Crystallized from Magmatic Salts*
P13 – GS01 –	*Goktug Harmanci, Studies of accessory minerals in the Athabasca Basin to evaluate the possible sources of U and REE in unconformity-related uranium deposits*
P14 – GS01 –	*Simon Kocher, Stockwork vein sequence and high precision geochronology: New insight into the timing and duration of mineralization at Bingham Canyon, Utah.*
P15 – GS01 –	*Thomas R. McLoughlin-Coleman, Pyrite-gold association in Witwatersrand-style modified paleoplacer gold deposit, Pardo Township, Ontario*
P16 – GS01 –	*Hoang Anh Tu Lavie Nguyen, Advances in methodology to apply palaeo-reconstruction models in mineral deposits exploration*
P17 – GS01 –	*Caibre J Stinnissen, Characterization of nickel and cobalt mineralization at the Easter-Duffy showing, Simpson Islands, Northwest Territories*
P18 – GS01 –	*Nahanni Young, Fluid inclusion analysis of mineralizing fluids of the Maw Zone REE deposit, Athabasca basin - significance for REE and unconformity-related uranium mineralization in the Athabasca basin*
P19 – SS10 –	*Song Gao, Phlogopite deformation features in kimberlites. Are they always a reliable indication of a xenocrystic origin for phlogopite at mantle depths?*
P20 – SS10 –	*Amy Mailey, Pionerskaya pipe: reclassification from orangeite to contaminated kimberlite*
P21 – SS05 –	*Sheila Ballantyne, Ore Body Architecture in Snow Lake: Metamorphosed and Deformed Volcanogenic Massive Sulphide Deposits*
P22 – SS05 –	*Lokman Gumus, Mineral chemistry and Hf isotope signature of zircons from rhyolites in the Izok Lake VMS deposit, Nunavut, Canada*

P23 – SS05 –	*Tara Lemke, Characterizing the precious metal-bearing base metal mineralization at the Homer Lake Prospect, Yellowknife greenstone belt, Northwest Territories*
P24 – SS05 –	*Ben Somps, Volcanic stratigraphy and hydrothermal alteration at the Paleoproterozoic Kay Mine volcanogenic massive sulfide deposit, Black Canyon City, Arizona USA*
P25 – SS03 –	*Merve Uygur, Approaches for Mineral Resource Assessment of SMS Deposits*
P26 – SY04 –	*Zachary Adam, Role of late transverse faults in gold mineralization in the Superior Province: a case study from the Maskinonge Lake fault, Michipicoten Greenstone Belt, Ontario*
P27 – SY04 –	*Sébastien Castonguay, Geology and multiple sulfur isotope signatures of the Fenelon gold deposit, northwestern Abitibi greenstone belt, Quebec: Structural controls, fluid origin, and ore-forming processes*
P28 – SY04 –	*Sarah C. Davey, Using major and trace element geochemistry for domain definition in grade control models, Detour Lake Mine, Ontario*
P29 – SY04 –	*Evan Hall, Controls on gold mineralization in an amphibolite facies gold deposit, High Lake Greenstone Belt, Nunavut, Canada*
P30 – SY04 –	*Alex Hutchison, Gold mineralization in the Blueberry zone of the Scottie Gold Mine Project, Stikine terrane, northwest British Columbia*
P31 – SY04 –	*Brett Kuzmicz, Continental large igneous provinces and global plate tectonics links to orogenic gold*
P32 – SY04 –	*Alexander Moses, Determining the origin and mode of emplacement of an enigmatic fragmental unit at the Windfall gold deposit*
P33 – SS21 –	*Fatma Gumus, Mineral chemistry and Nd isotope geochemistry of apatite in orogenic Au-associated gabbros, Baie Verte, NL*
P34 – SS21 –	*Théo Lombard, Mineral exploration footprints of crustal-scale deformation zones in Neoarchean greenstone belts, Canada: fieldwork resume and first hyperspectral and geochemistry results for the Val-d'Or area*

P35 – SS21 –	*Farzaneh Mami Khalifani, Conceptual and empirical predictive models for gold exploration: an example from the McIntyre Brook gold property, New Brunswick, Canada*
P36 – SS27 –	*Léa Gering, Automatisation of identification of indicators minerals using μ-XRF*
P37 – GS03 –	*Sophie Gagnon, Proterozoic zircon dates from auriferous zones at the Island Gold deposit: implications for late gold remobilization in the Superior Province.*
P38 – GS03 –	*Helen Kopystecki, Revisiting the paleoelevation history of the central Altiplano using stable isotopes in hydrated volcanic glass from the Corque Syncline, western Bolivia*
P39 – GS03 –	*Sonia Préfontaine, Preliminary ages for the Archean Ramsey-Algoma granitoid complex and surrounding Proterozoic intrusive rocks*
P40 – SY03 –	*Sandra Baurier Aymat, Characterization of breccia-hosted Ni-Cu-PGE mineralization in the Cryderman deposit, Sudbury Igneous Complex, Ontario*
P41 – SY03 –	*Nathan Carter, Sulfide replacement by oxides: Mobilization of Ni and Cu at the Crawford deposit, Northern Ontario*
P42 – SY03 –	*Anya Gupta, Hydration melting in Olivine-Bearing zone I of the Stillwater Complex, Montana*
P43 – SY03 –	*Rune Berg-Edland, Importance of lower crustal magmatism at magma-rich continental margins for the formation of LIP's and Cu-Ni-PGE deposits*
P44 – SY03 –	*Killian Milier, Preliminary petro-geochemical investigation of the Ni-Cu occurrence of W1 ultramafic intrusion (Wapatik) within the Lower Eastmain greenstone belt of Superior Province, Eeyou-Istchee Baie-James, Northern Quebec, Canada*
P45 – SY03 –	*Benoit M. Saumur, Scaled analogue modelling applied to magmatic sulfide deposits: Why? And what's next?*
P46 – SS16 –	*Francine Robert, Mistassini-Otish Impact Structure I: Petrography and geochemistry of the phosphorus-rich Mistassini Spherule Layer (MSL).*
P47 – SS16 –	*Francine Robert, Mistassini-Otish Impact Structure II: Melt-bearing impact breccias observed at the very base of the Mistassini Group.*

P48 – SS16 –	*Serge Genest, Mistassini-Otish Impact Structure III: First report of a huge dolomitic melt sheet as the uppermost units of the Albanel Formation, Mistassini Group.*
P49 – SS16 –	*Emer McConnell-Radford, Constraining the nature and age of the Holleford impact crater*
P50 – SS16 –	*James Burley, Distal flow deposits: Characterizing landscape modification and extended ejecta on Mars*
P51 – GS04 –	*Ai Gusti Guna, Pilot paleomagnetic study of the 148 Ma Notre Dame Bay Magmatic Province, Newfoundland, Canada and its relationship with North Atlantic Opening*
P52 – GS07 –	*J. Brendan Murphy, Appinite complexes, granitoid batholiths and crustal growth: a conceptual model*
P53 – GS07 –	*London Warburton, Magnetostratigraphic constraints on the end-Triassic North Mountain Basalt (Nova Scotia, Canada) eruption timeline*
P54 – SS07 –	*Arlin Fonseca, Contrasting features of aluminous rocks: evidences of the Low-Pressure Belt in the Central Grenville Province*
P55 – SS07 –	*Iqbal Muhammad Zahoor, Decoding the timing of polyphase metamorphism in the Mauricie region, central Grenville Province, Québec*
P56 – SS07 –	*Cheuk Yin Yip, Geochemical characterisation of hot syn-orogenic granites of the central Grenville Province*
P57 – SS22 –	*Nathan Cleven, Detrital zircon age distribution correlations between the Snowcap assemblage substrate of the Yukon-Tanana terrane and Proterozoic to Devonian stratigraphy of the Laurentian margin*
P58 – SS22 –	*Nadia Mohammadi, Permian Klondike magmatism in the Yukon-Tanana Terrane, Northern Cordillera*
P59 – SS22 –	*Julia Pires Leandro, Reconstructing Maastrichtian-modern sediment delivery to the forearc Georgia Basin using detrital zircon U-Pb geochronology*
P60 – GS14 –	*Maxwell J. Cain, Examining microstructures along the Murray Fault Zone from Blind River-Massey, Ontario, Canada: possible implications for regional deformation*

