

ATLANTIC GEOSCIENCE SOCIETY COLLOQUIUM & ANNUAL GENERAL MEETING

February 2-3, 2007, Delta Beausejour Hotel, Moncton, New Brunswick

PROGRAM

Meetings, technical sessions, luncheon, & banquet are all at the Delta Beausejour Hotel (*conference accommodation rate still available*), Moncton New Brunswick. For Colloquium registration information contact Susan Johnson @ (506) 432-2234; email: Susan.Johnson@gnb.ca or check the AGS website <http://ags.earthsciences.dal.ca/index.htm>. The **Mactaquac Room** will be the speaker-ready room and will be available from Friday 12:00 PM to 10:00 PM and Saturday all day.

Friday, February 2, 2007

Noon-9:00PM	Registration and poster set-up - Mezzanine
9:00-5:00PM	Workshop: A Review of Physical Volcanology – A Metallogenic Perspective - Shediac A/B
2:00PM-5:00PM	Orientation session - North American Soil Geochemical Landscape Project - Ballroom C
4:00PM-5:00PM	Atlantic Geology editors meeting – Boardroom
5:00-6:30PM	AGS Executive and Council Meeting - Boardroom
5:00-7:00PM	Poster session and cash bar - Mezzanine
7:00-8:40PM	General Session: Current Research in the Atlantic Provinces I - Ballroom B
7:00-8:40PM	Special Session: Dendrochronology - Ballroom C
8:40-10:00PM	General Session: Current Research in the Atlantic Provinces II: - Ballroom B
8:40-10:00PM	General Session: Current Research in the Atlantic Provinces III - Ballroom C
10:00PM-Midnight	Poster session and cash bar - Mezzanine

Saturday, February 3, 2007

8:00AM-5:30PM	Poster Session - Mezzanine
8:20-10:00AM	Special Session: SEG Student Chapter, Mineral Resources Research: - Ballroom B
8:20-10:00AM	Special Session: Late and Post-Glacial Climate Change Events in Eastern Canada I: - Ballroom C
10:00-10:20AM	<i>Coffee</i>
10:20-12:00PM	General Session: Current Research in the Atlantic Provinces IV - Ballroom B
10:20-12:00PM	Special Session: Salt Matters: Tectonic, Thermal, and Resource Aspects of Paleozoic to Mesozoic Evaporite Basins I: - Ballroom C
12:00-2:00PM	<i>Annual General Meeting and Luncheon</i> – Ballroom A
2:00-3:20PM	Special Session: Patterns and Geohazards in the North Atlantic - Ballroom B
2:00-3:20PM	Special Session: Salt Matters: Tectonic, Thermal, and Resource Aspects of Paleozoic to Mesozoic Evaporite Basins II: - Ballroom C
3:20-3:40PM	<i>Coffee</i>
3:40-5:00PM	General Session: Current Research in the Atlantic Provinces V - Ballroom B
3:40-5:00PM	Special Session: Late and Post-Glacial Climate Change Events in Eastern Canada II: - Ballroom C
5:00-6:00PM	APICS Earth Sciences Committee Meeting - Boardroom
6:00-7:00PM	Cash Bar - Mezzanine
7:00PM	Awards Banquet and Social - Ballroom A

Speaker: David Piper, GSC (Atlantic) - “Apprenticeship in geology—a second look”

A post-banquet tradition is the annual **AGS Ceilidh and Jam-Session**. The musically-inclined are invited to bring their instruments and entertain those of us who aren't so musically inclined. All instruments and styles welcome.

