



On-Line Access to Geoscience Bibliographic Citations

Preface by Robert G. Eppinger

Graham Closs and the Association's Bibliography Committee's compiled applied geochemistry-related publications in the "Recent Papers" section of EXPLORE for the past several decades. Graham was the person largely responsible for diligently sleuthing and providing citations for each issue and he deserves a huge thank you for this contribution. As Graham steps down from this role, the "Recent Papers" section will no longer be continued. With the widespread use of internet search engines and on-line databases, search capabilities for capturing relevant applied geochemical (or other scientific) bibliographic citations have become significantly easier in recent years. Provided here are some of the on-line resources for finding applied geochemical and other citations. However, while I use some of these resources, I still like to spend time in the library!

Introduction

On-line geoscience bibliographic citations and access points to citations are exponentially increasing as commercial, non-profit, and government agencies worldwide publish materials electronically. On-line bibliographic tools capture cited works, and open access content allows for freely obtained citations and documents. For this newsletter, citations from the numerous journals and books listed in the "Recent Papers" section of the **EXPLORE** newsletters from 2008-2011 were used to provide freely-accessible web sites to determine the availability of bibliographic information.

Subscription Services

Several subscription databases offer limited access to their citations, and in some cases one must purchase or have a subscription to obtain the full-text content. Among others, these include GeoScienceWorld (GeoScienceWorld, 2011), GeoRef (American Geosciences Institute, 2011a), and ScienceDirect (Elsevier, 2011b). These databases provide users with access to basic searches, advanced searches, and search tips for carrying out comprehensive searches. Geo-ScienceWorld cites all mainstream geoscience journals, including Economic Geology, Elements, and AAG's Geochemistry: Exploration, Environment, Analysis, all of which are simultaneously searched using the advanced search option, including date range selection (http://www.geoscienceworld. org/search.dtl/). As more geospatial data are available online, publications are being georeferenced to provide the ability to seek geographically-based citations. One of the latest entries in georeferenced materials is Geofacets

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President's Message



Yesterday's Leaders.

In my previous AAG President's Message, I outlined a goal during my tenure of seeing completion of a document describing the history of AAG and its forerunner, the Association of Exploration Geochemists (AEG), from inception to the present. I presented this goal at the last AAG Council meeting (February, 2012). I am pleased to announce that Beth McClenaghan stepped forward and graciously offered to lead this AAG history initiative. It is important that we capture this institutional knowledge before it is lost. Beth takes over the effort that was begun several years ago by Gerry Govett and then passed on to Bob Garrett. Beth's proximity to Bob's office at the Geological Survey of Canada (Bob is now an emeritus scientist at GSC) will facilitate her sleuthing through the boxes of records that Bob acquired. The completed document will eventually be placed on AAG's website under a webpage dedicated to AAG's history.

Eion Cameron and John Hansuld recently communicated with me suggesting that we consider scanning important early AEG and AAG documents and letters and posting them on the AAG website. The scanning suggestion is a natural companion effort to the AAG history initiative. The scanned documents will help flesh out and provide context to the AAG history webpage. They will also help reduce (but not eliminate) the need for space for printed archival materials that are important to AAG. In this spirit, if any of you long-time AEG/AAG Members have printed documents that are important to AEG's founding and early history, please consider scanning them and forwarding them to me (eppinger@usgs.gov) or to Beth (bmcclena@NRCan. gc.ca). We are looking for those unique and important pieces of AEG/AAG history that may have been forgotten. When evaluating documents in your possession, remember that you already have at your fingertips the complete archive of **EXPLORE** (and its forerunner, the AEG Newsletter) available for download in .PDF format from the AAG website, from inception to present (also thanks to Beth and her student help!). This in itself is a treasure trove of information on AEG/AAG's past and will be a critical resource for the history initiative. We are requesting from you important information that is not in **EXPLORE**. So check your files and, using your critical eye, if it looks useful to the history initiative, scan it to .PDF and forward it to us. Please include any contextual or background information that you might recall.

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President's Message ... continued from page 1

Tomorrow's Leaders.