P61 – GS14 –	*Abigail Clark, Structural analysis of Fletcher Creek fold, southern Ontario: Is it neotectonic in origin?*
P62 – GS14 –	*Emma J. Keefe, Influence of pre-existing structures and magmatism in rifting and breakup: A case study from the Notre Dame Bay Magmatic Province, Newfoundland, Canada*
P63 – GS14 –	*Nicholas Montenegro, Structural geology, timing of deformation and boundary relationships of the Martyn Lake formation of the Waugh Lake group, southern Taltson Orogen*
P64 – SS13 –	*Margaret A. Whelan, The Paleoredox Context of the McArthur and Birrindudu Basins, Northern Territory, Australia*
P65 – SS25 –	*Ajani S. Bissick, A sequence stratigraphic framework for the Ombombo Subgroup in northwestern Namibia*
P66 – SS25 –	*Caroline Gordon, Fluidal and blocky peperites in the McKim Formation of the Huronian Supergroup: Implications for contemporaneous volcanism and sedimentation*
P67 – SS25 –	*Marina Seraine, Triple Oxygen isotopes in shales from the Archean-Paleoproterozoic Fennoscandian basins (2.5 - 1.9 Ga)*
P68 – SS25 –	*Charlotte Spruzen, New stratigraphic logs and petrographic observations from the Tonian Reefal Assemblage, Yukon*
P69 – SS17 –	*Peng Ren, Sedimentary characteristics and provenance of the Late Ordovician-Early Silurian successions in the southeast Yangtze Block: Implications for paleogeographic evolution of the South China Block*
P70 – SS17 –	*Johnathan A Sorrentino, Physical and chemical properties influencing insect burial and fossilization*
P71 – GS13 –	*Muhammad A. Rafeeza, Provenance of Late Cretaceous to early Neogene strata in the Camargo Syncline and implications for basin geometry in southern Bolivia*
P72 – SS06 –	*Jessey Rice, Glacial dispersal from a migrating Laurentide Ice Sheet ice divide in northeastern Quebec and western Labrador*
P73 – SS11 –	*Sana Ahmad, Metal immobilization in secondary cements at a historic gold mine*
P74 – SS11 –	*Emily Champion, Biogeochemical Characteristics of Polyacrylamide-Treated Thickened Tailings at an Oil Sands Mine*

P75 – SS11 –	*Stuart Ferry, acid neutralization and metal(loid) release in oil sands froth treatment tailings*
P76 – SS11 –	*Sanaz Hasani, Evaluating Reactive Materials for Passive Water Treatment in Oil Sand Mine Reclamation Landforms*
P77 – SS11 –	*Benjamin Lei, Assessing critical metal incorporation in Ca-carbonate minerals using cyanobacteria: Application to mine site environments*
P78 – SS11 –	*Duncan McDonald, Field-deployable drainage columns for monitoring CO2 sequestration via enhanced weathering and mineralization of kimberlite mine wastes, olivine, and wollastonite*
P79 – SS11 –	*Carlos Paulo, Quantification and monitoring of CO2 sequestration in ultramafic mine wastes from Australia, Canada, and South Africa using geochemical mass-balance models*
P80 – SS11 –	*Nima Saberi, Reconciling microscale mineral reactivity with mine wastewater quality dynamics*
P81 – SS11 –	*Valerie Schoepfer, Geochemical controls on the dissolution of arsenic trioxide roaster waste from the Giant Mine, NT, Canada*

P83 – GS02 –	*Jerry Burgess, Forest carbon sequestration along a mafic-ultramafic lithosequence*
P84 – GS02 –	*Shania Ramharrack-Maharaj, Linking Surface Hydrology and Geology: A Case Study of the Niagara Escarpment (Hamilton, Ontario)*
P85 – GS02 –	*Gabrielle Ledesma, Deciphering the origin of element signatures in stream waters draining endmember silicate bedrock types in Newfoundland*
P86 – SS15 –	*Keira Hum, Promoting geoscience education through accessible Geotrails in urban settings*
P87 – SS15 –	*Shona van Zijll de Jong, Communicating space weather in Canada: Aurora chasers, solar cartoons, and space physics*

P88 – SS15 –	*Shona van Zijll de Jong, Researching public understanding of earthquake magnitude and intensity in preparation for Canada's forthcoming earthquake early warning system*
P89 – SS15 –	*Shona van Zijll de Jong, Earthquake Early Warning Education (E3) Partnerships: A knowledge to action initiative*
P90 – SS15 –	*Shona van Zijll de Jong, Earthquake early warning education (E3) practices, processes and priorities*
P91 – SS15 –	*Beth McLarty Halfkenny, The Canadian Federation of Earth Sciences: Promoting the Geosciences through new education and outreach initiatives*
P92 – SS15 –	*Derek DV Leung, TotBlocks: A new way to teach mineralogy using 3D-printed modular building blocks*
V01 – SS26 –	*Kateryna Poliakovska, Comparative study of two high-grade REE-Th-U deposits, Dibrovo from the Ukrainian Shield and Alces Lake from the Canadian Shield: geological setting, structure, and petrogenesis*
V02 – SS20 –	*Encarnación Roda-Robles, Exometasomatism prompted by spodumene-bearing pegmatites and its implications in lithium exploration: the case study from Alijó (northern Portugal)*
V03 – SS20 –	*Encarnación Roda-Robles, The paradoxical incompatible behaviour of Sr in highly evolved granitic melts as an indicator of potential Li-mineralization: the case study of Castillejo de Dos Casas (Salamanca, Spain)*
V04 – GS01 –	*Chaoyi Dong, Control of crustal deformation on orogenic Au mineralization in Himalaya: a case study from Buzhu*
V05 – SS11 –	*Kaitlyn Crawford, An investigation into laboratory scale kinetic tests: microbiology and geochemistry at 4˚C and 22˚C*
V06 – SS11 –	*Mignon Le Roux, Effect of oxygen barrier covers on microbial communities within highly oxidized mine tailings: implications for secondary mineralogy and metal mobility*
V07 – SS11 –	*Kagan Meier, The effects of metal additions on microbial communities in simulated PRB systems*
V08 – SS11	*Austin Miller, Performance of a permeable reactive barrier 26 years after installation*

V09 – SS11	*Janviere Uwanyirigira, Interaction of tannins with iron oxyhydroxide and sulfide phases: implications for passive mine waste remediation systems*
V10 – SS11	*Alana Wang, Geochemical stability of vitrified-arsenical glass prepared from arsenic trioxide roaster waste collected from the Giant Mine (Yellowknife, NT)*
V11 - SS1	*Gary Schudel: Biogeochemical assessment of microbial communities in laboratory-scale advanced customizable leach columns*

