



*Newsletter of the Volcanology and Igneous Petrology Division
Geological Association of Canada*

No. 78

December 7, 2015

From the Chair,

Welcome to the latest issue of Ashfall. It has been a while since our last issue and there have been some changes to the Division in that time. First off we have split the position of Secretary/Treasurer into two positions with James Braid continuing as Treasurer and Donnelly Archibald taking on the role of Secretary. For the first time this year we also provided funding to support two student field trips and reports of those trips are included here. This was an experiment for us and we will be evaluating the results to see if this is something we will be doing in the future. As always we are keen to receive reports or articles from our members – so feel free to get in touch if you have something to share.

Merry Christmas – Pete

From the Secretary,

I would like to introduce myself as the new secretary for the GAC VIP Division.

I graduated from St. FX University with a BSc in Earth Sciences in 2010 and Acadia University in 2012 (MSc Geology). I am currently a PhD student at the University of Adelaide in Australia.

My PhD research project aims to better understand the tectonic history of Madagascar throughout the Meso- to Neoproterozoic. I am interested in three magmatic suites emplaced during the ~500Ma preceding the amalgamation of Gondwana. I primarily use zircon U-Pb geochronology and complimentary oxygen and hafnium isotope systems in zircon to determine the timing and nature of magmatism. I also use the same zircon isotope proxies on detrital zircons to understand Mesoproterozoic basin development and relate Malagasy rocks with contemporaneous rocks in East Africa and India.

I look forward to serving as the secretary of the GAC VIP division – Donnelly

UNB student Chapter Maine Field Trip (June 23-27, 2014)

The UNB student chapter organized a four day field trip to Maine, USA in June 2014. This area of the United States comprises part of the Canadian Appalachians associated mainly with the Acadian orogeny (Silurian-Devonian). The main goal of this field trip was to visit the pegmatite region of Maine as it hosts world-class examples of lithium-caesium-tantalum (LCT)-type pegmatite dikes. These pegmatites host a variety of economic metals, including lithium, caesium, tantalum, niobium, and tin, in addition to gem-quality tourmaline, apatite and quartz. One of the world's pegmatite experts Frank Perham led the field trip for the day we visited those pegmatites. He has been working in the Maine pegmatite mine area for over 45 years.



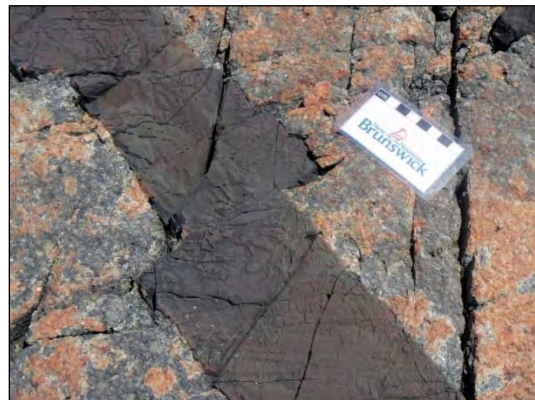
Field trip participants with Frank Perham

The first stop on Day 1 was a historical site, a beautiful granitic beach that used to be a quarry in late 1800's and early 1900's. This rock formed during the

Acadian Orogeny and it dates the climax of this orogeny in eastern Maine.



The second stop was an array of basaltic dikes cross-cutting the pale pink granite. These dikes are interpreted as feeders to an ancient volcano and some have undergone minor displacements as indicated by localized faults.



The third stop visited the shatter zone on Mount Desert Island. This area represents chunks of well-layered siltstone and sandstone (Bar Harbor Formation) floating in granitic magma.



The second day of the field trip focused on high-grade metamorphic rocks at two different locations. They visited highly folded Ordovician metasediments crosscut by granitic and basaltic dykes at the Marshall Point lighthouse.



The field trip continued by visiting folded gneisses with steep axial planes, shallow fold hinges and pegmatite dikes parallel to the gneissic rocks.



Our third day started with an amazing visit of Frank's personal collection (mineral pocket) from his 45 years of working on the Maine pegmatites, and followed by visiting two of the best and well-known pegmatite mines within the area (Mount Mica, and Havey quarry).