At the other end of the spectrum, we are moving forward on several fronts to capture younger scientists for membership in AAG. We already offer reduced membership to students (a bargain at \$10 US/year). We now have three different financial mechanisms for helping students of applied geochemistry. Information and links are available from AAG's website. In alphabetical order, these are: (1) The AAG Student Support Initiative. This program, begun in 2011, offers in-kind analytical support for Bachelors/ Masters/PhD students of applied geochemistry that are vetted by AAGs Education Committee (chaired by Erick Weiland). AAG pairs the selected student directly with the analytical laboratory providing support. Participating laboratories include ALS Minerals, Becquerel Laboratories Inc., Genalysis/Intertek, and Ultratrace/Bureau Veritas. (2) The ioStipend. This is a grant in the form of analytical services available for students conducting explorationrelated geochemical studies at a recognized educational institution. The grant is a partnership between ioGlobal and Acme Analytical Laboratories Ltd., and ioGlobal vets the proposals. (3) AAG offers student support in the form of travel money for a few students wishing to attend and present their research at our biennial International Applied Geochemistry Symposia (IAGS). This program is funded by AAG's Distinguished Applied Geochemists Fund and

Notes from the Editor

The June 2012 issue of **EXPLORE** features one article by Emily Wild describing on-line access to geoscience bibliographic citations. This article offers useful suggestions for searching reference material in place of the AAG's recently discontinued section 'Recent Papers'.

Thank you to all contributors to **EXPLORE** No. 155: Steve Amor, Betty Arsenault, David Cohen, Bob Eppinger, Erick Wieland and Emily Wild. We are actively looking for ideas for articles for issues of **EXPLORE** in 2013. Please let me know if you have any ideas.

Beth McClenaghan

Editor



interested students should contact the AAG Symposium Committee chairman (David Cohen, d.cohen@unsw.edu. au). Details on the upcoming 2013 IAGS in Rotarura, New Zealand can be found elsewhere in this issue of **EXPLORE**. In all three programs, selected students are expected to summarize their work in **EXPLORE** and/or GEEA.

It is good to see AAG activity at both fronts—capturing vital historical and institutional information from yesterday's leaders and capturing for membership young upcoming geochemists that will be tomorrow's leaders.

Bob Eppinger

President



On-Line Access to GEEA

The Association's journal Geochemistry: Exploration, Environment, Analysis (GEEA) is now available online via the Lyell Collection (www.lyellcollection.org) - a fully searchable online collection of most of the Geological Society of London's books and journals. As a member of the Association of Applied Geochemists you are entitled to access all of the online content for this journal. Before you can access the journal you will need to activate your subscription. To do so, go to the subscription activation page (www.lyellcollection.org/cgi/activate/ibasic) and put in your subscriber ID number. This ID number consists of your AAG member membership number prefixed with the letters AAG. For example, if your AAG membership number is 3667, you subscriber ID number will be AAG3667. You will then need to select a username and password which you will use to login and view the journal. If you do not know your AAG membership number, contact Betty Arseneault in the AAG Business Office.

