

Tuesday, November 14 – Morning
Theatre 1 – Regulatory and Policy Updates

Chairs: Benji Straker (GNWT – MRD) and Bernard Park (GNWT – PRD)

09:00 Creating a NWT Mineral Resources Act – N. Leeson

09:20 The Expert Panel Report on the Review of Environmental Assessment in Canada: How the Mackenzie Valley Measures Up – B. Wheler

09:40 Regional Impact Assessment: A New Strategic Path for the Northwest Territories – M.A. Cliffe-Phillips

10:00 The Northwest Territories Power Corporation: Planning for the Future – J. Grewal

10:20 Coffee Break

10:40 A Perspective on Fish Habitat Protection in the North under Recent and Forthcoming Changes to the Fisheries Act – C. Stevens

11:00 The Duty to Consult Aboriginal Peoples: Background and Legal Update – T. Kruger

11:20 Indigenous Engagement in the Mining Sector: Lessons from Ontario – J. Abouchar

11:40 NWT Cumulative Impact Monitoring Update – J.C.N. Kanigan

12:00 Navigating Environmental Risk: When and How to Apply the Precautionary Principle – C.J. Birchall & J. Donihee

12:20 Official Opening (Theatre 1)

Tuesday, November 14 – Morning

Theatre 2 – Mining and Exploration

Chairs: Tom Hofer (NWT & NU Chamber of Mines) and Philippe Normandeau (GNWT – NTGS)

08:20 Nunavut Exploration Overview 2017 – M. Russer

08:40 NWT Mineral Exploration and Mining Overview 2017 – H.E. Falck

09:00 Indin Lake Gold Project – 2017 Colomac Update – W. Waychison

09:20 TerraX Minerals Inc. – Yellowknife City Gold Project – Update on Drilling – A. Sexton

09:40 Earning and Maintaining Social Licence in an Urban, Recreational, and Brownfield Environment with an Unsettled Land Claim – D.M. Connelly

10:00 Pine Point Mining – J. Key

10:20 Coffee

10:40 Diavik Diamond Mines – 2016 Socio-Economic Monitoring Agreement Performance – R. Alty

11:00 Geochemical Vectoring on Gold Systems Using Carbon Isotopes – D.R. Webb

11:20 Current Status of Mineral Tenure in the Northwest Territories – M. Bhuiyan

11:40 Exploration Assessments Digital Data Formatting – A Proposed National Standard – A. Belanger

12:00 TMAC Resources – Hope Bay Exploration and Geoscience Update – S. Parsons

12:20 Official Opening (Theatre 1)

Tuesday, November 14 – Morning

Theatre 3 – Energy in Canada's North

Chairs: Kathryn Fiess (GNWT – NTGS) and Viktor Terlaky (GNWT – NTGS)

- 08:20 Activity Update – Northwest Territories Geological Survey Petroleum Geosciences Group – K.M. Fiess
- 08:40 Central Mackenzie Valley Basin Analysis Project – J. Rocheleau
- 09:00 Integrating Chemostratigraphic and Sedimentological Datasets to Establish a Sequence Stratigraphic Framework for the Devonian Canol Formation, Central Mackenzie Valley and Mackenzie Mountains, Northwest Territories – M.T. LaGrange*
- 09:20 Neoproterozoic Deformation in Eastern Mackenzie Mountains and Mackenzie Plain, Northwest Territories – K.M. Fallas
- 09:40 Lithostratigraphy, Chemostratigraphy, Thermal Maturity, and Source Rock Potential of the Horn River Group at Two Outcrops in the Southern Peel Plateau Area, Northwest Territories – V. Terlaky
- 10:00 Status Report on the GNWT's Petroleum Resources Division's Current and Planned Activities – T.I. Butters
- 10:20 Coffee

Environmental Monitoring and Research

Chairs: Isabelle de Grandpré (GNWT – ENR) and Julian Kanigan (GNWT – ENR)