Mount Mica is the oldest gem mine in the USA (<http://digmainegems.com>), belongs to the Oxford pegmatite field of western Maine. It is large, poorly zoned, pocket-bearing LCT type granitic pegmatite dike, which is the second oldest elbaite occurrence (a member of tourmaline Group) in North America. This LCT pegmatite along with many other pegmatites occur within and around the northern and northeastern margin of the Sebago pluton and are, therefore, assumed to be genetically related to its emplacement and crystallization (Simmons et al. 2005). The dike is characterized by a greater abundance of muscovite than biotite; it also contains tantalite, cassiterite, beryl,

spodumene, lepidolite, and tourmaline. They had an underground tour of tunnels with Frank and Gary (the mine owner), and had the chance to see pockets and their associated mineralization. Gem quality bearing pockets are usually above garnet horizon, and occur along the aplitic footwall portion of the dike in Mount Mica; these garnets are often rimmed by black tourmaline.



The trip continued with sample hunting the mineral dumps, and then they headed toward Paris. After the lunch break, they drove down to the Havey quarry, another active tourmaline mine as the final stop for the day. Havey is also a LCT type pegmatite, which was originally discovered as a feldspar mine in the early 1900's. The quarry was mined for gem tourmaline since 1910 when the owner found the first gem tourmaline. The Havey tourmaline is considered one of the best examples of the mineral in the world, with its brilliant colors and clarity (<http://www.pegworkshop.com>). Besides tourmaline, the Havey Mine also produces lepidolite and smoky quartz crystals of wonderful color and mass. Important differences between the Havey quarry and Mount Mica is the presence of graphic texture, the higher content of lepidolite and beryl; tourmaline crystals are also smaller.



The field trip ended by visiting the Fort Foster Brittle Zone in Kittery Maine. The area is full of small-scale, dextral

strike-slip faults of late Paleozoic age that developed parallel to the mylonitic layering of sheared gneisses, schists and amphibolites of the Rye Complex of southern Maine.



Pseudotachylyte, frictionally generated melt from Paleozoic earthquakes, is evident along layer-parallel slip zones, and is up to two cm in thickness.



The Maine geological survey has a complete file resource on the geological sites in the state. For more information, please follow the link below:

http://www.maine.gov/dacf/mgs/explore/explore_map.shtml

More information on each of the stops of our field trip is in the following links

Day 1

Red Beach Granite

<https://www1.maine.gov/dacf/mgs/explore/bedrock/sites/oct03.pdf>

Schoodic Point, Acadia National Park

<http://www.maine.gov/dacf/mgs/explore/bedrock/sites/nov04.pdf>

Mount Desert Island

<http://www.maine.gov/dacf/mgs/explore/bedrock/sites/oct10.pdf>

Day 2

Marshall Point Lighthouse

<https://www1.maine.gov/dacf/mgs/explore/bedrock/sites/mar00.pdf>

Pemaquid Point Lighthouse

<https://www1.maine.gov/dacf/mgs/explore/bedrock/sites/jul02.pdf>

Day 3

Mount Mica

<http://www.mindat.org/loc-3784.html>

Havey Quarry

<http://haveymine.blogspot.ca>

<http://www.pegworkshop.com/minlist/havey.html>

Day 4

Fort Foster Brittle Zone

<https://www1.maine.gov/dacf/mgs/explore/bedrock/sites/apr07.pdf>

Thank you to Zeinab Azadbakh, a PhD Candidate at The University of New Brunswick for providing photos and a description of this exciting field trip. (Zeinab.azadbakht@unb.ca)

A geological tour of Nova Scotia: Ottawa-Carleton Universities Student SEG field trip summary

In August 2015, the Ottawa-Carleton Universities Society of Economic Geologists (OCUSEG) student chapter hosted a week-long field trip to study the geology of Nova Scotia. The province boasts a wide variety of ore-hosting igneous, sedimentary and metamorphic rocks exposed in a variety of picturesque locations. Eight OCUSEG student members joined 3 students from the Saint Mary's University SEG student chapter for the trek across western Nova Scotia. The OCUSEG plans a yearly field trip to introduce students to various ore deposits. The OCUSEG would like to thank the VIP division of GAC for their financial assistance, which was paramount to the success of the trip.