NOTES

- 1) Posters will be displayed on 6'x 6' velcro friendly boards, and presenters must bring their own velcro. Posters will be assigned to a designated board. Please set up posters as soon as possible after arrival, preferably before 5:00 PM on Friday to be ready for the first poster session at 5:00PM and so that the judges of student posters may get started before the evening sessions begin. The Graham Williams student poster award will be presented at the Banquet. Please be at your poster to answer questions during the scheduled times. Posters must be taken down by 5:30 PM on Saturday.
- 2) Speakers will have 20 minutes including time for questions, and the sessions will be kept on schedule by the Chairs, to allow for judging of the high number of student presentations. The Rupert MacNeill student award will be presented at the Banquet.
- 3) Speakers will have one LCD projector with a dedicated laptop, and a laser pointer available. Slide preview room will be the Mactaquac Room. Deliver your CD or memory stick to the projectionist well in advance of your scheduled talk. Send to Ian Spooner before January 26 or have it loaded on the session computer on Friday February 2. This will allow ample time for loading of the material before the speaker sessions begin.
- 4) The Beausejour has asked for some notice for the meals. Buy your Luncheon and Banquet tickets prior to arrival or register through the AGS website <http://ags.earthsciences.dal.ca/index.htm> or notify Peter Wallace by phone: (902) 494-2364; Fax: (902) 494-6889; or e-mail: Peter.Wallace@dal.ca

University of New Brunswick SEG-CIM Student Chapter Workshop: "A Review of Physical Volcanology: A Metallogenic Perspective"

Friday, February 2, 2007, 9:00AM-5:00PM

RYAN TOOLE AND DAVID LENTZ

University of New Brunswick

This SEG-CIM Student Chapter Workshop covers general aspects of physical volcanology as it relates to mineralization in a variety of volcano-plutonic settings. The workshop evolves to more specific ore-forming environment descriptions, with direct application to mineral exploration. The workshop is targeted at advanced students to exploration geologists. We are particularly pleased that the CIM Distinguished Lecturer, Prof. Wulf Mueller (UQAC), will be able to participate thanks to support from the NB CIM. Also, UNB's SEG-CIM Student Chapter wishes to thank Mac Watson and Freewest Resources Incorporated for support of our research and this workshop.

PROGRAM

9:00AM	DAVID R. LENTZ (UNB) - Volcanic nomenclature: a review
9:45AM	<i>COFFEE</i>
10:00AM	REG A. WILSON (NBDNR) - Volcanic rock textures and the interpretation of volcanic environments and facies
11:00AM	DAVID R. LENTZ (UNB) - Examination of feeder dikes in ore-forming systems: analysis of geological, petrochemical, and geotectonic constraints
Noon	<i>LUNCH</i>
1:00PM	WULF MUELLER (UQAC) – CIM Distinguished Lecturer 2006-2007 - Archean subaqueous calderas: first order hosts of volcanic-hosted massive sulphide deposits in the Abitibi Belt
2:00PM	CLIFF SHAW (UNB) - A combined experimental and field approach to volcanology: examples from the Quaternary West Eifel Volcanic Field, Germany
2:30PM	*WARNA S. DOWNEY (UNB), O. SPIELER (U. of Munich), and CLIFF SHAW (UNB) - Experimental constraints on perperite formation and relationship to explosive volcanism: a new approach
3:00PM	<i>COFFEE</i>
3:30PM	STEVEN MCCUTCHEON (NBDNR) - A Late Devonian epicontinental caldera complex in southwestern New Brunswick: precursor to the granite-related Mount Pleasant Sn-W-Mo-In deposit
4:00PM	*ALEX WILLS (UNB) and DAVID LENTZ (UNB) - Evolution from felsic pyroclastic to effusive volcanism associated with VMS formation, Bathurst Mining Camp, NB

Workshop: “North American Soil Geochemical Landscape Project - Orientation Session” Maritime Soils Project Workshop

T.A. GOODWIN¹, R. MROZ², AND T.PRONK³

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The Maritime Soils Project (MSP) is part of a tri-national initiative by the USGS, GSC, and the SGM (Mexico). The North American Soil Geochemical Landscape Project (NASGLP) plans to meet the need for soil geochemical (including relevant biological and organic compound) data for assessing and managing natural resources and risks of environmental hazards. One of its goals is to create an understanding of the amount and origin of variation in soil geochemistry, by using a consistent soil sampling methodology and analyses to determine the concentrations of various parameters in different parts of the soil. It is estimated that over 10,000 soil samples will be collected from pre-determined locations, in Mexico, the United States, and Canada. This project is the first multi-national, multi-agency collaboration of its kind starting with a common focus, understanding and protocols. From the outset it is designed to have outcomes related to government decision-making. Numerous government stakeholders are supportive of this project and include both the federal and provincial departments of health, environment, natural resources, and agriculture. The project will interact with the National Forest Inventory (NFI) and National Land and Water Information System (NLWIS) and with the NFI share actual field sampling sites to increase the value of the databases generated.