- 10:40 Using the Past to Inform the Future: A Paleocological Perspective of the Impacts of Drought and Fire on Lakes and Forests – K.A. Moser
- 11:00 Response of Stream Macroinvertebrates to Recent Wildfires in the North Slave, South Slave, and Dehcho Regions, Northwest Territories, Canada – C.S. Garner*
- 11:20 Environmental DNA – Real Time Results in the Field to Confirm the Presence of Target Species – E. Bonhomme
- 11:40 Baseline, Indicators and Uncertainties of Great Slave Lake Fisheries Ecosystem Under Multiple Pressures – X. Zhu
- 12:00 Cost-Effective Water Baseline Environmental Monitoring of Northern Waterways – P. Adlakha
- 12:20 Official Opening (Theatre 1)

* Student Presentation

Tuesday, November 14 – Afternoon

Theatre 1 – Regulatory and Policy Updates

Chairs: Benji Straker (GNWT – MRD) and Bernard Park (GNWT – PRD)

14:40 Update on the Recent and Planned Activities of the Office of the Regulator of Oil and Gas Operations – J. Fulford

15:00 Transportation Corridors and Access to Resources in the Northwest Territories – R. Neudorf & P. Strand

15:20 Regulation in an Era of Reconciliation – What Should the Way Forward Look Like? – N. Kara

16:00 ICORE-IL: Achieving Regulatory Excellence through Collaborative Innovation – C. Froese

Tuesday, November 14 – Afternoon

Theatre 2 – Permafrost Modelling and Monitoring

Chairs: Peter Morse (GSC – Ottawa) and Stephan Gruber (Carleton University)

- 14:40 CMIP5 Climate Scenarios Compared to Meteorological Data from 2006 to 2016 for Yellowknife, Inuvik, and Iqaluit – S.A. Proskin
- 15:00 Integrating High Resolution Field Observations and Modelling in Order to Improve Our Understanding of Hydrological Change in the Arctic Northwest Territories – P. Marsh
- 15:20 Numerical Geothermal Analysis: An Important Component for the Designs and Evaluations for Structures in Permafrost Regions – G. Zhang
- 15:40 What's in a Time Series? Utilizing Metric to Summarize and Compare Spatio-Temporal Permafrost Site Characteristics on a Large Scale – S. MacDonald*
- 16:00 Predicting Liquid Water Content in Permafrost from Temperature Time Series: The Importance of a Structurally Sound Model – N. Brown*
- 16:20 Towards Better Monitoring of Permafrost Thaw: Subsidence and Ice Content – S. Gruber

* Student Presentation

Tuesday, November 14 – Afternoon

Theatre 3 – Environmental Monitoring and Research

Chairs: Isabelle de Grandpré (GNWT – ENR) and Julian Kanigan (GNWT – ENR)

14:40 Marian Watershed Stewardship Program – M. Birlea

15:00 Northwest Territories – Environmental Studies Research Fund: Providing Funding for Research in the Northwest Territories Related to the Energy Industry – K. Hansen

15:20 Temporal and Spatial Variability of Snow Water Equivalent, Snow Depth, and Snow Density at Local and Regional Scales in a 14,000 Km² Sub-Arctic Basin – D. Tokarski*

15:40 Tree-Ring Reconstruction of Streamflow in the Snare River Basin, Northwest Territories, Canada – J.P. Martin

Wednesday, November 15

Theatre 1 – Geoscience

Chairs: Beth Fischer (GNWT – NTGS) and Edith Martel (GNWT – NTGS)

- 09:00 Update on the Geological Survey of Canada's Geo-mapping for Energy and Minerals Program – C.A. Ozyer
- 09:20 Northwest Territories Geological Survey – 2017 Overview – J. Ketchum
- 09:40 Scheelite-Bearing High Fluid-Flux Skarns at the Metasomatic Skarn Front and their Relationship to other Mineralization at the Cantung W-Cu Skarn, Northwest Territories – C.P.E. Lentz*
- 10:00 Evidence for Mafic-Magma Derived Hydrothermal Fluids in Rare Earth Element Signatures and Melt Inclusions of Magmatic and Hydrothermal Apatite from the Cantung W-Cu Skarn Deposit, Northwest Territories – E.E. Adlakha
- 10:20 Coffee
- 10:40 Preliminary Structural Constraints on the Geometry of Selwyn Basin from Little Owls Lake to Howard's Pass, Nahanni Map Sheet (NTS 105I), Northwest Territories – B. Penner*
- 11:00 Local Stratigraphy of the Duo Lake Formation at Howards Pass in the Selwyn Basin Region, NWT – A.F. Flower*
- 11:20 Placer Gold and the Quaternary Stratigraphy of the Redstone River, an Orientation Study in the Foothills of the Mackenzie Mountains – P.X. Normandeau
- 11:40 A New Frontier for the Acasta Gneiss Complex: The Oldest Evolved Crust on Earth – M.B. Belosevic