Betty Arseneault

Business Manager Tel: (613) 828-0199 Fax: (613) 828-9288

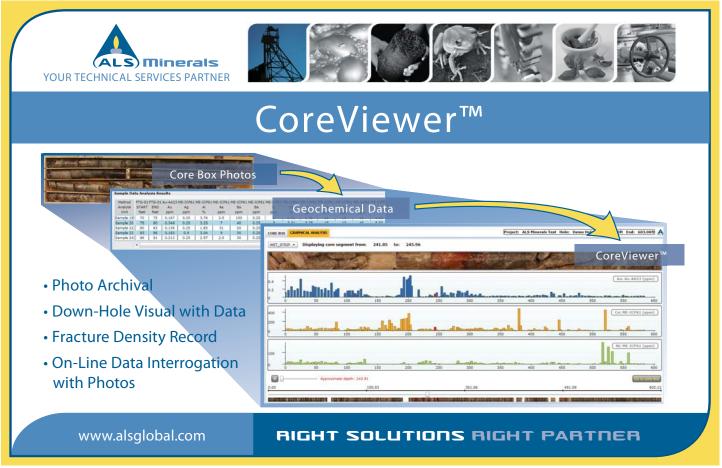
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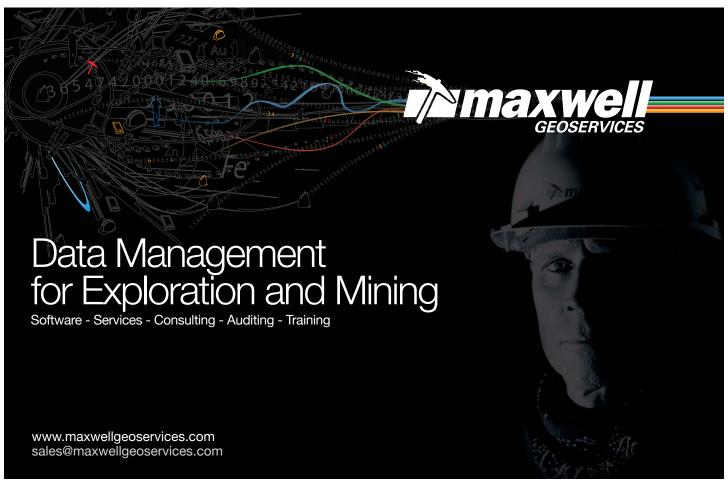
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(Elsevier, 2011a), which includes access to 130,000 geologic maps and map-contextual information, including those in Elsevier journal articles and in the Geological Society of London's *Lyell Collection*.

Cost-Free Services

International geological survey organizations are listed on the Directory of Geoscience Organizations of the World web site (Geological Survey of Japan, 2011), and provide access to the main homepage for each country's geoscience agency web site. Most geoscience government agencies have a "Publications" page that links users to the agencies' bibliographic databases, such as Geoscience Australia's Publications and Presentations web site (Australian Government Geoscience Australia, 2011) or the U.S. Geological Survey's (USGS) Publications Warehouse database (U.S. Geological Survey, 2011). Many publication links provide advanced search capabilities using numerous parameters such as report series, year, authors, or keywords (such as "geochemistry"). Citation searches can be saved in spreadsheet formats or in files compatible with personal bibliographic software. Most large geological survey organizations also have geoscience libraries with on-line search capabilities.

Unconventional bibliographic citation sources can be utilized to perform advanced searches by authors, journals and books, and/or subject areas. These include the freely available GoogleScholar (GoogleScholar, 2011) and the free downloadable Publish or Perish software (Harzing, 2011). Sometimes, scientists are interested not only in journal articles or other published materials, but also the associated citation metrics. Publish or Perish provides usage statistics on authors and journals, automatically links the user to Google-Scholar indexes, and provides exporting options as text files and in formats for personal bibliographic software. For example, in Publish or Perish one can select the "Author impact" tab and search < Hawkes, Herbert E.>. By clicking on any one of the resulting citations, the user is linked to that citation in GoogleScholar, as well as the works that include the selected citation. For most of these citations, GoogleScholar links to the records available, such as from a journal's web site and/or ScienceDirect. For quick searches of scientific material, GoogleScholar is generally better to use than Google or other standard search engines. GoogleScholar limits the searches to citations, whereas Google searches multiple types of materials.

Open-access materials (free full-text documents) are available from several sources worldwide. In the geosciences, librarians refer scientists to *Geoscience e-Journals* (Université de Bretagne Occidentale Brest Quimper Morlaix, Geosciences, 2011) and the *Open-Access Journals/ Series* (American Geosciences Institute, 2011b). For a list of additional open access journals that are "free, full text, quality-controlled scientific and scholarly journals, covering all subjects and many languages," please refer to the *Directory Open Access Journals* (Lund University Libraries, 2011).