The trip began in Digby to study the structural characteristics, formation history and tectonic significance of the North Mountain Basalt. Prof. Dan Kontak of Laurentian University, a world renowned economic geologist and expert in Nova Scotia geology, led this portion of the trip. The North Mountain Basalt comprises beautifully exposed volcanic flows, columnar basalts, excellent examples of hydrothermal alteration and structure, and a wide variety of zeolite minerals. Each flow unit is relatively flat lying and over 20 feet thick. In the northern part of the formation close to Digby only the upper and middle flows are exposed. Just above the contact between the upper and middle flows, sheared pipe vesicles (now amygdaloidal) at the base of the upper unit illustrate the direction in which the lava was flowing



The boundary between the upper and middle flow units of the North Mountain Basalt. The sheared amygdules (pipe vesicles) at the base of the upper unit indicate the direction of flow, S.J. Ginley

The middle flow unit of the North Mountain Basalt could be mined for zeolite, which has industrial applications when pulverized. Zeolites are commonly focused in bubble trains perpendicular to the flow which has a high density of amygdales. The amygdale-rich zones likely represents areas the lava flow which solidified last, serving as conduit for volatiles to be expelled near the top of the flow.



Zeolite-rich bubble trains of the middle flow unit of the North Mountain Basalt, E. Adlakha

After Digby, the group travelled south to Kemptville, NS. The East Kemptville mine was a Sn-Zn-Cu mine which was active in the 1970s and 1980s. It is geologically located in the highly evolved western margin of the granitic South Mountain Batholith. Avalon Rare Metals currently manages the site at East Kemptville and allowed the group access to their storage pile where the group hunted for sphalerite and cassiterite veins. Even a sledge hammer could not liberate the most promising veins as they are hosted in very hard topaz greisen. A trip to the core shack allowed a better view of the ore. While examining 200 feet of core, the group discussed how this style of polymetallic mineralization could have developed from fluids released during crystallization of the South Mountain Batholith.

The group then visited the lithium-rich Brazil Lake Pegmatite, another example of melt fractionation. The Brazil Lake pegmatite is currently an active aggregate quarry and hosts spectacular crystals of spodumene up to 50 cm in length. Cosmetic-grade muscovite is also present within the pegmatite.

After Kemptville, the group headed east along the south shore of the Nova Scotia coast to the Ovens. The Ovens is a historical site of a gold rush in the 1860s. The site also sports seaside caves and even the opportunity for visitors to pan for gold in rivers. The group studied the Goldenville Formation, exposed along the cliffs. Here, the Goldenville Formation comprises slate that exhibits fantastic examples of turbidity Bouma cycles as well as deformation structures and gold-bearing quartz veins hosted along lithological contacts and structural dilations associated with a tight anticline. The group also collected incredible arsenopyrite samples.



The group preparing to enter the East Kemptville Sn-Zn-Cu mine, S.J. Ginley



White spodumene (Li-bearing pyroxene) crystals of the Brazil Lake Pegmatite, E.Adlakha



An anticline in the Goldenville Formation at the Ovens, S.J. Ginley



Au-bearing arsenopyrite in a sand layer of the Goldenville Formation at the Ovens, S.J. Ginley

After the Ovens, the group continued east along the coast to Peggy's Cove. Here the group walked across hundreds of meters of exposed South Mountain Batholith. Here the South Mountain Batholith contains abundant metasedimentary xenoliths of the Meguma Group, and aplite and pegmatite units. The group discussed the formation of the aplite and pegmatite due to the interaction of the melt with volatiles released from the adjacent Meguma Group.



Discussing formation of aplite and pegmatite in the South Mountain Batholith with Dan Kontak at Peggy's Cove, S.J. Ginley

In Halifax, Dillon Consulting, an environmental assessment firm, hosted the group for a morning of lectures on well-site monitoring, environmental assessment and unconventional oil and gas extraction. The afternoon was spent visiting a well-site and being introduced to well-monitoring tools and practices.

The last day of the OCUSEG field trip to Nova Scotia was spent at Joggins Fossil Cliffs, in the northern part of the province close to the New Brunswick border. The group's guide was Dr. John Calder, a local expert and geologist with the Department of Natural Resources who was instrumental in designating the cliffs a UNESCO world heritage site. Joggins was visited by both Charles Lyell and Charles Darwin, who discovered the earliest co-occurrence of terrestrial animals and terrestrial plant life.