The MSP will be one of the first phases of the tri-national project to actually start the fieldwork using the established sampling and analytical protocols. The MSP is scheduled to start its field component during the summer of 2007 to establish 70 sample sites in Nova Scotia and 96 sampling sites in New Brunswick and tie in to the commencement of the NASGLP in New England. The workshop will provide a background to the overall project, how it was decided to start this project in the Maritimes, its proposed timelines/implementation and will conclude with a discussion of sampling and analytical protocols.

The MSP is scheduled to start its field component during the summer of 2007 and both Nova Scotia and New Brunswick provincial geological survey branches have taken the initiative to be the driving force behind the field component of the NASGLP through participation in the MSP. This is not a pilot project, somewhat of a demonstration project, but more importantly, a solid commitment to the continent-wide understanding of the geochemical landscape. Further background information, sampling and analytical protocols, the previous national workshop, etc. can be viewed on the following site <ftp://nrnl.nrcan.gc.ca/gsc/NAmSGLs/>

Workshop: “North American Soil Geochemical Landscape Project - Orientation Session”

Convenor: A.G. Pronk, NBDNR Time: Friday, February 2, 2007 - Ballroom C

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| 2:00PM | TOON PRONK (NBDNR) - Opening remarks and project overview. Introduction to the North American Soil Geochemical Landscape Project (NASGLP) and the Maritime Soil Project (MSP). |
| 2:20PM | RITA MROZ (Environment Canada) - Environment Canada, background soil chemical/toxicological database for the Atlantic Region |
| 2:35PM | TERRY GOODWIN (NSDNR) - Key questions North American Soil Geochemical Landscape Project - a Nova Scotia Perspective |
| 2:50PM | ERIC GRUNSKY (GSC-OTTAWA) and TOON PRONK (NBDNR) - Maritime Soils Project (background, sample density, time-line, etc.) - Introduction of the MSP |
| 3:00PM | <i>COFFEE</i> |
| 3:10PM | Sampling and analytical protocols. Open discussion with possible small group discussion, depending on number of participants. The protocol is presently being discussed on line by the participants in the national workshop that took place in Ottawa last fall |
| 4:00-5:00PM | Discussion group |

ATLANTIC GEOSCIENCE SOCIETY ANNUAL COLLOQUIUM

CONCURRENT TECHNICAL SESSIONS - FRIDAY EVENING

* Student Presentation

First author is the speaker unless indicated by a ►

AGS POSTER SESSION – Mezzanine Friday 5:00PM – 7:00PM and 10:00PM - Midnight

GENERAL SESSION: Current Research in the Atlantic Provinces I and II – Ballroom B

Chairs: Sandra Barr and Aaron Satkoski

- 7:00 – J.G. HINCHEY - **Volcanogenic massive sulphides of the southern Tulus Volcanic Belt, central Newfoundland: environments and styles of mineralization**
- 7:20 – ALANA M. HINCHEY - **The Paleoproterozoic metavolcanic, metasedimentary, and igneous rocks of the Aillik domain, Makkovik Province, Labrador**
- 7:40 – GEORGIA PE-PIPER and DAVID J.W. PIPER - **Post-collisional shoshonites: product of dehydration melting of subduction-enriched metadiorite underplated at base of crust**
- 8:00 – C.E. WHITE, R.J. HORNE, and S.M. BARR - **The Meguma Group of southern Nova Scotia: new insights on the stratigraphy, tectonic setting, and provenance**
- 8:20 – *DREW PELLEY, RICK HORNE, and MILTON GRAVES - **Magnetic mineralogy and susceptibility of magnetostratigraphic / stratigraphic units in the Goldenville Group, eastern Meguma Terrane**
- 8:40 – J. BRENDAN MURPHY and JAROSLAV DOSTAL - **Continental mafic magmatism of different ages in the Antigonish Highlands, Nova Scotia: constraints on the evolution of an enriched mantle source**
- 9:00 – *J.A. BRAID, J.B. MURPHY, and C. QUESADA - **Structure of the Late Paleozoic Pulo do Lobo Accretionary Prism, southern Iberia: a key to understanding the amalgamation of Pangea**
- 9:20 – *RYAN NOFTALL, GEORGIA PE-PIPER, and DAVID J.W. PIPER - **Detrital zircons as provenance indicators in the Cretaceous Chaswood Formation**
- 9:40 – J.W.F WALDRON, J.D. FLOYD, C.E. WHITE, S.M. BARR, A. SIMONETTI, and L.M. HEAMAN - **Sand in the Iapetus and Rheic Oceans: new detrital zircon data from terranes in the Appalachian/Caledonide Orogen**