* Student Presentation

Wednesday, November 15

Theatre 2 – Permafrost Landscape Change

Chairs: Trevor Lantz (University of Victoria) and Scott Lamoureux (Queens University)

- 08:20 Permafrost Monitoring in the Hudson Bay Lowlands: Preliminary Results from the Ontario Far North – P. Roy-Léveillé
- 08:40 Broad-Scale Geophysical Controls Associated with Thermokarst Landscape Sensitivity – A.C.A. Rudy
- 09:00 Thaw Depth Monitoring in the Mackenzie Valley, Northwest Territories – S.L. Smith
- 09:20 Depth Profiles of Geochemistry and Organic Carbon from Permafrost and Active Layer Soils in the Northern Slave Geological Province – S. Gruber & R. Subedi
- 09:40 Predictive Mapping of Permafrost Thaw Settlement Hazard near Lac de Gras, Northwest Territories – R.J. McKillop
- 10:00 Impacts of Forest Fires on Discontinuous Permafrost in the Southern Northwest Territories – J.E. Holloway
- 10:20 Coffee

Permafrost and Infrastructure

Chairs: Lucus Arenson (BGC Engineering Inc.) and Sandra MacDougall (Yukon Government)

- 10:40 TRAILS – ITH: Collaborative Geoscience to Support Infrastructure Management in a Changing North – P.D. Morse
- 11:00 An Experimental Study of Permafrost Restoration Under the Seismic Line in the Wetland-Dominated Zone of Discontinuous Permafrost, Northwest Territories, Canada – M. Braverman
- 11:20 Five Years of Monitoring Test Sections Along Highway 3 Near Yellowknife, Northwest Territories – L.U. Arenson
- 11:40 Permafrost Engineering at Laval University: Understanding Degrading Permafrost to Develop Engineering Tools for Adapting Canada's Northern Transportation Infrastructure – S. Dumais

* Student Presentation

Wednesday, November 15

Theatre 3 – Diamond Geology and Exploration

Chairs: Barrett Elliott (GNWT – NTGS) and Scott Cairns (GNWT – NTGS)

- 09:00 Overview of the Slave Province Geophysical, Surficial Materials and Permafrost Study Update – Revitalizing Mineral Exploration and Facilitating Sustainable Development in a Key Economic Region – B. Elliott
- 09:20 Tracing the Breadcrumbs Back to their Source; Exploring Geological Factors Controlling Production of Atypical Glacial Dispersal Patterns of Indicator Minerals – M. Ross
- 09:40 Airborne MAG/EM Data Integration of Slave Province Kimberlites, NWT – H. Ugalde
- 10:00 Paleoenvironmental Research on Early Cenozoic Sediment Fills in Lac De Gras Kimberlite Pipes: Progress and Prospects – A.V. Reyes
- 10:20 Coffee
- 10:40 Kennady North Project 2017 Field Season Update – R. Moore
- 11:00 Kelvin and Faraday Kimberlite Emplacement Geometries and Implications for Subterranean Magmatic Processes – T. McCandless
- 11:20 Mantle Composition, Age and Geotherm Beneath the Darby Kimberlite Field, West Central Rae Craton – D.G. Pearson
- 11:40 Novel Kimberlite Exploration Tools: Delineating Country Rock Hydration Associated with Kimberlites using Vis-SWIR Hyperspectral Point Data Collected from Drill Core – R. Tappert
- 12:00 Why Your KIM-Bearing Till Samples May Not be Leading You to Kimberlite – D.A. Sacco