Fantastic exposure of stratigraphy at Joggins Fossil Cliffs, S.J. Ginley

The group walked about three miles of the cliffs (out of the ten total miles exposed) and saw trace fossils such as tetrapod footprints, and fossilized trees and ferns. Some fossilized trees contain fossils of world's oldest reptiles that lived in the area during the Pennsylvanian. Of economic interest, coal seams stretch across the cliffs.



A fossilized tree trunk at Joggins Fossil Cliffs with a coal seam at its base, S.J. Ginley



The entrance to an abandoned coal mine at Joggins Fossil Cliffs, S.J. Ginley

Thanks to funding from the VIP section of GAC, the 2015 OCUSEG field trip was a huge success! Students of varied backgrounds who are associated with the University of Ottawa, Carleton University and Saint Mary's University were able to come together and enjoy a tremendous range of geology.

Field-trip summary courtesy of Stephen Ginley, a University of Ottawa MSc Candidate and member of the OCUSEG (Ottawa-Carleton Universities Society of Economic Geologists) Student Chapter

The Society of Economic Geologists student chapters of the University of Tasmania (CODES) and Lakehead University: Joint field trip to Iceland and Sweden

The Society of Economic Geologists student chapters of University of Tasmania (CODES) and Lakehead University planned a joint trip to Iceland and Sweden which took place in August 2015. The trip was very successful as a “hands on” field experience as well as an amazing opportunity to network. The attendees of the trip were a mixture of Undergraduates, Masters, Doctorate, and Post-Doctorate students and industry geologists that work in a variety of fields of mining and exploration. The trip was accompanied by world renowned experts including; Professor Pete Hollings whose research has focused on many aspects of igneous petrology and geochemistry, Professor Jocelyn McPhie who is a volcanologist with experience of many different aspects of eruption processes and volcano types from facies characteristics, and Professor David Cooke who is a hydrothermal geochemist and economic geologist who specializes in magmatic-hydrothermal ore deposits. This ambitious trip would not have been possible without the generosity of some organizations, including the Volcanology and Igneous Petrology Division of the GAC, whose contributions of funding opened opportunities to plan otherwise unaffordable day trips.



Map of Iceland showing the areas visited during the trip.

Iceland is one of the most beautiful places in the world with seemingly endless sightseeing areas. But the island also has a uniqueness that makes it a perfect place to observe active modern volcanism, alteration and rifting. Iceland is located at the junction of the Mid-Atlantic ridge and the Faeroe ridge and overlies a mantle plume, which makes the production of magma much greater than other areas along submarine rifts. The

northern latitude and presence of glaciers has had an effect on the landscape, with sub-glacier eruptions, glacial and interglacial sedimentation, and deglaciation and associated isostatic rebound. There are three main groups of rocks in Iceland; Tertiary Basalts (16 - 3.3 Ma), Pleistocene Formation (3.3 – 0.8 Ma), and Upper Pleistocene/ Holocene rocks (0.8 Ma – present).

A brief description of some of the highlights of the trip follows.

Day three included a guided tour of the Snæfellsnes Peninsula which is the western portion of the Snæfellsnes Volcanic Zone (SVZ). The SVZ is an off-rift system that runs perpendicular to the main rift of Iceland. This area had two periods of volcanism, Tertiary basalt and sedimentary horizons and overlying Holocene bimodal-volcanic rocks with undersaturated and transitional compositions. The guide for this trip is an award-winning local volcanologist, Haraldur Sigurðsson, who also has over 40 years in research, with world-wide experience. The day had many stops including basalt and rhyolite flow, spatter cones, hyaloclastites, glacial deposits, gabbro, among others.



Group members at one of the stops with some beautiful lava flow textures.