SPECIAL SESSION: Dendrochronology – Ballroom C

Chairs: Colin Laroque and Marc Desrosiers

- 7:00 – *BEN PHILLIPS and COLIN P. LAROQUE - **Radial-growth forecasts of five conifers in southeastern New Brunswick**
- 7:20 – *SARAH J. HART and COLIN P. LAROQUE - **Investigating vegetation changes in alpine environments in Jasper National Park**
- 7:40 – *BETHANY L. COULTHARD and COLIN P. LAROQUE - **Effects of forestry on the radial growth trends of treed bogs in southwestern Nova Scotia**
- 8:00 – *NATASHA A. O'NEILL, ANDRE ROBICHAUD, and COLIN P. LAROQUE - **Southwestern Nova Scotia's hidden old-growth forests: extending tree-ring chronologies through historic churches**
- 8:20 – ANDRE ROBICHAUD, BEN PHILLIPS, and COLIN P. LAROQUE - **The geology of a building: the multiple layers of the Sinclair Inn, Annapolis Royal, Nova Scotia**

CONCURRENT TECHNICAL SESSIONS - FRIDAY EVENING

GENERAL SESSION: Current Research in the Atlantic Provinces III – Ballroom C

Chairs: Colin Laroque and Cliff Stanley

- 8:40 – *KATHLEEN GOULD, GEORGIA PE-PIPER, and DAVID J.W. PIPER - **Origin of chlorite rims in reservoir sandstones of the Lower Missisauga Formation, offshore Nova Scotia**
- 9:00 – ADRIAN F. PARK, CLINTON J. ST. PETER, and DAVID G. KEIGHLEY - **Late Tournaisian ‘pop-up’ and collapse in a transpressional strike-slip zone: the Indian Mountain Deformed Zone, southeast New Brunswick**
- 9:20 – D. LAVOIE - **Hydrocarbon systems in the Paleozoic of northern New Brunswick: are all the elements there?**
- 9:40 – CLIFFORD R. STANLEY and DAVID M.K. MURPHY - **Documenting the physical changes and thermodynamic effects of geochemical reactions: a metasomatic example in Gale vector space**

10:00PM-Midnight Poster Session and Cash Bar – **Mezzanine**

CONCURRENT TECHNICAL SESSIONS SATURDAY MORNING

SPECIAL SESSION: SEG Student Chapter, Mineral Resources Research – Ballroom B

Chairs: Sabine Vetter and Dave Shinkle

- 8:20 – *A. AHMED - **Geology, petrology, geochemistry, and economic potential of a Neoproterozoic to Triassic accreted terrane, in southern Sukhbaatar Aimag (province), south-eastern Mongolia**
- 8:40 – *N.H. JANSEN, T. CHRISTOPHER, and J. DOSTAL - **An infrared spectral reflectance study of the hydrothermal alteration minerals from the Campamento Au/Ag deposit, southern Mexico**
- 9:00 – *TONY BARRESI - **A petrogenetic model of prospective stratigraphy in the Eskay Rift, northwest British Columbia**
- 9:20 – *CHRISTOPHER GALBRAITH - **Tourmaline compositions as an indicator of emerald mineralization at Tsa da Glisza, Yukon Territory**
- 9:40 – *HEATHER CAMPBELL, BRUCE BROSTER, and MICHAEL A. PARKHILL - **Glacial dispersal patterns in sediments overlying the Mount Fronsac mineralized deposit, Bathurst Mining Camp, northern New Brunswick**
- 10:00 – *COFFEE*