Wednesday, November 15 – Afternoon
Theatre 1 – Keynote Presentation
14:00-15:00

Discovering mineral deposits through till: "mythbusting" the silver-bullet

Dr. Peter Winterburn

NSERC/AcmeLabs/Bureau Veritas Minerals Industrial Research Chair in Exploration Geochemistry
MDRU - EOAS - The University of British Columbia
Vancouver, BC

Abstract - Canada, as with many northern latitude environments, presents a challenge to mineral exploration in having many prospective mineral belts covered with a blanket of glacial products, including till, alluvium, organic veneers and post-glacial re-worked materials. Whilst indicator mineral trains have proved highly successful at identifying broad target areas, the pre-drilling surface evaluation of individual discrete targets remains an obstacle to effective and efficient mineral exploration. Ongoing research at the University of British Columbia over a range of mineralisation styles and utilizing commercial inorganic and organic geochemical techniques of soil and vegetation coupled with landscape mapping, has identified distinct pathways by which geochemical responses can develop on the land surface without invoking complex processes. Two sites in contrasting settings: the DO18 kimberlite, Northwest Territories, and the Highmont South deposit, Highland Valley Copper Mine, Central BC, will demonstrate that glacial processes, groundwater movement and vegetation are the principal ingredients in anomaly formation directly above mineralisation. Ongoing experiments with low-concentration blends of ore and till have demonstrated that geochemical and bacterial responses change rapidly in the presence of mineralisation and are likely directly related to the production of organic signatures.

At the DO-18 kimberlite, concealed by 10m of till, a distinct low-level Nb-Ni-Cr-Mg-organic response is identified directly over the kimberlite and tails off in the down-ice direction. The response dominantly resides with resistant mineral phases, and although subtle (6ppm Nb, 45ppm Cr, 20ppm Ni), can be identified by portable XRF. A portion of the anomaly is concealed by post-glacial alluvial processes and demonstrates the value of surface material mapping. The response was generated through ice transported clastic material in the till plume being locally enhanced by frost boil transport to the surface.

At Highmont South, where ice movement parallels the strike of an elongate mineralised body buried under 5-10m of till; a tight Cu (>360ppm) – Mo (>10ppm) – Ag (>0.054ppm) – Bi (>0.24ppm) signature is present directly over and down-ice of mineralisation within a broader regional anomaly from Highland Valley. The Mo surface response has been enhanced through vegetation (lodgepole pine) cycling, which has significantly enriched Mo (7-19ppm) in needles directly over mineralisation. Geochemical responses are also evident directly over major structures, however are limited to elements soluble in the ambient conditions. Organic signatures are present over both mineralisation and cross-cutting structures.



At both locations, conventional exploration geochemical techniques including fp-XRF, coupled with a clear knowledge of the glacial and post-glacial history, would have identified the presence of mineralisation as distinct drill targets without the necessity to utilize poorly understood selective extraction, proprietary or other commercial “Silver-bullet” techniques.

Biography

Dr Peter Winterburn is an Exploration Geochemist with over 25 years of experience in industry prior to joining the Mineral Deposit Research Unit as a professor of Exploration Geochemistry at the University of British Columbia in 2014.

Peter was previously employed by Anglo American plc as their Regional Geochemist in Africa and subsequently in South America, based out of Santiago, Chile following which he held the post of Chief Geochemist: Global Exploration with Vale based out of Toronto. Peter has worked in over 60 countries representing a range of environments from tropical to arctic to arid deserts in both mountainous and subdued terrains.

Peter is currently the NSERC/AcmeLabs/Bureau Veritas Minerals Research Chair in Exploration Geochemistry at MDRU, where he directs a program aimed at answering many of the questions and providing practical applications with respect to the discovery of minerals deposits through transported overburden. Peter has active research projects and students in British Columbia, the Northwest Territories, Colombia and Chile, where he is working on a dominant theme of understanding the processes of anomaly generation and anomaly retention in the surface soils. This research includes themes as diverse as regolith mapping, surface organic and inorganic geochemistry, soil mineralogy, extractive geochemistry and microbial genomics.