Day five was a very busy day with many stops including; Stakholstjörn rootless cones, Dimmuborgir collapsed lava lake, Námafjall geothermal area, Stora-Víti crater, and Leirhnjúkur lava field. Rootless cones form when lava flows over and interacts with subaerial water causing an eruption due to steam build up. Rootless cones resembles a volcanic crater but does not have a vent underneath them, they consist of juvenile clasts, scoria, and splatter. Dimmuborgir formed ~2000 years ago when a lava lake formed (~10 m deep) in a topographic depression. This area is known for its lava pillars that formed from escaped steam from underlying water rich sediments that cooled surrounding rocks as the steam rose. This area has many quenched lava layers as seen by many thin layers of oxidized lava in the sequence, suggesting a repeated injection and draining of the lava

lake. The Námafjall geothermal field has many boiling mud pools, steaming fumaroles, and solfo-taras. Leirhnjúkur lava field has two main lava flows, one from 1729 and another from 1975-1984. It was interesting as the lava was still hot from the more recent eruption as seen by escaping steam in some areas.



Steaming fumaroles in left hand side of picture in distance, boiling mud pool in bottom right from the Námafjall geothermal field.



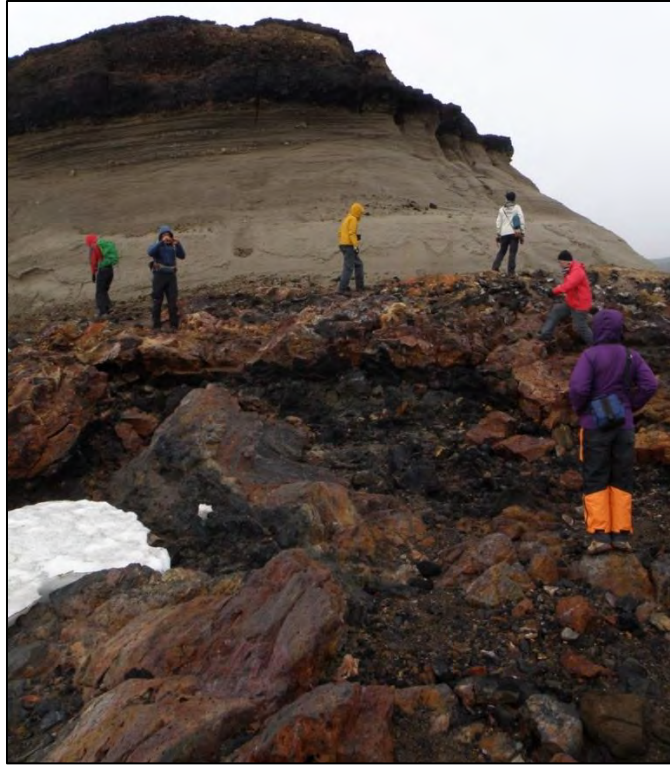
Spatter from the Leirhnjúkur lava field.

The stops on day six were Herðubreið tuya, Ódáðahraun lava field, Holuhraun lava field and Öskjuvatn and Víti craters. All of these features are part of the Askja volcanic center and fissure system which has been active for the past 200, 000 years. Herðubreið tuya is a table mountain that formed by sub glacial eruption forming the distinctive flat top shape, it is 1682 m tall and is mainly composed of hyaloclastite and pillow basalts. The Ódáðahraun lava field truly felt out of this world, due to the near absence of visible plant or animal life. NASA agreed and used the area as a training area for the moon landing missions. Holuhraun lava field is the most recent lava field in Iceland, which formed during the Bárðarbunga fissure volcano eruption between August 29, 2014 and February 27, 2015. Walking on less than a year old rocks was a great experience The rocks were still hot and heated the water of a river that runs next to and underneath the lava field. Some field trip participants could not resist a late night dip!



Steam coming off of the lava field.

A rhyolite plinian eruption created the 8 km Askja caldera and subsequent rhyolite subplinian-phreatoplinian-plinian eruption in 1875 formed Öskjuvatn caldera. Post eruption phreatic activity then created the Víti crater. Some features observed from the 1875 eruption were welded fall deposits and changes of wet and dry cycles of eruption due to the vent sometimes being underwater and sometimes not.



Thermally oxidized lava flow in Öskjuvatn caldera, capped by pyroclastic flows from the 1875 eruption.