GENERAL SESSION: Current Research in the Atlantic Provinces IV – Ballroom B

Chairs: Bruce Broster and Cyndie Pitre

- 10:20 – A.M. ARNOTT - **Using confectionaries to teach geology**
- 10:40 – *RAFAEL CAVALCANTI de ALBUQUERQUE, IAN S. SPOONER, and CLIFFORD R. STANLEY - **The southern Nova Scotia wine terroir: a geological and pedological study of the geochemistry of soils from vineyards with a focus on cation exchange capacity**
- 11:00 – *HOLLY J. STEWART, TIM C. WEBB, and CLIFF S.J. SHAW - **Correlating geological properties with durability of construction aggregate**
- 11:20 – *H. JAGGARD, T. GOODWIN, and A.M. O’BEIRNE-RYAN - **Establishing potential for leaching of Hg and As from soils in the Montague Gold District, Nova Scotia**
- 11:40 – *ANDREA N. PARSONS - **Potential for uranium mobilization from weathered outcrops of uranium-bearing sedimentary strata, southern Nova Scotia**

CONCURRENT TECHNICAL SESSIONS SATURDAY MORNING

SPECIAL SESSION: Late and Post-Glacial Climate Change Events in Eastern Canada I – Ballroom C

Chairs: Ann Miller and Mike Lewis

- 8:20 – PIERRE JUTRAS - **What geological history tells us about global warming**
- 8:40 – G.A. FERGUSON and S.E. GRASBY - **Groundwater and the Pleistocene glaciation in Canada**
- 9:00 – J. GOSSE, G. YANG, J. FASTOOK, T. BELL, J. STAIGER, J. GRAY, and G. MARQUETTE - **Collapse of the Newfoundland Ice Cap and evidence against the Nunatak Hypothesis**
- 9:20 – A.U. REUTHER, RALPH R. STEA, JOHN C. GOSSE, and FIONA MCDONALD - **Deglaciation of Nova Scotia: a chronostratigraphic approach**
- 9:40 – T.W. ANDERSON, E. LEVAC, and ► C.F.M. LEWIS - **Palynological responses around the Gulf of St. Lawrence to the North Atlantic Preboreal Oscillation and 8.2 cal ka cold events**
- 10:00 – *COFFEE*

SPECIAL SESSION: Salt Matters: Tectonic, Thermal, and Resource Aspects of Paleozoic to Mesozoic Evaporite Basins I: - Ballroom C

Chairs: Marcos Zentilli and Juergen Adam

- 10:20 – Y. KETTANAH, M. ZENTILLI, H. WIELENS, and D.G. WACH - **Petroleum and aqueous fluid inclusions in Mesozoic and Carboniferous rock salts from Atlantic Canada**
- 10:40 – PRASANTA K. MUKHOPADHYAY (MUKI), PAUL J. HARVEY, and KRIS KENDELL - **Genetic relationship between salt mobilization and petroleum system parameters within Triassic-Recent sediments from deepwater Sable and Shelburne subbasins, Scotian Basin: implications for future oil and gas exploration strategies**
- 11:00 – J.B.W. WIELENS - **Gypsum at Cheverie, just some boring white rock?**
- 11:20 – BRIAN ROULSTON - **“Caprock”**
- 11:40 – ARNFINN PRUGGER, BALAZS NEMETH, and TERRY DANYLUK - **Saskatchewan potash geology, with emphasis on disruptions to “normal”, flat-lying Phanerozoic stratigraphy**
- 12:00 - 2:00 – *LUNCHEON and AGS ANNUAL GENERAL MEETING – BALLROOM A*
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CONCURRENT TECHNICAL SESSIONS SATURDAY AFTERNOON