AUTHOR INDEX

Abi Daoud, Angelina, SS17
Ackerson, Michael, SY05, SY05
Adam, Zachary, SY04
Adetunji, Ademola, SY05
Adlakha, Erin, SS13, SS18
Adsit, Aaron, SS05
Ahmad, Sana, SS11
Alçiçek, Hülya, GS13
Alessi, Daniel, SS13
Ali, Jaabir, SS11
Alves, Pedro, SS26
Amos, Richard, SS11
Amyotte, Ethan, SS20
Anderson, Julia, SS11
Anderson, Melissa, SS03, SS03, SS05
Anenburg, Michael, SS18
Anh Tu Lavie Nguyen, Hoang, GS01
Annesley, Irvine, SS26
Ansdell, Kevin, SS15, SS21
Archibald, Donnelly, GS07, SS04
Ardakani, Omid, SS11
Arizaleta, Maria, SS11
Asfour, Abdul, GS01
Ashton, Ken, GS14, GS14
Aubet, Natalie, SS13
Ayer, John, SY05
Azmy, Karem, GS03, GS13
Babechuk, Michael, GS02, SS13, SS13, SS13, SS25
Bachynski, Ryan, SS05
Baghban Asgharinezhad, Saeid, SS26
Bailey, Kimberley, SS05
Bain, Jeff, SS11, SS11, SS11
Bain, Wyatt, SS18, SS18, SY03
Baker, Don, GS03, GS07, GS07
Baker, Nigel, GS01
Ballantyne, Sheila, SS05
Balta, Brian, SY05
Bandyayera, Daniel, SS08
Barker, Ivan, SS20
Barlow, Mike, SY01
Barnes, Sarah-Jane, SS09, SY03, SY03
Barnes, Stephen, SY03, SY03
Barr, Sandra, SS04, SS04, SS07
Barré, Guillaume, SS02, SY02, SY04
Barrington, Monica, SY04
Bastrakov, Evgeniy, SY01
Bates, Ben, GS02
Batycky, Anya, SS11
Baurier Aymat, Sandra, SY03
Bautista, Sergio, SY03
Baxter, Alan, SS03, SS03
Beaton, Daniel, SS11
Beauchamp, Marc, SS27, SS27
Beaudoin, Alwynne, Plenary
Beaudoin, Georges, GS01, GS01, SS02, SS06, SS08, SS21, SS21, SS27, SY02, SY04, SY04, SY04, SY04
Beckett, Peter, SS11
Bedard, Jean, SS08, SY03
Bédard, Paul, SY01, SY03
Bekker, Andrey, SS25
Beland, Caitlin, SY01
Bell, Natasha, SS17
Bell, Robin-Marie, SY04
Belley, Philippe, GS01
Bello Rodriguez, Juan, SS06
Bennett, Joseph, SS24
Bennett, Neil, GS01
Beranek, Luke, SS22
Berman, Robert, SS09
Berryman, Eleanor, SS11
Bethell, Erin, SS03, SS03, SS27, SS27
Bethune, Kathryn, GS14, GS14, SY02
Bhalla, Shalaila, SY04
Bhattacharya, Janok, GS13, SS17
Biasi, Joseph, GS07
Bidgood, Anna, SS21
Bien Concepcion, Daryll, SY01
Bilodeau, Maude, GS07
Bingham-Koslowski, Nikole, GS01, SS17
Bissick, Ajani, SS25
Bizhani, Majid, SS11
Bleeker, Wouter, SY04
Blowes, David, SS11, SS11, SS11, SS11
Bluemel, Britt, SS05
Blunt, Martin, SS11
Boggild, Kai, SS09
Boggs, Katherine, SS15
Bond, Trevor, SS11
Borcinova Radková, Anežka, SS11
Bou, Esther, SY02
Boudreau, Alan, SY03, SY03
Boulanger, Jean-Francois, SS11
Bowerman, Melissa, SS10
Boyce, Joseph, SS16
Branning, Kahlen, SS26
Brassard, Éloïse, SS27
Brauch, Klaus, SS20
Breasley, Catriona, SS20
Brönner, Marco, SS20
Brookfield, Michael, GS03, SS16, SS16
Brown, Marissa, SS11
Brueckner, Stefanie, GS01, SS02, SS05, SS21, SY01, SY01
Brugman, Melinda, SS25
Brunton, Frank, SS11
Brzozowski, Matthew, SY03
Bukhari, Syed, SS09
Burelle, Collin, SS11, SS11
Burgess, Jerry, GS02
Burley, James, SS16, SS16
Burnham, Marcus, SY01
Burnie, Teanna, GS13
Bussière, Bruno, SS11
Bussweiler, Yannick, SS18
Bustard, Aaron, SY04
Butler, Jared, SY02
Büttner, Steffen, SY05
Cain, Maxwell, GS14
Cain, Michael, SS05
Callegaro, Sara, SY03
Camacho, Alfredo, SS09
Campbell, Heather, SS06
Campos, Ian, SY04
Canam, Rebecca, GS14
Capps, Nicholas, SY04
Cardoso-Fernandes, Joana, SS20, SS20
Carlson, Anders, SY02
Caron, Francois, SS11
Caron, Jean-Bernard, SS17
Carson, Rob, SS11
Carter, Joy, GS01
Carter, Lawrence, SS20, SS20
Carter, Nathan, SY03
Cartigny, Pierre, SS02, SY04
Case, George, SY01
Castonguay, Sébastien, SY04, SY04
Catlos, Elizabeth, SS16
Cawood, Peter, SS08
Cawood, Tarryn, SY01
Chacko, Tom, SS08
Chakhmouradian, Anton, SS10
Champion, Emily, SS11
Chappaz, Anthony, SY01
Charbonneau, Mark, SS11
Charles, Christopher, SS02
Chen, Fangge, SS17
Chen, Fenglin, SS07
Chen, Ning, SS21
Chen, Xiao, SY03
Cheraghi, Saeid, SY05
Chew, Dave, SS21
Chi, Guoxiang, GS01, GS01, GS01
Chinaglia, Sofia, SS20
Chinchalkar, Neeraja, SS16
Chinn, Ingrid, SS10, SS10
Cho, Vivian, GS01
Choquette, Brandon, GS01, SY04
Clark, Abigail, GS14
Clark, James, SY04
Clayton, Katherine, SS25
Cleaver, Amy, SS11
Cleven, Nathan, SS22
Cliff, John, SS02, SS20
Clifford, Brendan, SS20
Cloutier, Michael, GS01
Cobbett, Rose, SS22
Coint, Nolwenn, SS18, SS18, SS27
Coldebella, Bruna, SS08, SY02
Coller, David, GS01
Collins, William, GS07
Colpron, Maurice, SS22
Concepcion, Daryll, SS02, SY01, SY01, SY01
Conliffe, James, GS01, SY01
Constantin, Marc, SY01
Corrigan, David, SS07, SS07
Corriveau, Louise, SS18, SY01
Côté-Lavoie, Édouard, GS01, SY04
Côté-Mantha, Olivier, GS01, GS01, SS27, SY04
Coudert, Lucie, SS11
Coueslan, Chris, SS08
Cousens, Brian, SS03, SS26
Coxon, Ian, SS13, SS13
Coyan, Joshua, SY01
Crabtree, Dave, SY01
Crawford, Kaitlyn, SS11
Creaser, Robert, GS01, SS04, SS08, SS22, SS27, SY04
Crouse, Patrick, GS01
Crowley, James, SS04
Crowley, Jim, SS22, SS22
Cruden, Alexander, SS08
Cui, Xiaozhuang, SS07
Currie, Bianca, SS02
Cutts, Jamie, SS03, SS09
Czarnota, Karol, SY01