Bibliographic software for personal use is available for many who are affiliated with commercial, academic, or government research libraries, such as *EndNote* (Thomson Reuters, 2011a), EndnoteWeb (Thomson Reuters, 2011b), or RefWorks (RefWorks, 2011). If one does not have access to these bibliographic software tools, there are bibliographic software packages that are freely available online, such as Zotero (Zotero, 2011) and Mendeley (Mendeley, 2011). Personal bibliographies of literature reviews include capabilities of organizing citations and full-text documents, searching geoscience library catalogs within the software, and importing files from commercial vendors, such as ScienceDirect and GeoRef.

If scientists have additional questions or need help accessing citations or materials, they may contact local libraries and/or national, state, and provincial geological survey libraries. Many librarians are members of the Geoscience Information Society (GSIS). GSIS is an international geoscience librarian organization that meets annually at the Geological Society of America's (GSA's) annual meeting. The GSIS GEONET E-mail List is a way for geoscience librarians from worldwide academic, government, and special library's to communicate with one another (Geoscience Information Society, 2011). For many research inquiries and for interlibrary loan, we use Worldcat (OCLC, 2011), an international library catalog of book and journal holdings. U.S. Geological Survey librarians, for example, routinely work with Natural Resources Canada librarians and geoscience librarians in Australia, New Zealand, United Kingdom, and many other countries to find and use geoscience materials for our research scientists and for the general public. The geosciences are unique in that most libraries throughout the world are interconnected, facilitating access to much of the geoscience literature.

Selected References and Websites

- American Geosciences Institute, 2011a, *GeoRef*, accessed 22 March, 2012, at http://www.agiweb.org/georef/.
- American Geosciences Institute, 2011b, *Open-Access Journals/Series*, accessed 22 March, 2012, at http://www.agiweb.org/georef/about/openaccess.html.
- Australian Government Geoscience Australia, 2011, *Publications and Presentations*, accessed 22 March, 2012, at http://www.ga.gov.au/products-services/publications.html/.
- Elsevier, 2011a, *Geofacets*, accessed 22 March, 2012, at http://www.geofacets.com/.
- Elsevier, 2011b, *ScienceDirect*, accessed 22 March, 2012, at http://www.sciencedirect.com/.
- Geological Survey of Japan, 2011, *Directory of Geoscience Organizations of the World*, accessed 22 March, 2012, at http://www.gsj.jp/Intl/Dir/a.htm.
- Geoscience Information Society, 2011, *GEONET E-mail List*, accessed 22 March, 2012, at http://www.geoinfo.org/lists.html.

Online Access to Geoscience Bibliographic Citations ... continued from page 4

- GeoScienceWorld, 2011, *GeoScienceWorld*, accessed 22 March, 2012, at http://www.geoscienceworld.org/.
- GoogleScholar, 2011, GoogleScholar Advanced Scholar Search, accessed 22 March, 2012, at http://scholar.google.com/advanced scholar search?hl=en&as sdt=0,6.
- Harzing, A.W., 2011, *Publish or Perish*, accessed 22 March, 2012, at http://www.harzing.com/pop.htm.
- Lund University Libraries, 2011, *Directory Open Access Journals*, accessed 22 March, 2012, at http://www.doaj.org/.
- Mendeley, 2011, *Mendeley*, accessed 22 March, 2012, at http://www.mendeley.com/.
- OCLC, 2011, *WorldCat*, accessed 22 March, 2012, at http://www.worldcat.org/.
- RefWorks, 2011, *RefWorks*, accessed 22 March, 2012, at http://www.refworks.com/.
- Thomson Reuters, 2011a, *EndNote*, accessed 22 March, 2012, at http://www.endnote.com/.