Soapbox Talk Schedule

Talk #	Poster #	First Author	Title	Time
1	1	E. Salmabadi	Structural Framework for the Cantung Tungsten Deposit, Northwest Territories	13:20
2	2	R.A. Stirling	Investigating the Diverse Glacial Geology South of Lac De Gras, Northwest Territories, and its Potential Implications for Drift Prospecting	13:27
3	3	S. McPeak	Estimating Overburden Depth in a Permafrost-Rich Environment using Passive Seismics: Results From the 2017 Preliminary Survey at Kennady Camp, NWT	13:34
4	4	B. Harris	Forming a Sequence Stratigraphic Framework for The Hare Indian Formation Using High-Resolution Chemostratigraphy and Sedimentology, Central Mackenzie Valley, Northwest Territories	13:41
	KEYNOTE			14:00 – 15:00
5	5	L. Wong	Water Quality Data to Support Cumulative Effects Decision-Making in the Mackenzie Valley, Northwest Territories	15:17
6	6	L. Arnold	Cumulative Impact Information and Environmental Assessment Decision-making in the Mackenzie Valley, Northwest Territories	15:24
7	7	J.V. Telford	Using Paleolimnology to Establish Baseline Conditions and Trends for Contaminants and Climate for a Community-Based Aquatic Ecosystem Monitoring Program, Marian Watershed, Northwest Territories	15:31
8	8	J.A. Viscek	Evaluating Lake Water Balances in Relation to Catchment Characteristics Near Yellowknife, NT, and Their Hydrological Response to Varying Climatic Conditions	15:38

Wednesday, November 15 - Evening

Prince of Wales Northern Heritage Centre (PWNHC)

Charles Camsell Talk

(sponsored by NAPEG) – open to the public (free)

Counting the cost of climate change along the Dempster Highway

Dr. Chris Burn

Chancellor's Professor of Geography

Carleton University

Ottawa, Ontario

Abstract - The Dempster Highway is the only all-season road to Canada's Arctic. It extends for 736 km from near Dawson, YK (64° 2' N), to Inuvik, NWT (68° 18' N). About 90% of the route is on continuous permafrost. The road crosses two glacial limits in the alpine terrain of southern Ogilvie Mountains and the Laurentide limit on the eastern side of Richardson Mountains. For 450 km the highway traverses unglaciated terrain. The route also traverses the tree line, passing through Arctic and alpine tundra. The climatic gradient from Dawson (MAAT -4.1 °C) to Inuvik (-8.2 °C) is complicated by effects of winter inversions in the dissected terrain of Ogilvie Mountains and at the eastern approach to Richardson Mountains on Peel Plateau. Permafrost conditions are more consistent, with mean ground temperatures varying between -2 and -3 °C beneath forest/taiga or tundra.

Climate is changing relatively rapidly throughout the region. Since 1970, annual mean air temperatures have risen by 0.77 °C/decade at Inuvik, where eight of the last 15 years' rainfall lie in the highest 15 totals recorded. The response of the highway embankment to increasing ground temperature is greatest in glaciated terrain, where relict glacier ice is preserved. When this thaws, remediation is continuous and expensive.

Much of the documented warming of ground near the highway is due to increases to the snow cover caused by the embankment obstructing surface air flow over tundra. The response to increasing precipitation is greatest in the unglaciated mountains, requiring repair of washouts in summer and more frequent management of icings in winter. The costs currently are approximately \$1M per km in glaciated terrain and have been incrementally \$400k/yr in the mountains since 2005. For the Yukon, the rising expense represents an annualized 5% increase in the cost of operating the road. Climate-related maintenance accounts now over 40% of highway maintenance expenses for the 465 km in Yukon. In the short term, it is possible to mitigate thaw of permafrost by managing snow accumulation, but it is difficult to manage changes in the precipitation regime without significant capital investment.