Dalton, April, SS06
Dang, Huy, GS02
Daoudene, Yannick, SS08
Dare, Sarah, SS05, SS18, SY03, SY03, SY03, SY03
Darling, James, SY05
Darrah, Tom, SS11
Davey, Sarah, SY04
David, Jana, SS05
David, Jean, SS08, SS27
Davies, Ethan, GS02, GS14
Davies, Joshua, GS01, SS07, SS25, SY03
Davis, Bill, SS09, SS22
Davis, Donald, SS08
Davis, Kyle, SS15
Daxberger, Heidi, SS15
Day, James, SY03
Daya, Priyal, SS05
de Bruyn, John, SY05
de Carvalho, Luísa, SS10
de Jong, Shona, SS15, SS15, SS15, SS15
de Souza, Stéphane, GS01
Deane, Jordan, GS14, GS14
Debono, Lindsay, SY05
Dejou, Brigitte, SY03
Della Justina, Fabiano, GS04
Deloule, Etienne, SS07
Demers, Isabelle, SS11, SS11
DePolo, Paige, SS15
Deveau, Claude, SS20
Dewing, Keith, SS03
DeWolfe, Michelle, SS03, SS05
Diao, Xi, SS20
Dias, Filipa, SS20
DiCecco, Veronica, SY01
Dickin, Alan, SS07
Dickson, Mary-Lynn, SS09
Director, OGS, SY01
Djon, Lionnel, SY03, SY03, SY03, SY03
Dolphin, Glenn, SS15, SS15
Dong, Chaoyi, GS01
dos Santos Jr., Angelo, SS13
Dostie, Lance, SS11
Drever, Cameron, SY01
Duarte, Luís, GS13
Dubé, Benoît, SY04
Dufrane, Andrew, SS08
Duguet, Manuel, SS20
Dunning, Gregory, SS07, SS07
Dupras, Normand, SY01
Dupuis, Christian, GS04
Dynes, James, SS11
Easton, Michael, SS07, SY01
Edgeworth, Ivan, GS03, SS02
Edwards, Ben, SS09
Eglington, Bruce, GS01
Ehrman, James, SS17
El Bilali, Hafida, SS22, SY04
Elongo, Vanessa, SS22
Emsbo, Poul, SY01
Enright, Allison, SS11
Eriks, Nicole, SS21
Ernst, Richard, SS22, SY04
Errandonea-Martin, Jon, SS20, SS20, SS20
Estrella, Maria Paula, GS01
Eyles, Carolyn, GS14, SS06, SS15, SS15, SS15
Eyles, Nicholas, SS09, SS09
Fairhurst, Lydia, SS10
Fakhraee, Mojtaba, SS13
Falck, Hendrik, GS01, GS01, GS01, SS11, SS22, SY01
Falcón, Luisa, GS13
Falster, Alexander, SS20
Fay, Liam, SY03
Fayek, Mostafa, SS20, SY01
Fedo, Christopher, SS13
Fedortchouk, Yana, SS10
Feng, Renfei, SS21
Fenton, Nicole, SS11
Ferry, Stuart, SS11
Feteha Salem, Basma, SS26
Figueroa, Maria, SS02
Fillion, Mathieu, SS11
Finkelstein, Sarah, SS06
Fiorentini, Marco, SY04
Flemming, Roberta, GS04, SS02, SS10, SS16, SS16
Flesch, Mark, SS11
Fonseca, Arlin, SS07
Fortin-Rhéaume, Jean-Daniel, SS05
Fouillard, Gabrielle, GS01
Fournier, Herbert, SS21
Fournier-Roy, François, SS08
Fredericks, La Donna, SY02
Freisen, Vanessa, SS03
Freitag, Ralf, SS03
Fuchs, Sebastian, SS03
Fuck, Reinhardt, SS10
Fusswinkel, Tobias, SY04
Gadd, Michael, GS01, SY01
Gage, Henry, GS14, SS06
Gagnon, Sophie, GS03
Galley, Christopher, SS03, SS03
Gao, Cunhai, SS06, SY01, SY01
Gao, Song, SS10
Garate-Olave, Idoia, SS20, SS20, SS20
Gauthier, Michelle, SS06
Gautreau, Jacques, SS15
Gemmell, Thomas, SS03, SS05, SY02
Genest, Serge, SS16, SS16, SS16, SS16
Genna, Dominique, SS05, SY02
Géring, Léa, SS27
Gibson, Dan, GS14
Gibson, Harold, GS01, SS03, SS05, SY02, SY02
Gibson, Timothy, SS09
Gil-Crespo, Pedro-Pablo, SS20
Girard, Rejean, SS21
Glithero, Diz, SS15
Glomsaas Nymoen, Kristine, SY02
Gnanapragasam, Nirmal, SS11
Godel, Belinda, SY03
Godet, Antoine, SS08, SS08, SS08, SY04
Goldfarb, Richard, SY04
Gomez Canizo, Beatriz, SS15
Gómez, Juan, GS13
Good, David, SY03
Gordon, Caroline, SS25
Gosse, John, SS02, SS02
Gosselin, Eve, SS07
Goutier, Jean, SS02
Graham, Garth, SY01, SY01
Grammatikopoulos, Tassos, SY01
Graveline, Marie-Hélène, SS15
Graversen, Kelsey, SS10
Gray, Peter, SS15
Greenman, Wilder, SS09, SS25
Gregory, Daniel, GS01, GS01, SS02, SS02, SS03, SS15, SS21, SY01, SY01
Grey, Melissa, SS17
Grieve, Richard, SY05
Groat, Lee, GS01, SS20, SS20, SS20, SS26
Guarnieri, Pierpaolo, GS01
Guatame-Garcia, Adriana, SS11, SS11
Guevara Alday, Jorge Alejandro, GS01
Guillerez, Alexandre, GS01
Guilmette, Carl, SS08, SS08, SS08, SS27, SY02, SY03, SY04, SY04
Gumus, Fatma, SS21
Gumus, Lokman, SS05
Gupta, Anya, SY03
Gusti Guna, Ai, GS04
Güven, John, GS01
Haase, Claudia, SS20
Haataja, Anna, SY02
Hadlari, Thomas, SS03
Hagedorn, Grant, SY01
Halcrow, Graham, SS26
Hall, Britt, GS02
Hall, Evan, SY04
Halverson, Galen, SS09, SS13, SS13, SS25, SS25, SS25
Halvorson, Brad, SS11
Hamill, John, SS05
Hamilton, Jessica, SS11, SS11
Hamilton, Jordan, SS11
Hamilton, Mallory, SS18
Hamilton, Mike, GS01, GS01, SY05
Hanchar, John, SS18, SS18, SS21
Hanley, Jacob, GS01, SS02, SS05, SS20, SY04
Hannington, Mark, SS03, SS03, SS05
Hansen, Joe, SS15, SS15
Hansen, Joseph, SS15
Harmanci, Goktug, GS01
Harrison, Anna, SS11, SS11, SS11
Harrop, John, SS20
Hasani, Sanaz, SS11
Hastie, Evan, GS14, SY01, SY01
Haugaard, Rasmus, SY05, SY05, SY05, SY05
Hayes, Sarah, SY01
Hayman, Patrick, SS20
Hayward, Nathan, SY01
Hazen, Robert, SS25, SS26
Heaman, Larry, SS08
Heer, Emily, SS15
Henry, Kristin, SY05
Herd, Chris, SS16, SS16
Hesselbo, Stephen, GS13
Hickey, Kenneth, GS01
Hicks, Chris, SY03
Hickson, Cathie, SS09
Hidy, Alan, SS02
Higgins, Michael, GS07
Hinchey, Alana, SY02, SY03
Hinchey, John, SY01
Hitzman, Murray, SS21
Hodder, Tyler, SS06
Hodgskiss, Malcolm, SS13, SS25