Day nine had a few stops but the highlight was definitely a hike to see the Laki fissure and lava field. A foggy and misty morning cleared just in time as the group summited Laki Mountain to reveal an amazing view of the 27 km-long fissure system consisting of scoria, spatter, and tuff cones. The Laki eruption took place between June 8, 1783 and February 7, 1784. There were more than 140 eruption sites and each site was associated with short (hours - few day) subplinian eruption followed by a longer lived lava phase. Eruption from Laki are estimated to have been 10 to 13 km high and the effects from this eruption included a 1.3 °C drop in average temperature for the Northern Hemisphere which lasted 2 or 3 years. Fumes and gases from this eruption had a drastic effect on the Iceland population, as grass growth was stunted, half of the livestock and a fifth of the population died.

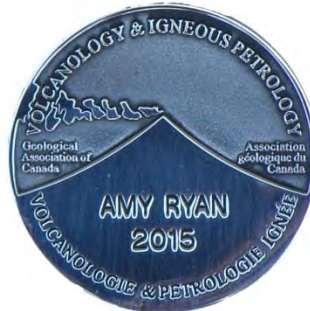
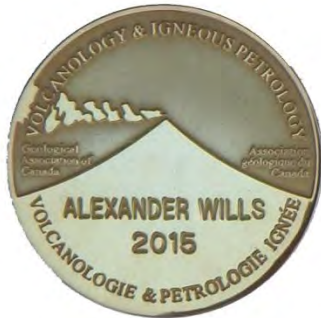


Three of the Lakehead students on Laki Mountain with the Laki fissure to the right.

Iceland is a truly unique location and an amazing place for any geologist to visit. Observing modern day volcanic processes with expert guides, was an incredibly valuable and exciting experience for everyone involved. Many thanks to all the participants involved in planning and funding of this once in a lifetime experience!

Photos and field-trip summary courtesy of Sean O'Brien, M.Sc. Candidate at Lakehead University

2015 AWARDS



GÉLINAS MEDALS

Every year the Volcanology and Igneous Petrology Division of the Geological Association of Canada presents three medals for the most outstanding theses, written by Canadians or submitted to Canadian universities, which comprise material at least 50% related to volcanology and igneous petrology. A gold medal is awarded for the best Ph.D. thesis, a silver medal for the best M.Sc. thesis and an antique copper medal for the best B.Sc. thesis. Nominated theses are evaluated on the basis of originality, validity of concepts, organization and presentation of data, understanding of volcanology and petrology, and depth of research.

Gold Medal – Dr. Alexander Wills



The Volcanology and Igneous Petrology (VIP) Gold Medal for best PhD goes to Alexander Oakley Wills at UNB supervised by Dave Lentz for his thesis is entitled "Chemstratigraphy and hydrothermal alteration of the Flat Landing Brook Fm, Brunswick Belt, Bathurst Mining Camp". It is a very detailed and impressive work and thoroughly deserves the medal.

Citation by Peter Hollings

Silver Medal – Amy Ryan



This year's Volcanology and Igneous Petrology (VIP) Silver Medal goes to Amy Ryan from UBC supervised by Kelly Russell for her MSc thesis entitled "Water solubility and bubble growth dynamics in rhyolitic silicate melts at atmospheric pressure which has one publication in press and another in review.

Citation by Peter Hollings

Amy's Response

I am honored to receive the 2015 Gelinas Silver Medal. First and foremost, I would like to thank the Geological Association of Canada, particularly the Volcanology and Igneous Petrology Division, for selecting me. I am deeply honored to be a part of this community and to be acknowledged by this excellent body of researchers.

I would also like to thank my supervisor Dr. Kelly Russell for his guidance, support and encouragement. It has been an absolute pleasure to work with you over the last few years. Finally, I would like to thank my support-network of peers in the Volcanology Petrology Lab at UBC, friends both at UBC and outside my academic life, and, of course, my family. I am eternally grateful for your love and support.

Thank you again. I am honored to be the recipient.