SPECIAL SESSION: Patterns and Geohazards in the North Atlantic - Ballroom B

Chairs: Cristian Suteanu and David Piper

- 2:00 – *S.J. BOWMAN - **Spatial and temporal analysis of seismicity along Mid-Atlantic Ridge segments: a comparative approach**
- 2:20 – DAVID J.W. PIPER and EFTHYMIOS K. TRIPSANAS - **Character and timing of late Quaternary earthquake - triggered submarine landslides, Orphan Basin, offshore eastern Canada**
- 2:40 – GREG BAKER - **Seafloor of the North Atlantic Ocean: digitally quantifying variability using the Divider Method**
- 3:00 – CRISTIAN SUTEANU - **Patterns of geohazards in the Atlantic Ocean: implications of spatial and temporal scales for the study of evolving correlations**
- 3:20 – *COFFEE*

CONCURRENT TECHNICAL SESSIONS SATURDAY AFTERNOON

GENERAL SESSION: Current Research in the Atlantic Provinces V – Ballroom B

Chairs: John Calder and Matt Stimson

- 3:40 – ALAN RUFFMAN - **The use of tsunami-laid deposits to hindcast the magnitude and hazard of the event**
- 4:00 – *G.J. NELSON and P.K. PUFAHL - **Precambrian phosphorite accumulation in the Paleoproterozoic Baraga Group, Michigan, USA**
- 4:20 – *MARC LAFLAMME and GUY M. NARBONNE - **Tiering in Ediacaran fronds from Mistaken Point, Newfoundland**
- 4:40 – *M. STIMSON, J.H. CALDER, and R.A. MACRAE - **The taphonomic implications of a new fossil tree from Joggins, Nova Scotia**

SPECIAL SESSION: Salt Matters: Tectonic, Thermal, and Resource Aspects of Paleozoic to Mesozoic Evaporite Basins II: - Ballroom C **Chairs: Brian Roulston and Hans Wielens**

- 2:00 – M. ZENTILLI and A.M. GRIST - **Thermal effects of salt and brines in sedimentary basins**
- 2:20 – C. BEAUMONT and ► S.J. INGS - **Initiation and early evolution of salt withdrawal mini-basins**
- 2:40 – *CODY MACDONALD, CLARKE CAMPBELL, JUERGEN ADAM, CSABA KREZSEK, and DJORDJE GRUJIC - **Physical modelling of the initial salt mobilization and salt tectonics in late syn-rift and post-rift basins with application to the Early to Late Jurassic Abenaki and Sable subbasins, Scotian Margin**
- 3:00 – *CLARKE CAMPBELL, CODY MACDONALD, JUERGEN ADAM, CSABA KREZSEK, and DJORDJE GRUJIC - **Physical modelling of the formation and salt tectonics of salt-canopy systems at deepwater continental margins with application to the Jurassic to Early Cretaceous, Abenaki and Sable subbasins, Scotian Margin**
- 3:20 – *COFFEE*

SPECIAL SESSION: Special Session: Late and Post-Glacial Climate Change Events in Eastern Canada II – Ballroom C

Chairs: Ann Miller and Mike Lewis

- 3:40 – *P.J. DICKINSON and B.E. BROSTER - **Important geological parameters in the assessment of LOI data for delineation of climate change**
- 4:00 – ANN A.L. MILLER - **The enigma of the Younger Dryas: just what might have been the trigger?**
- 4:20 – A.A. SEAMAN - **The Gaspereau Ice Centre and the Younger Dryas glaciation of central New Brunswick**
- 4:40 – IAN SPOONER and ROB RAESIDE - **Global warming, climate change and geoscientists: a volatile mix**
- 7:00 – *AWARDS BANQUET AND SOCIAL – BALLROOM A*
Speaker : DAVID PIPER, GSC (Atlantic) - **“Apprenticeship in geology – a second look”**.

AGS POSTER SESSION – Mezzanine Friday 5:00PM – 7:00PM and 10:00PM - Midnight; Saturday 8:00AM – 5:30PM

- * **Student presentation**
- *G. BALDWIN and P.K. PUFAHL - **The sedimentology and diagenesis of a Mississippian brachiopod biostrome in the vicinity of Newport Landing, Hants County, Nova Scotia**
- *K. BEAL, D.R. LENTZ, K.G. THORNE, and G. DUNNING - **The Zealand Station beryl deposit, west-central NB: mineralogic, geochronologic, and petrogenetic constraints**
- DONOVAN BLISSETT, DAVE KEIGHLEY, TOM AL, and DENIS LAVOIE - **Micro-CT distinction of dolomite, calcite, and porosity in hydrothermally dolomitized carbonate from the Sayabec Formation (Lower Silurian), Gaspé**