Hofstra, Al, SY01
Holdstock, Mark, GS01
Hollings, Peter, SY03, SY03
Holwell, David, SY03
Honsberger, Ian, SY04
Hood, Ashleigh, SS13, SS25
Hopfner, Mario, SS20
Hostrawser, Jack, SS16
Houlé, Michel, SY01, SY03, SY03, SY03
Hull, Scott, SY05, SY05
Hum, Keira, SS15, SS15, SS15
Hume, Brandon, GS04
Huntsman, Philippa, SS11
Huston, David, SY01, SY01
Hutchins, Aaryn, SS20
Hutchison, Alex, SY04
Hymers, Lesley, SS15, SS15
Hyndman, Roy, SS07, SS22
Hysert, Melany, SS15
Iacono-Marziano, Giada, SY03
Indares, Aphrodite, SS07, SS07, SS07, SS07, SS07
Ivanik, Olena, SS26
Jaimes Bermudez, Juan, SS16
Jalowitzki, Tiago, SS10
James, Tramaine, SS27
Jamieson, Heather, SS11, SS11, SS11
Jamieson, John, SS03
Jaret, Steven, SS16
Jébrak, Michel, SY02
Jefferson, Charlie, SS25
Jenkins, Christopher, SY03
Jeřábek, Petr, SS04
Jess, Scott, SS15
Jessell, Mark, SY02
Jiang, Dazhi, SS07
Johnson, Barrie, SS11
Johnson, Jeffrey, SS16
Johnstone, Shawn, SY05
Jolley, Alison, SS15
Joly, Aurore, SS05
Jones, Thomas, SS11
Jørgensen, Taus, SS05, SY05, SY05
Jouvent, Marine, SS04
Jowitt, Simon, SS22, SS27, SY01, SY04
Joy, Brian, GS01, SS16
Joyce, Nancy, SS04, SS22, SS22
Jugo, Pedro, SY02, SY03
Kabel, Jacob, GS01
Kamal, Darius, GS01
Kamber, Balz, SS20
Kamo, Sandra, Plenary, GS03, SY04
Kazamel, Brent, SS11
Keefe, Emma, GS14
Keiding, Jakob, SS18
Kellett, Dawn, GS14, SS20, SS22
Kelley, Karen, SY01
Kendall, Brian, GS03, SS02, SS17
Kennedy, Kirsten, SS09
Kerr, Andrew, SY01, SY01
Keyser, William, SS20
Kieffer, Marie, SY03
Kin I Sio, Corliss, GS01
King, Alan, SS03, SY05
King, Michael, SS03
Kinney, Carson, SS07, SY01
Kjarsgaard, Bruce, SS08
Kleinsasser, Jackie, SY02
Knox, Bernadette, SS05, SS05
Kobak, Samantha, SS15
Kocher, Simon, GS01
Kolb, Jochen, SY04, SY04
Kondrasovas, Halina, SS27, SS27
Konhauser, Kurt, SS13
Kontak, Daniel, GS01, GS01, GS01, GS07, SS20, SS27, SY02
Koptev, Egor, SS10
Kopylova, Maya, SS10
Kopystecki, Helen, GS03
Kosinski, Gordon, SY05
Kremer, Paul, SY02
Kroner, Stephan, SS20
Kubuya, Rocky, SS11
Kuhn, Thomas, SS03
Kulakov, Evgeniy, SS07
Kurz, Tobias, SS27
Kuster, Klaus, SY03
Kuzmicz, Brett, SS22, SY04
Kylander-Clark, Andrew, SS04
Laflamme, Crystal, SS02, SS08, SS26, SY02, SY04
Laflamme, Marc, SS17, SS17, SS25
Lafrance, Bruno, GS01, GS01, GS14, SS05, SY02, SY02, SY04, SY04, SY04
Lakanen, Max, SS11
Lam Savina Tam, Wing, SS11
Lambiv Dzemua, Gideon, SS06, SS11
Landry, Emilie, SS20
Large, Simon, GS01
Larsen, Rune, SY03, SY03
Larson, Kyle, SS07
Laughton, Joshua, SS08
Launay, Gaetan, SS20, SY01
Lawley, Christopher, Plenary, GS01, SS03, SS24, SY01, SY01
Lawton, Don, SS11
Laxdal, Aurelia, SS02
Layne, Graham, SY04
Lazowski, Cody, SS13
Le Roux, Mignon, SS11, SS11
Le Vaillant, Margaux, SY03
Lechte, Maxwell, SS09, SS13, SS13, SS25
Lecumberri-Sanchez, Pilar, GS01, GS01, GS01, SS13, SS22, SY01
Ledesma, Gabrielle, GS02
Lehman, Miranda, SS05
Lei, Benjamin, SS11
Lelievre, Peter, SS03
Lemke, Tara, SS05
Lentz, David, Plenary, GS07, SS11, SS21, SS26, SS26, SS26, SS26, SS26, SS26
Lepland, Aivo, SS25
Lesher, Michael, SY01, SY03, SY03, SY03, SY03, SY03, SY05, SY05
Leung, Derek, SS15, SS21
Lexa, Ondrej, SS04
Leybourne, Matthew, SS11, SS11, SS25
Li, Changcheng, SS07
Li, Jie, GS03, GS13
Li, Wenxuan, SY02
Li, Xiaofeng, SS26
Li, Zhiquan, SS13
Lian, Olav, SS06, SS20
Liang, Wenyao, SS06
Lima, Alexandre, SS20, SS20, SS20, SS20
Lin, Jinru, SS21
Lin, Shoufa, GS03, GS14, SS04, SS07, SS08, SY02, SY04
Lin, Yongjie, GS13
Lindsay, Mark, SY02
Lindsay, Matthew, SS11, SS11, SS11, SS11, SS11
Linnen, Robert, SS20, SS20, SS21, SS26, SY01
Lisitsin, Vladimir, SY01
Litza, Nicolas, SY05, SY05
Liu, Lingfei, GS14
Lloret, Carla, SS20
Lockhart, Justin, GS02, SS11
Loginova, Julia, SS24
Lombard, Théo, SS21
Long Cheung, Ka, SS27
Longuépée, Hugues, SS20
Lotout, Caroline, SS07
Louwerse, Lukas, GS04
Lowe, David, SS11, SS11, SS11, SS11, SS25, SS25
Lulin, Jean-Marc, SY03
Luo, Yan, GS01, SS04, SS08, SS22
Lussier-Purdy, Colin, SS11
Lyatsky, Henry, GS04
Lypaczewski, Philip, SS21, SS27, SS27, SS27, SS27
Macdonald, Daniel, SS03
Macdonald, Francis, SS25
MacKay, Cameron, SS27
MacLellan, Lauren, SS02, SS02
Macquistan, Mary, GS01
Magyarosi, Zsuzsanna, SS26, SY01
Maier, Wolfgang, SS09, SY03
Mailey, Amy, SS10
Maloney, Katie, SS09, SS15, SS15, SS15, SS25, SS25
Malta, Isaac, SS08, SY02
Mami Khalifani, Farzaneh, SS21
Mansur, Eduardo, SS09, SS18, SS18, SY03
Mao, Jingwen, SY02
Marich, Andrea, SS06, SY01
Mark, Benjamin, SY02
Marmier, Vincent, SS11
Marquez, Eduardo, SS11
Marquis, Geneviève, SY01
Marsh, Jeffrey, GS01, SS08
Martel, Edith, GS14, SS08
Martin, Ashley, SS02
Martin, Laure, SY02, SY04, SY04
Martin, Samuel, GS03
Martineau, Christine, SS11
Martins, Tania, SS20, SS20, SS20, SS20
Matheson, Edward, SS17, SS17
Mathieu, Lucie, SY02
Matterson, Trevor, SS16
Matusevicius, Justinas, GS01
Maverick, Dakota, SS25
Mavromatis, Vasileios, SS11
Maw, Liam, SY04
Mayer, Bernhard, SS11
McBeth, Joyce, SS11, SS11, SS11, SS11, SS11, SS11
McCafferty, Anne, SY01
McCausland, Philip, GS04, GS04, SS16