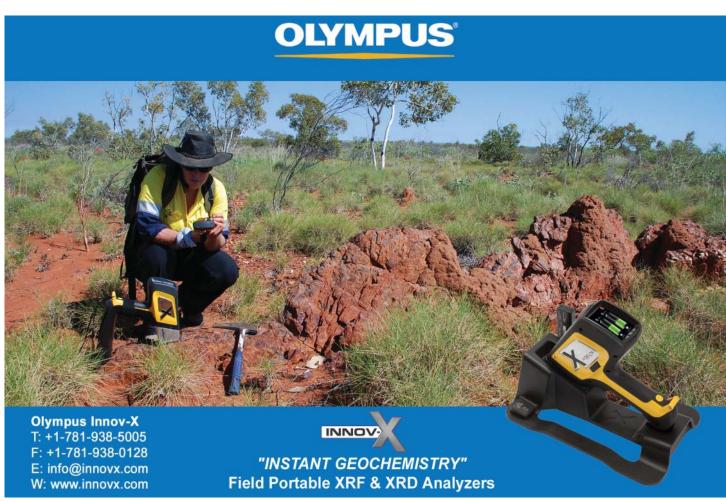
- Thomson Reuters, 2011b, *EndNoteWeb*, accessed 22 March, 2012, at http://www.myendnoteweb.com/.
- U.S. Geological Survey, 2011, *Publications Warehouse*, accessed 22 March, 2012, at http://pubs.usgs.gov/.
- Université de Bretagne Occidentale Brest Quimper Morlaix, Geosciences, 2011, *Geoscience e-Journals*, accessed 22 March, 2012, at http://www.univ-brest.fr/geosciences/e-journals/.
- Zotero, 2011, *Zotero*, accessed 22 March, 2012, at http://www.zotero.org/.

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Emily C. Wild

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AAG Student Support Initiative In-kind Analytical Support for BSc (Hons), MSc and PhD Students

In 2011, AAG began the process of implementing a coordinated program with analytical laboratories to provide In-Kind Student Support for applied geochemical research projects. We are off to an exciting start and expect to see a paper in EXPLORE in the near future regarding the results from the first student (Xin Du from University of Western Australia – Intertek sponsored analyses) to participate in the program.

To: John Flynn, Director Business Development

Genalysis Laboratory Services

From: Robert G. Eppinger

President, Association of Applied Geochemists (AAG)

Dear John,

I want to thank you and your company, both personally and on behalf of AAG, for providing analytical support to student Xin Du for her REE study at the University of Western Australia. Genalysis' generous support to Xin is the first under AAG's new In-Kind Student Support initiative established in 2011. In addition to highlighting the support that Intertek has provided this student, we look forward to seeing an article by Ms Du in AAG's newsletter, **EXPLORE** later this year.

Thank you again, Bob Eppinger

Investment in Applied Geochemistry

As an investment in the future, the AAG wishes to encourage and support students whose area of study is Applied Geochemistry. AAG believes that by identifying appropriate students, using a set of simple criteria, and coordinating with analytical laboratories that are willing to offer in-kind support in terms of geochemical analyses, high quality research and training in fundamental geochemical principles can result.

One note of concern is that we have not received any applications from students over the past several months. Committee members, and several AAG members, have contacted over 19 Universities directly in an attempt to increase student participation. If you have contacts within the Universities in your area, please ensure that they are aware of this support for students and direct them to the AAG web site for additional details and application materials

Laboratories Participating in the In-Kind Student Support Initiative

Four laboratories have generously signed on to provide the In-Kind Student Support committing over \$35,000 in terms of analytical support:

- 1. Becquerel Laboratories Inc., Mississauga, Ontario, Canada
- 2. ALS Laboratory, North Vancouver, BC, Canada
- 3. Genalysis / Intertek, Gosnells, Western Australia
- 4. Ultratrace / Bureau Veritas, Canning Vale, Western Australia

If your laboratory or student is interested in being a part of this program, please contact the chair of AAG's Education Committee, Erick Weiland (Erick_Weiland@fmi.com), who can provide you with details of this program. Student applications and instructions may also be found on the AAG web site: http://www.appliedgeochemists.org/ student's page under the In-Kind Student Support link.

Education Committee

Ray Lett, Ryan Nobel, Nigel Radford, Eric Grunsky, Erick Weiland (Chair)











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Industry Research Initiative in Exploration Geochemistry

The Mineral Deposit Research Unit (MDRU) in the Department of Earth and Ocean Science (EOS) at the University of British Columbia (UBC), Vancouver, Canada has launched a new industry-sponsored research initiative in Exploration Geochemistry. We are seeking expressions of interest from individuals who would be excited to lead the MDRU Exploration Geochemistry Initiative. The successful candidate will have a unique opportunity to provide leadership and innovation to develop a robust and well-supported research program that will establish new foundations in the field of Exploration Geochemistry.