***J.P. BUTLER, M.R. ST-ONGE, and R.A. JAMIESON - Metamorphism of impure marbles and calc-silicates from southwestern Baffin Island: implications for regional sapphire exploration**

D.B. CLARKE, B. WUNDER, H-J. FÖRSTER, A. HAHN, and D. RHEDE - Andalusite-topaz relations in peraluminous granites: preliminary results from an experimental investigation

***M.I. FERGUSON, T.L. WEBSTER, and J.C. GOSSE - The application of high-resolution laser altimetry to deglaciation dynamics: Bridgetown, Nova Scotia**

***ALAN J. HIDY and JOHN C. GOSSE - Temporal variations in sediment flux to the western Gulf of Mexico over multiple glacial-interglacial cycles**

***S.R. HINDLE and G.A. FERGUSON - Fluid circulation depth and crustal-scale faults**

DAVE KEIGHLEY, MARTIN FOWLER, DENIS LAVOIE, and VEN REDDY - Spectral gamma-ray, XRD, and organic geochemistry of an offshore lacustrine succession, Albert Formation, Moncton Basin, southern New Brunswick

***S.E. KELLEY, J. GOSSE, and D. UTTING - A study on the Kingnait Moraine system and coinciding eskers, Foxe Peninsula, Baffin Island**

***CRYSTAL LAFLAMME and CLIFFORD R. STANLEY - Petrology of the Triple Seven Zn-Cu volcanic hosted massive sulphide deposit, Flin Flon, Manitoba**

***SHERI A. LYON, SANDRA M. BARR, and SONYA A. DEHLER - Source(s) of magnetic and gravity anomalies south of Cape Breton Island, Nova Scotia, and onshore-offshore geological correlations**

R.F. MILLER and D.N. BUHAY - The geological library of the Natural History Society of New Brunswick: supporting early scientific research in the Maritimes region

***H. NEILSON and J. GOSSE - Landform evolution in the south central Andes: determining the major mechanisms of formation of the great escarpment between 32 and 38 degrees south, Argentina**

MICHAEL A. PARKHILL and MARC DESROSIERS - Northwestern New Brunswick till geochemical database project

DAVID J.W. PIPER, RYAN NOFTALL, HEIDI MCKEE, and GEORGIA PE-PIPER - How to get into deep water: sand transport seaward of early Cretaceous deltas in the Scotian Basin

***MARY A. SAMOLCZYK, IAN S. SPOONER, CLIFFORD R. STANLEY, and LINDA A. LUSBY - Local stratigraphy and groundwater chemistry in the Grand Pré region, Nova Scotia: contamination sources and mitigation strategies**

***A.M. SATKOSKI, S.M. BARR, and S.D. SAMSON - Geochemistry of late Neoproterozoic and Cambrian sedimentary and metasedimentary rocks in the Caledonian Highlands, southern New Brunswick**

***DAVID SHINKLE and DAVID LENTZ - Long Lake uranium deposit, north-central New Brunswick: a granite-hosted uraniumiferous polymetallic vein system in the Canadian Appalachians**

***DOUG STIFF, CHRIS HOPKINSON, IAN SPOONER, and TIM WEBSTER - Using climate data, landscape parameterization, and a LiDAR generated digital elevation model to map flood risk in Oxford, Nova Scotia**

***KRISTA SUTTON, R.J. HORNE, and R.A. JAMIESON - Oikocrysts in the gold districts of the Meguma Group, central Nova Scotia**

***NIKOLAOS TSOUKALAS, GEORGIA PE-PIPER, and DAVID J.W. PIPER - Architecture and origin of the Upper Miocene ignimbrites, island of Kos, Greece**

***E.C. UNDERWOOD and G.A. FERGUSON - Contamination of groundwater by geogenic barium**

***S. VETTER, J.A. WALKER, and D.R. LENTZ - First results of the Guitard Brook gold occurrence study, Elmtree Inlier, northeastern New Brunswick**