McClelland, Bill, SS22
McClenaghan, Beth, SS06
McConnell-Radford, Emer, SS16
McCutcheon, Jenine, SS11, SS11, SS11, SS11
McDonald, Andrew, SS21
McDonald, Duncan, SS11
McFarlane, Christopher, SS26
McGarry, Samantha, SS11
McGill, Danielle, SS02, SY01, SY01
McHale, Sean, SS11
McIntire, Eliot, SS24
McLarty Halfkenny, Beth, SS15, SS15, SS15, SS15
McLoughlin-Coleman, Thomas, GS01, SS13, SS25
McMartin, Isabelle, SS06
McNeil, Rick, SS27
McParland, Decla, SS11, SS11
Meagher, Daniel, SS05, SS15
Meier, Kagan, SS11
Mendonça Filho, João, GS13
Meng, Xuyang, SY02
Menuge, Julian, SS20, SS20, SS20
Mercier-Langevin, Patrick, SS05, SS05, SY04, SY04, SY04, SY04
Merrick, Chelsey, SY01
Mesich, Nickolas, SS06
Metsaranta, Riku, SY03
Miggins, Daniel, SS16
Miles, Andrew, SS20
Milier, Killian, SY03, SY03
Miller, Austin, SS11
Miller, Brent, SS07
Miloski, Pedro, SY03
Miranda, Ana Carolina, SS18
Mitchell, Matthew, SS24
Moghazi, Abdel-Kader, SS26
Mohammadi, Nadia, SS22, SS26
Mole, David, SY02, SY02
Molnar, Sheri, GS04
Monecke, Thomas, GS01, SS05
Mongeau, Philippe, SY04
Montenegro, Nicholas, GS14, GS14
Montreuil, Jean-François, SS18, SY01
Montsion, Rebecca, SY02
Morisset, Caroline-Emanuelle, SY03
Morrison, Shaunna, SS25, SS26
Moser, Desmond, SS20
Moses, Alexander, SY04
Mosher, David, SS03, SS09
Mou, Chuanlong, SS17
Moukhsil, Abdelali, SS07, SS07, SS26
Moutela, Paulo, SS20
Moyen, Jean-François, SY02
Mulder, Jacob, SS08
Müller, Axel, SS20, SS20
Mulligan, Riley, SS06
Mundreon, Sean, SS27
Mungall, James, GS01, SS25, SY03
Murimboh, John, GS03
Murphy, Brendan, GS07, SS09
Mykytczuk, Nadia, SS11
Nadeau, Antoine, SS27
Nadeau, Olivier, SY01
Nagy, Carl, SY04
Nakajima, Miki, SY05, SY05
Namur, Olivier, SY03
Naulot, Rémi, SS05
Nazari-Dehkordi, Teimoor, SS20
Nebel, Oliver, SS08
Neil, Ben, SS08
Nelson, Lyle, SS25
Neyedley, Kevin, SS05
Nickerson, Shae, SS04
Nielsen, Julia, GS14, SS15, SS15
Niinikoski-Fusswinkel, Paula, SY04
Nissen, Adam, SS20
Normandeau, Philippe, SS06, SS06, SS10
Nosova, Anna, SS10
Nxesi, Bukelwa, SY05
O'Driscoll, Brian, SY03
Ojo, Adebayo, GS04
O'Neil, Jonathan, SS08
Onodenalore, Ofure, GS01
Ootes, Luke, SS22
Orlóci-Goodison, Ruth, GS14
Ortega, Jorge, GS01
Osadetz, Kirk, SS11
Osawa, Hatena, SS17
Osinski, Gordon, SS08, SS16, SS16, SS16, SS16, SS16, SY01, SY05
Ovas, Alexander, SS22, SY04
Pagé, Philippe, SY03
Paiement, Jean-Philippe, SS05
Paige, Cody, SS02
Pakostova, Eva, SS11, SS11
Paktunc, Dogan, SY03
Palmer, Michael, SS11
Pan, Yuanming, SS21, SS27
Pan, Yu-Yen, SS15
Pana, Dinu, GS04
Papangelakis, Elli, SS15, SS15, SS17
Paradis, Suzanne, SY01
Parisi, Andrew, SS16
Parker, Amy, SY03
Parkinson, Amy, SS13, SS13
Parr, Nicholas, SS20
Parsa, Mohammad, SS21
Parsons, Andy, SS22
Parsons, Michael, SS11
Patel, Avni, SS11
Patrick, Brian, GS01
Patten, Clifford, SY04
Pattison, David, SS07
Pattison, Edward, SY03, SY03, SY05
Paulen, Roger, SS06, SS09
Paulo, Carlos, GS02, GS13, SS11, SS11, SS11, SS11
Peace, Alexander, GS04, GS14, GS14, GS14, SS10, SS15, SS15
Pears, Glenn, SS05
Pearson, Graham, GS01, SS04, SS08, SS10, SS10, SS10, SS10, SS22
Pearson, Kate, SS15
Pecoits, Ernesto, SS13
Pedemonte, Giovanni, SS21
Pedreira Pérez, Rocío, SS08
Pehrsson, Sally, SS09
Pelchat, Pierre, SS27
Peloquin, Shirley, SS18
Penney, Glen, SS27, SS27
Percival, Jeanne, SS27
Perea, Daniel, SS02
Peřestý, Vít, SS04
Perrot, Morgann, GS01, SS07, SY03
Perrouty, Stéphane, SS21, SS27, SS27, SY02, SY02, SY02
Pesquera, Alfonso, SS20, SS20
Pestaj, Tom, SS22
Peter, Jan, SY01, SY01
Peters, Dustin, SY03, SY05
Peterson, Ron, GS01
Petrus, Joseph, SY03
Petts, Duane, GS01, GS01, GS01, GS01, GS01, SS03
Pfister, Jérémie, SS20
Piatak, Nadine, SY01
Piatek, Jennifer, SS16
Piercey, Stephen, Plenary, SS05, SS05, SS21, SS22
Pilote, Jean-Luc, SY04
Pires Leandro, Julia, SS22
Piunno, Paul, SS17
Planke, Sverre, SY03
Plante, Benoît, SS11, SS11, SS11, SS11
Pohl, Claudia, SS20
Poliakovska, Kateryna, SS26
Polivchuk, Matthew, SS03, SS27
Polk, Raven, GS03
Pollney, Denis, SY05
Porter, Suzannah, SS13, SS13
Potter, Eric, GS01
Powell, Jeremy, GS01, GS01, GS01
Powell, Michael, SS10
Power, Ian, GS02, GS13, SS11, SS11, SS11, SS11, SS11, SS11
Prabhu, Anirudh, SS26
Pratt, Brian, Plenary
Préfontaine, Sonia, GS03
Prevec, Stephen, SS09, SY05, SY05
Priebe, Elizabeth, SS11
Prikhodko, Alexander, GS04
Ptacek, Carol, SS11, SS11, SS11, SS11, SS11
Pufahl, Peir, GS03, SS17, SS17, SS17
Qian, Jiahui, SY02
Quesnel, Benoît, SY04
Qun Chen, Hui, SS11
Raab, Gerald, SS02
Rabbani, Aneesa, GS13, SS17
Rabiei, Morteza, GS01
Rafeeza, Muhammad, GS13
Rainbird, Robert, GS01, SS09, SS13, SS13, SS25, SS25
Ramharrack-Maharaj, Shania, GS02, SS15
Ranza, Luigi, SS20
Rasmussen, Kirsten, GS01, SS22
Raudsepp, Maija, SS11
Rausis, Kwon, GS02, SS11, SS11
Raymond, Guillaume, SY04
Rayner, Nicole, SS03, SS26
Rehm, Adrian, SS08
Reid, James, SS05
Reimer, Wolfgang, SS20
Reimink, Jesse, SS22
Reinwald, Stacey, SS11
Ren, Peng, SS17
Reynolds, Merilie, GS01, GS01, GS01, SS02, SS05, SY01, SY01, SY01
Ribeiro, Diogo, SY04