This research program will dramatically increase the understanding of element mobility and transport from blind and buried deposits into, and through, the surficial environment. This new knowledge will be utilized to develop new mineral exploration techniques and strategies. These objectives will be accomplished with a diverse research group that will be established by the successful candidate, and will consist of a number of Post-Doctoral Fellows, doctoral and masters level graduate students. The Exploration Geochemistry research group will be supported as a component within MDRU, will benefit from the geochemical expertise and infrastructure at UBC, and will have the support of various industry partners.

The project leader will be an international leader capable of launching a major research initiative and building a broad range of partnerships to advance new areas of collaborative, industrially-relevant research. The candidate will have innovative perspectives to achieve these goals as well as extensive experience in conducting and managing applied research programs, and will have enthusiasm for training young researchers. In addition to the research funds provided by this project, initiatives to generate new projects and funding are expected.

Core funding has been provided by industry grants with potential additional support from the National Science and Engineering Research Council of Canada (NSERC) to establish an Executive Industrial Research Chair. This Chair is designed to attract the best candidates from industry with non-academic research backgrounds who demonstrate collaborative research strengths and have an ability to "cross boundaries". The position will carry an academic appointment within UBC. A PhD is preferable but not essential. Teaching experience and an extensive publication record is not required. The position is a five-year term. Salary and benefits will be competitive with industry.

For further information, contact Dr Craig Hart, MDRU Director at chart@eos.ubc.ca or Dr Peter Bradshaw, Chairman of the Search Committee at pbradshaw@firstpointminerals.com. Additional background on the MDRU Exploration Geochemistry Initiative is available at http://www.mdru.ubc.ca/home/about/jobs/IRCExplnGeochem.php . Expressions of interest consisting of a CV and a one-page cover letter should be sent by email to eoshr@eos.ubc.ca, and will be reviewed on June 30th, 2012 and thereafter until a suitable candidate is identified.

UBC hires on the basis of merit and is committed to employment equity. UBC is strongly committed to diversity within its community and especially welcomes expressions of interest from visible minority group members, women, Aboriginal persons, persons with disabilities, persons of any sexual orientation or gender identity, and others who may contribute to the further diversification of ideas. However, Canadians and Permanent Residents of Canada will be given priority.



MDRU-Mineral Deposit Research Unit Department of Earth and Ocean Sciences Vancouver, B.C. Canada V6T 1Z4 Tel: 604-822-6136 Fax: 604-822-6088

: 604-822-6136 Fax: 604-822-6088 E-mail: mdru@eos.ubc.ca PAGE 8 NUMBER 155 EXPLORE



CALENDAR OF EVENTS

International, national, and regional meetings of interest to colleagues working in exploration, environmental and other areas of applied geochemistry. These events also appear on the AAG web page at: www.appliedgeochemists.org

2012

24-29 June 2012. Goldschmidt 2012. Montréal QC Canada. Website: www.goldschmidt2012.org/

2-6 July 2012. Eurosoil 2012 - Soil Science for the Benefit of Mankind and Environment, Bari, Italy. Website: www.eurosoil2012.eu

11-15 July 2012. Euroscience Open Forum, Dublin, Ireland. Website: www.dublinscience2012.ie

15- 20 July 2012. Geochemistry of Mineral Deposits, Andover NH USA. Website: http://tinyurl.com/6mcan74

15-22 July 2012. 9th International Symposium of



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Environmental Geochemistry. Aveiro Portugal. Website: http://9iseg.web.ua.pt

28 July-2 August 2012. American Crystallographic Association (ACA) Annual Meeting. Boston MA USA. Website: http://tinyurl.com/3dfn8lu