Amy Ryan

Bronze Medal – Douglas Nikkila



This year's Volcanology and Igneous Petrology (VIP) Bronze Medal goes to Douglas Nikkila from Lakehead University for his Geology B.Sc. honours thesis titled "The mineralogy and petrology of a newly discovered REE occurrence within the Coldwell Complex near Marathon, Ontario". The thesis gives a detailed description of the mineralogy of some syenites that are of economic interest. The mineralogy was not straightforward, due to the

complicated history of the rocks, but was unraveled through use of an assortment of tools (conventional petrographic microscope with reflected light; powder X-Ray Diffraction, and a Scanning Electron Microscope with energy dispersive spectrometer). Of interest, the minerals responsible for high rare earth element concentrations in the rocks are identified. The Volcanology and Igneous Petrology Division of GAC acknowledges this excellent work and congratulates Mr. Nikkila on winning the VIP Bronze Medal.

Citation by Peter Hollings

Doug's Response

I am extremely grateful for being awarded the Leopold Gelinas Bronze Medal for my undergraduate study on syenites in the Coldwell Complex. A lot of hard work was put into my undergraduate thesis, although I could not have done it without the support of many people. I have to thank Dr. Shannon Zurevinski and Dr. Roger Mitchell (Lakehead University) for their guidance throughout the undertaking of this thesis; Mick Stares and Canada Rare Earth Corporation for allowing me to work on the property; and Dorothy Campbell of the OGS for her assistance with field work. I would also like to thank the judges of the Volcanology & Igneous Petrology Division of the Geological Association of Canada. I have started work on my MSc thesis this past fall, studying the layered series of the Center II syenites at the Coldwell Complex. I look forward to meeting many of you at conferences in the near future. Thank you all for your support.

Doug

2014 Volcanology and Igneous Petrology Division Financial Summary

Balance January 1, 2014	\$4227.76	
	Credits	Debits
Dues	\$1550	
Support for shortcourse		
Annual Business Meeting, lunch		
Newsletter		
Postage, copying, miscellaneous office		
Web-page charges		\$26.21
VIP Award Medal Engraving and new medals		\$158.20
Profit from shortcourse		
Bank charges		\$16.85
Bank interest		
Totals	\$1550	\$201.26
	\$5576.50	

Meeting Announcements

GAC-MAC 2016 June 1-3, 2016

Yukon College Campus, Whitehorse,
Yukon

MARGINS THROUGH TIME

*From the Margin of Laurentia, to the
Margin of Beringa, to the Margin of
Society*



The Whitehorse 2016 Organizing Committee invites you to join us June 1-3, 2016 for the first-ever GAC-MAC meeting in Whitehorse, Yukon. The conference will highlight Northern Cordilleran geology and feature field

trips to some unique geologic settings. We are planning a diverse program that will cover a range of geoscience disciplines including tectonics, metallogeny, geological hazards, and glaciated (and unglaciated!) northern landscapes – all against a backdrop of spectacular scenery and warm hospitality.

<http://whitehorse2016.ca/>

VIP reminders

The Career Achievement Award - the deadline is **31 January 2016** and nominations should be sent to Pete (peter.hollings@lakeheadu.ca)

The Gold Gélinas medal for an outstanding PhD thesis in the fields of volcanology and igneous petrology - the deadline is **28 February 2016** and nominations should be sent to Pete (peter.hollings@lakeheadu.ca)

The Silver Gélinas medal for an outstanding MSc thesis in the fields of volcanology and igneous petrology - the deadline is **28 February 2016** and nominations should be sent to Donnelly (donnelly.archibald@adelaide.edu.au)

The Bronze Gelinás medal for an outstanding Honours thesis in the fields of volcanology and igneous petrology - the deadline is **15 April 2016** and nominations should be sent to John (john.greenough@ubc.ca)

GAC-VIP Executive

Chair:	Pete Hollings	pnhollin@lakeheadu.ca
Vice-Chair:	John Greenough	john.greenough@ubc.ca
Secretary:	Donnelly Archibald	donnelly.archibald@adelaide.edu.au
Treasurer:	James Braid	jbraid@stfx.ca
Past Chair:	Jarda Dostal	jarda.dostal@smu.ca
Councilor West:	Kevin Cameron	kjc@sfu.ca
Councilor Central:	Pierre-Simon Ross	pierre-simon.ross@ete.inrs.ca
Councilor East:	David Lentz	dlentz@unb.ca
Student Councilor:	Vacant	

For more information, visit the GAC-VIP Division Website:

<http://www.vip-gac.ca/About.html>