Rice, Jessey, SS06
Richards, Jeremy, SY02
Rickwood, Carrie, SS11
Riedman, Leigh, SS13
Rieger, Philip, GS01
Rizo, Hanika, SS11
Robbins, Leslie, GS02, SS13, SS13, SS13
Robert, Francine, SS16, SS16, SS16, SS16
Robertson, Jared, SS11
Robichaud, Lise, SY02
Roda-Robles, Encarnación, SS20, SS20, SS20
Rodrigues de Almeida, Cátia, SS20
Rodrigues, Bruno, GS13
Rodrigues, Rita, SY04
Rogers, Neil, SS26, SS26
Rollinson, Gavin, SS20
Román, Nelson, SS21
Ross, Kirk, SY04
Ross, Martin, SS06, SS06, SS06, SS09
Ross, Pierre-Simon, SS05, SY04, SY04
Rottier, Bertrand, GS01, SS21, SS21, SS26, SY04, SY04
Rowson, Neil, SS11
Ruffet, Gilles, SS08
Ruhl, Micha, GS13
Russell, Kelly, SS09
Russell, Wyatt, SS11
Ryan, Jim, SS22
Saalmann, Kerstin, SS20
Saberi, Nima, SS11
Sadki, Driss, GS13
Saini, Radhika, SS16
Samson, Charles, SY04
San Juan, Carma, SY01
Sanborn-Barrie, Mary, SS09
Sandeman, Hamish, SY01, SY02, SY04
Santaguida, Frank, SY01
Santimano, Tasca, SS15
Santos, Douglas, SS20, SS20
Sappin, Anne-Aurélie, SY01, SY03
Saumur, Benoit, SY03, SY03
Saurette, Emily, SS11, SS11
Savard, Dany, SY02, SY03, SY03
Saylor, Joel, GS03, GS13, SS22
Scaillet, Stéphane, SS04
Schaarschmidt, Maria, SS06
Schaffer, Zivi, SS11
Scheffer, Christophe, SY04
Schiffbauer, James, SS25
Schmidt, Jamie, GS02
Schoenbohm, Lindsay, SS15
Schoenenberger, Jasmin, SS27
Schoepfer, Valerie, SS11
Schofield, Marina, SS03, SS05
Scholz, Ricardo, SS10
Schudel, Gary, SS11, SS11, SS11
Schulze, Dan, SS10
Schuster, Richard, SS24
Schuth, Stephan, SS02
Schwarz, Deana, SS15
Schwarz-Schampera, Ulrich, SS03
Schwerdtner, Walfried, GS14
Seal, Robert, SY01
Šegvić, Branimir, SS17
Seibel, Henning, SY05
Serafini, Guido, SY05
Seraine, Marina, SS25
Serna, Santiago, SS25
Severs, Matthew, SS18
Sharp, Zachary, SS25
Shawwa, Nabil, SS13, SS13, SS25
Shekut, Samuel, GS13
Sherlock, Ross, GS01, GS01, SY02, SY04, SY04, SY04
Shimeld, John, SS09
Shirey, Steven, SS10, SY05, SY05
Shkarupin, Alexi, SS11
Sider, Prestyn, GS01
Silva, David, SS20
Silva, Ricardo, GS13
Silva-Caceres, Matias, SS11
Simmons, Jack, GS01
Simmons, Skip, SS20
Simon, Adam, SY02
Simoneau, Jacques, SS21
Slagstad, Trond, SS07
Slater, Evan, SY04
Slotznick, Sarah, GS07, SS25
Smit, Matthijs, SS08, SS08, SS09
Smith, Albertus, SS13
Smith, Amanda, SS04
Smith, David, SS05, SY05
Smith, Emily, SS25
Smith, Kate, SS20
Smith, Peter, SY01
Smith, Richard, GS04, GS04, SY05, SY05
Smith, William, SS20, SY03, SY03
Snyder, David, SY05
Soltanmohammadi, Azam, SY03
Somps, Ben, SS05
Sørensen, Bjørn, SY03, SY03
Soroka, Tanner, SS17
Sorrentino, Johnathan, SS17
Soucy La Roche, Renaud, SS07, SS07, SS22
Soukup, Maya, SS02
Sousa, Isabela, SS25
Southam, Gordon, SS11
Sparkes, Greg, SY01
Spencer, Christopher, SS07, SS16, SS25
Spiers, Graeme, SS11
Spray, John, SS16, SY05
Sproat, Colin, SS17
Spruzen, Charlotte, SS25
Stachel, Thomas, SS10, SS10, SS10
Stanley, Clifford, GS01, GS03
Stapleton, Greg, SY01
Starzynski, Hannah, SS11
Steele-MacInnis, Matthew, SS18, SS18, SS18
Steel-McInnis, Matthew, SS18
Steiner, Ralf, SS20
Stepner, Dan, SS08
Stern, Richard, SS04, SS08, SS10, SS22, SY02, SY04
Stevenson, Ross, SS08
Stewart, Craig, SY04
Stewart, Margaret, SS03, SS05, SY04
Stinnissen, Caibre, GS01
Stinson, Victoria, SS15
Stockli, Daniel, SS16
Stralberg, Diana, SS24
Strauss, Ashley, SS17
Strong, Jacob, SS08
Strongman, Keaton, SS03, SS05, SY02, SY02
Strother, Paul, SS25
Strowbridge, Susan, SS07
Stubley, Michael, SS05
Stuebing, Devon, SY02
Stueeken, Eva, SS13
Sullivan, Elizabeth, SS25
Sunatori, Evelyne, SS04
Sutton, Jonathan, GS01, GS01
Swanson-Hysell, Nicholas, SS25
Swing, Megan, SS02
Sykes, James, SS27
Szumila, Ian, SY05, SY05
Tabaud, Anne-Sophie, SS05
Tait, Kim, SS16, SY01
Tait, Kimberly, SY01
Tallman, Peter, SS21
Tarkyth, Dène, GS01
Taylor, Adriana, SS11
Taylor, Sandra, SS02
Tedeschi, Michael, SS27, SY02
Tegner, Christian, SY03
Tekin, Ozgur, SY01
Teodoro, Ana, SS20, SS20, SS20
Tersmette, Daniel, SS08
Thompson, Gary, SS27, SS27
Thompson, Karen, GS02
Thomson, Gary, SS27
Thorne, Kathleen, SS26, SS26, SS26
Thurston, Phil, SY02
Timmerman, Suzette, SS10, SS10
Tinkham, Douglas, GS01, SS08, SS08, SS08, SS08, SY02, SY02, SY02
Tomacic, Jessica, SS27
Tornabene, Livio, SS16, SS16
Tornos, Fernando, SS18, SS18
Torremans, Koen, GS01
Tosca, Nicholas, SS25
Toth, Zsuzsanna, SY02
Toubri, Youssef, SS11
Trail, Dustin, SY05, SY05
Tremblay, Alain, GS01, SS08
Tremblay, Jonathan, SS20
Tschirhart, Victoria, GS01, GS01, GS01
Tunc, Ayetullah, SS21
Turcotte, Melissa, SS11
Turner, David, SS27
Turner, Elizabeth, GS01
Turvey, Connor, SS11, SS11
Twigg, Helen, SS21
Ulrich, Ania, SS11
Uluak Itchuaqiayq, Cana, SS24
Umbsaar, Jonathan, SS03
Unger, André, SS08
Unitt, Richard, SS21
Unterweissacher, Thomas, SS20
Utting, Nicholas, SS11
Uwanyirigira, Janviere, SS11
Uygur, Merve, SS03
Vachon, Laura, SY03
Vajavur, Rajesh, SY05
Valentin dos Santos, Eduardo, SS21
Väliranta, Minna, SS06
van der Stijl, Frank, GS01
van Keken, Peter, SS10
van Rooyen, Deanne, SS04, SS07, SS21