29 July-2 August 2012. Microscopy and Microanalysis 2012. Phoenix AZ USA. Website: http://tinyurl.com/428tyv6

29 July-3 August 2012. Organic Geochemistry (Gordon Research Conference), Holderness NH USA. Website: http://tinyurl.com/7k6mrmc

5-15 August 2012. 34th International Geological Congress, Brisbane Australia. Website: www.34igc.org

26-30 August 2012. 32nd International Geographical Congress: "Down to Earth". Cologne, Germany. Website: www.igc2012.org

28 -30 August 2012. 2nd International Conference on Environmental Pollution and Remediation, Montreal QC Canada. Website: http://icepr2012.international-aset.com/

29 August-2 September 2012. 14th Annual Conference of the International Association for Mathematical Geosciences. Budapest, Hungary. Website: www.iamg2010-budapest.hu/

2-6 September 2012. 7th International Conference on Environmental Catalysis. Lyons France. Website: www.conference-service.com/ICEC-2012/welcome.cgi

9- 13 September 2012. Planet Earth-from Core to Surface: First European Mineralogical Conference. Frankfurt Germany. Website: http://emc2012.uni-frankfurt.de

17- 20 September 2012. Geoanalysis 2012, Buzios Brazil. Website: www.ige.unicamp.br/geoanalysis2012

27-29 September 2012. Calcium and magnesium in groundwater - distribution and significance. Katowice, Poland. Website: www.pigog.com.pl/CaMgSeminar/

1-4 October 2012. GeoHannover2012 "GeoResources in the 21st Century." Hannover, Germany. Website: www. geohannover-2012.de

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CALENDAR OF **EVENTS**

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7-10 October 2012. 5th International Symposium on Environmental Geochemistry in the Tropical Countries. Buzios, Brazil, Website: www.isegtropic.com/site/isegt.php

29-31 October 2013. 9th Fennoscandian Exploration and Mining. Levi, Finland. Website: http://fem.lappi.fi/en

4-7 November 2012. GSA 2012 Annual Meeting, Charlotte NC USA. Website: www.geosociety.org/meetings/2012/

19-21 November 2012. 5th Water Contamination Emergencies: managing the threats. Muelheim an der Ruhr, Germany. Website: www.wcec5.eu/

3-4 December 2012. Annual International Conference on Geological & Earth Sciences (GEOS 2012). Singapore. Website: http://geoearth.org/

3-7 December 2012. Northwest Mining Association: 118th Annual Meeting, Exposition & Short Courses. Spokane WA USA. Website: www.nwma.org/

5-8 December 2012. 13th European Meeting on Environmental Chemistry. Moscow, Russia. Website: www. europeanace.com/about/meetings2013

2013

28-31 January 2013. Mineral Exploration Roundup 2012. Vancouver BC Canada. Website: http://tinyurl.com/cvt4jng

3-6 March 2013. Prospectors and Developers Association of Canada Annual Convention. Toronto ON Canada. Website: www.pdac.ca/pdac/conv/index.aspx

22-24 May 2013. Geological Association of Canada/ Mineralogical Association of Canada Annual Meeting. Winnipeg MB Canada. Website: http://gacmacwinnipeg2013. ca/



16-20 June 2013. 12th International Conference on the Biogeochemistry of Trace Elements. Athens GA USA. Website: http://tinyurl.com/ca39d7g

28 July-2 August 2013. 11th International Conference on Mercury as a Global Pollutant Edinburgh UK. Website: www.mercury2013.com/

4-8 August 2013. Microscopy & Microanalysis 2013. Indianapolis IN USA. Website: www.microprobe.org/events

25-30 August 2013. Goldschmidt 2013. Florence, Italy. Website: http://www.goldschmidt.info/2013/

27-30 October 2013. GSA 2012 Annual Meeting. Denver CO USA. Website: www.geosociety.org/meetings/

18-21 November 2013. 26th International Applied Geochemistry Symposium, Rotorua, New Zealand. Website: www.gns.cri.nz/iags

Please let us know of your events by sending details to: **Steve Amor**

Geological Survey of Newfoundland and Labrador P.O. Box 8700, St. John's NL Canada. A1B 4J6 Email: StephenAmor@gov.nl.ca 709-729-1161



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The Association of Applied Geochemists

announces the

2012 AAG Student Paper Competition



The AAG announces the 9th biennial Student Paper Competition. The paper must address an aspect of exploration geochemistry or environmental geochemistry related to mineral exploration and be based on research performed as a student.