Biography

Dr Chris Burn has been studying permafrost in Yukon and the western Arctic since 1982. His work is principally concerned with the response of permafrost terrain to disturbances, either due to changes



in surface conditions or to climate. He spent over 25 years working in the Mackenzie Delta area with J. Ross Mackay (1916-2014), Canada's leading authority on permafrost and ground ice. Ten of Chris's former graduate students work in the NWT, and three others in Yukon. His research program has been supported for many years by the Natural Sciences and Engineering Research Council, the Polar Continental Shelf Project, and the Aurora Research Institute. More recently he has been collaborating with the Transportation Engineering Branch, Yukon Government, on studies of permafrost conditions along the Dempster Highway. Chris has particularly enjoyed working with consulting engineers, especially Don Hayley, formerly of EBA, on the Dempster Highway and Wayne Savigny of BGC on the Mackenzie Gas Project.

Thursday, November 16 – Morning

Theatre 1 – Geoscience

Chairs: Beth Fischer (GNWT – NTGS) and Edith Martel (GNWT – NTGS)

- 09:00 Bedrock Mapping of the Beaulieu River Volcanic Belt at Sunset Lake, Slave Craton. Northwest Territories – B. Knox
- 09:20 Volcanic Setting of the Sunrise VMS Deposit, Cameron-Beaulieu Volcanic Belts, Slave Province – Y.M. DeWolfe
- 09:40 The South Rae Mapping Project: New Results from Bedrock Mapping – E. Martel
- 10:00 Evolution of <2.0 Ga Metasedimentary Rocks Involved in 1.9 Ga Burial Metamorphism and Exhumation Adjacent to the Snowbird Tectonic Zone, Southeast Rae Craton Margin, Southeast Northwest Territories – E.J. Thiessen*
- 10:20 Coffee
- 10:40 Provenance, Regional Correlations and Tectonic Significance of the Porter Lake and Lynx Lake Outliers, South Rae Craton, Northwest Territories – B. Neil*
- 11:00 Activities of the Canada-Nunavut Geoscience Office 2017 – L. Ham
- 11:20 Recent Surficial Geology Projects at the Canada-Nunavut Geoscience Office – T. Tremblay
- 11:40 The GEM-2 Glacial Synthesis Project: Overview and Report of Field Activities in the Kivalliq Region, Nunavut – I. McMartin
- 12:00 Characteristics, Metamorphic Assemblages and Preliminary In Situ Monazite Ages of Two Distinct Supracrustal Rock Packages in the Tehery Lake-Wager Bay Area, Northwestern Hudson Bay, Nunavut – H.M. Steenkamp
- 12:20 New Geoscience Constraints for Boothia Peninsula, Nunavut: Update on the GEM-2 Integrated Geoscience of the Northwest Passage Project – M. Sanborn-Barrie

* Student Presentation

Thursday, November 16 – Morning

Theatre 2 – Permafrost Hydrology

Chairs: Isabelle de Grandpré (GNWT – ENR) and Philip Marsh (Wilfrid Laurier University)

08:20 Linking Permafrost Geomorphology to Organic Matter Release and Decomposition – N. Weiss

08:40 Over-Winter Flowpaths Through Talik Networks in Discontinuous Permafrost Terrains – R.F. Connon

09:00 Quantifying Thaw Mechanisms in Discontinuous Permafrost: Is Talik Formation a Tipping Point? – A. Devoie*

09:20 Hydrothermal Regime of Stream Channels in the Tuktoyaktuk Coastlands and Anderson Plain, Northwest Territories, Canada – T.P. Ensom*

Permafrost: Preparing for Change

Chairs: Kumari Karunaratne (GNWT – NTGS) and Steve Kokelj (GNWT – NTGS)

09:40 The Formation of a Canadian Permafrost Association – K.C. Karunaratne

10:00 The Technical Opportunities and Economic Implications of Permafrost Decay on Public Infrastructure in the Northwest Territories – S. Brown

10:20 Coffee

10:40 How Standards Help Reduce the Vulnerability of Arctic Infrastructure – C. Moore

11:00 Implementing Remote Sensing Tools to Examine Permafrost Dynamics and Impacts to Infrastructure – S.V. Kokelj