van Staal, Cees, SS04
Vasyukova, Olga, SS26, SS26
Vayavur, Rajesh, SY05
Vazquez-Lopez, Veanessya, SY05
Veh, Sahy, GS14
Venesse Naber, Tiera, SS26
Vennemann, Torsten, SY04
Vervoort, Jeffrey, SS07
Vessey, Colton, SS11
Vest Sørensen, Erik, GS01
Vice, Lianna, SY02
Villaseca, Carlos, SS20
Vite-Sanchez, Octavio, SS05
Vriens, Bas, SS11, SS11, SS11, SS11
Wach, Grant, GS13
Waddington, Dennis, GS14
Wagner, Lara, SS10
Wagner, Thomas, SY04
Waight, Tod, SY04
Walker, James, SS21
Walker, Jim, SS26
Walker, Joseph, SY02
Wall, Corey, SS05
Wall, Frances, SS20
Wallace, Chaneil, GS01
Wallace, Malcolm, SS13, SS25
Walter, Michael, SS10, SS26
Wang, Alana, SS11
Wang, Baolin, SS11, SS11, SS11
Wang, Bronwen, SY01
Wang, Chang-Le, SS13, SS13
Wang, Jian, SS07
Wang, Lijun, GS14, SS04
Wang, Qingfei, GS01, SS17
Wang, Qiyu, SS17
Wang, Wei, GS02
Wang, Ying, SS27
Wang, Yumeng, GS01, GS01
Wanke, Dietrich, SS20
Warburton, London, GS07
Webb, Lucy, SS25
Webber, Karen, SS20
Wellman, Charles, SS25
Whelan, Margaret, SS13, SS13, SS25
Whitaker, Anna, SS17
White, Chris, SS04, SS04
White, Sarah Jane, SY01
Whymark, Wesley, GS01
Wilkinson, Jamie, GS01
Williams, Janice, SS15
Williams, Jason, SS26
Williams-Jones, Anthony, SS26, SS26, SY01, SY04
Williams-Jones, Glyn, SS09
Williamson, Ben, SS20, SS20
Williamson, Marie-Claude, SS03, SS27, SS27
Wilson, David, SS11
Wilson, Sasha, SS11, SS11
Wilson, Siobhan, GS13, SS11, SS11, SS11, SS11
Wilton, Derek, SS03, SS27, SS27, SS27
Wirth, Mark, SS02
Woodburn, Gavin, SS15
Wu, Mingqian, SS20
Wu, Qihang, SS08
Xiao, Shuhai, SS25
Xiao, Wenjiao, GS14
Xu, Jinglin, GS01
Xu, Weimu, GS13
Xu, Xinyue, SS18, SS18, SS18
Yakymchuk, Chris, GS03, SS07, SS08, SY01, SY04
Yang, Jianwen, SS21
Yergeau, David, SY04
Yin Yip, Cheuk, SS07
Yin, Changqing, SY02
Yiu, Fannie, GS14
Young, Graham, SS17
Young, Nahanni, GS01
Yousefi, Fazilat, GS07
Yuan, Zhong-zheng, GS01
Yudovskaya, Marina, SY03
Zack, Thomas, SY04
Zagorevski, Alex, SS04, SS22, SS22, SS22, SS22
Zahir, Zohra, GS02
Zahoor Iqbal, Muhammad, SS07
Zajacz, Zoltan, SS05
Zettl, Julie, GS13, SS17
Zeyen, Nina, SS11, SS11, SS11
Zhang, Daisy, SY01
Zhang, Jian, SY02
Zhang, Shuangquan, SS03
Zhang, Yihuai, SS11
Zhang, Yiming, SS25
Zhao, Liandang, SS18
Zhou, Haoyang, SS20
Zhou, Yongzhang, SS13
Zhu, Yiting, SS26
Zientek, Michael, SY03
Zinck, Janice, SS15

NOTES

NOTES

NOTES

NOTES

NOTES

THANKS TO OUR EXHIBITORS! • MERCI À NOS EXPOSANTS!

Actlabs

Canadian Ocean Literacy Coalition / La Coalition canadienne de la connaissance de l'océan

CoreLift™

Geological Association of Canada / Association géologique du Canada

Canada Geological Survey - Commission géologique 1842

GLENCORE

Laurentian University / Université Laurentienne — Goodman School of Mines / École des mines

Laurentian University / Université Laurentienne — Harquail School of Earth Sciences / École des sciences de la Terre

IAMGOLD Corporation

CôtéGold

IMDEX™

ISOMASS Scientific Inc.

Mineralogical Association of Canada / Association minéralogique du Canada

MERC

ODM

Ontario

oreas

PROTO Manufacturing

Society for Geology Applied to Mineral Deposits

SGS

VALE

GAC-MAC-PEG 2024

May 19 to 23

AGC-AMC-PEG 2024

19 au 23 mai

AT THE HEART OF THE CONTINENT

AU COEUR DU CONTINENT

Nous sommes impatients d'accueillir la réunion annuelle **AGC-AMC-PEG 2024** à l'Université de Brandon au Manitoba.Cette réunion comprendra toute la programmation attendue du **AGC** et du **AMC**, ainsi le **10e Symposium international sur les pegmatites granitiques** avec des visites sur le terrain et des sessions spéciales.

L'appel à propositions de sessions, de sorties de terrain et de cours ou d'ateliers courts sera lancé début juin 2023, et le programme scientifique et pédagogique préliminaire sera disponible en septembre. Pour information ou pour soumettre une proposition contactez Paul Alexandre (AlexandreP@BrandonU.ca).

https://event.fourwaves.com/gacmac2024/pages

We look forward to hosting GAC-MAC-PEG 2024 at Brandon University in Manitoba. This meeting will include all the expected **GAC** and **MAC** programming, as well the **10th International Symposium on granitic pegmatites** with field trips and special sessions.

The call for session proposals, field trips, and short courses or workshops will be issued in early June 2023, and the preliminary scientific and educational program will be available in September. For information or to submit a proposal contact Paul Alexandre (AlexandreP@BrandonU.ca).