Innovation, Community Engagement, and Education

Chairs: Gideon Lambiv-Dzemua (GNWT – NTGS) and Mike Byrne (GNWT – CSCR)

11:40 What is REDI and Why Now? – V. Gordon

12:00 Mining Matters: Raising Awareness Through Partnerships – L.A. Clinton

12:20 Developing and Engaging Indigenous Workers for the Canadian Mining Sector – P. Larouche

Thursday, November 16 – Morning

Theatre 3 – Environmental Monitoring and Research

Chairs: Isabelle de Grandpré (GNWT – ENR) and Julian Kanigan (GNWT – ENR)

- 09:20 The Influence of Meadowbank Mine on Caribou Seasonal Habitat Use – D. Coulton
- 09:40 The Influence of Sediment Focusing on the Spatial and Depth Distribution of Arsenic in Long Lake Sediments – C.E. Schuh*
- 10:00 Paleoecotoxicology as a Tool to Assess the Toxicity of Lake Sediments at Giant Mine – C.L. Cheney
- 10:20 Coffee
- 10:40 Archaeology for Seabridge Gold's Courageous Lake Exploration Program: A Bold Survey Plan – L.P. Seip
- 11:00 Regional and Localized Distribution of Arsenic in Soil in the Yellowknife Region – J.T. Oliver*
- 11:20 How Might Airborne Particulates Impact Caribou Around an Open Pit Mine in the Arctic? – W. Chen*
- 11:40 Community-Based Monitoring for Better Decision-Making – B.J. Keats*
- 12:00 Effect of Legacy Pollution from Gold Mines on Mercury Methylation in Lakes Near Yellowknife, NWT – M. Azdajic
- 12:20 Linking Wildfire Activity and Metal Fluxes to Northern Lakes at Decadal Timescales – N. Pelletier*

* Student Presentation

Thursday, November 26 – Afternoon

Theatre 1 – Geoscience

Chairs: Beth Fischer (GNWT – NTGS) and Edith Martel (GNWT – NTGS)

- 14:40 Evaluation of Major Carving Stone Deposits and Quarries throughout the Qikiqtaaluk of Nunavut: 2016-17 Results – R.A. Elgin
- 15:00 Stratigraphy, Gamma-Ray Spectrometry, and Uranium Prospectivity of the Kilohigok Paleosol in the Bear Creek Hills, Kitikmeot, Nunavut – A. Ielpi
- 15:20 The Coppermine River Transect: A Slice through 700 Million Years of Earth's History – R.H. Rainbird
- 15:40 How Tectonic Strain Rate Influence Seismic Hazard from Injection-Induced Earthquake – H. Kao

Thursday, November 26 – Afternoon

Theatre 2 – Innovation, Community Engagement, and Education

Chairs: Gideon Lambiv-Dzemua (GNWT – NTGS) and Mike Byrne (GNWT – CSCR)

14:40 Canadian Mineral Exploration HR Outlook – L.M. Coffin

15:00 Indigenous Business, the North and the Mining Section – a Triple Win – P. Gruner

15:20 Infrastructure, Natural Resource, and the Advancement of an Innovative Canadian LNG Technology – P.E. Miller

16:00 Integrating Utility Scale Solar and Energy Storage into Canadian Mining Operations Relying on Diesel Backed Micro-grids – D. Cameron

Thursday, November 26 – Afternoon

Theatre 3 – Environmental Monitoring and Research

Chairs: Isabelle de Grandpré (GNWT – ENR) and Julian Kanigan (GNWT – ENR)

- 14:40 Integrating Inuit Qaujimajatuqangit (IQ) and Caribou Collaring Data into Screening Level Risk Assessment at Agnico Eagle Meadowbank Mine, Nunavut – R. Vanengen
- 15:00 Forest Resource Modeling and Ecosystem Change Monitoring in the Northwest Territories using Airborne Laser Scanning – C. Hopkinson
- 15:20 A Seismological Overview of the Induced Earthquakes in the Duvernay Play near Fox Creek, Alberta – R. Schultz