The student must be the principal author and the paper must have been published in Geochemistry: Exploration, Environment, Analysis no more than three years after completion of the degree. All eligible papers in 2011 and 2012 volumes of GEEA will be reviewed by the selection panel.

The winner will receive:

SGS

- A cash prize of \$1000CAD generously donated by SGS Minerals Services;
- A 2-year membership of AAG, including the society's journal (GEEA);
 EXPLORE newsletter, publication of an abstract and CV of the winner;
- a certificate of recognition; and
- \$500US towards expenses to attend an AAG-sponsored meeting, courtesy of AAG.

The results of the 2012 competition will be announced at the 26th IAGS in Rotorua, New Zealand. Details are available from the Chair of the committee or the AAG Students' page (http://www.appliedgeochemists.org/).

David Cohen
Chair, Student Paper Competition
School of BEES
The University of New South Wales
UNSW NSW 2052 Australia
Email: d.cohen@unsw.edu.au

AAG Member News

Mary Doherty has accepted a position as Chief Geochemist for Newmont Mining Corporation and is now based in Denver, Colorado, USA.



The Association of Applied Geochemists Student Membership \$10 US

Encourage a Student to Join!

New AAG Website Coordinator

AAG's web site has a new coordinator, Jamil Sader. Jamil takes over this volunteer position from Bob Eppinger, who is now our new AAG President.

Bob was coordinator of the AAG website for 6.5 years and we thank Bob for his time and efforts. Jamil is an exploration geochemist with MMG and is based in Vancouver, Canada.

Anyone wishing to provide content or feedback for the AAG website may contact Jamil at:

jamil.sader@mmg.com

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Actlabs is committed to bringing the most modern technologies and a higher level of competencies to the analytical laboratory for the mineral industry. We are continuously expanding existing facilities and opening new facilities as we strive to meet the needs of our customers.

State-of-the-art instrumentation allows us to offer services unavailable at other laboratories. We have developed the only robotic fusion system in the world to allow for rapid analysis of REE samples. We are also the first and only organization within North America to have a Field Emission Gun Scanning Electron Microscope (FEG-SEM)-FEI Quanta 650 with two EDX detectors and MLA quantitation software.

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ioStipend



In-kind Analytical Research Fund for BSc(Hons), MSc and PhD students

Much has been said and written about the broadening gulf between the demand for qualified explorationists and the supply coming out of our colleges, technical institutes and universities. One merely has to attend any geo-conference and gaze out over the sea of grey to fully grasp the situation our industry faces. This is all the more evident in the field of exploration geochemistry whose members have always been in short supply.

As consultants and service industries, we owe our livelihood to mining and exploration and thus have a vested interest in its development. We believe that any aid to promote fresh faces into our sector is helping to secure our future.

Acme Analytical Laboratories Ltd. and ioGlobal are taking the bold initiative of directly aiding students in the geosciences via the ioStipend. The ioStipend is a grant available to students conducting exploration-related geochemical studies at a recognized educational institution. The grant is in the form of analytical services using any package provided by Acme Analytical Laboratories Ltd. Students and/or their teachers/advisors can apply for the grant by submitting the application to ioGlobal who will vet the proposals.

The grant is intended to promote the collection of high quality, base-line data for comparison with more "esoteric data" (eg, isotopic data, partial digests, non-standard sample media) generated during the course of research, and to promote broad training in fundamental geochemical principals across the geosciences.

The **ioStipend** allows for amounts of approximately \$5,000 (AUD, CAD or equivalent) for in-kind analytical work. Successful applicants will also be provided with 3 academic licences of **ioGAS**, the new exploratory data analysis software package available from ioGlobal.

The application form is available at www.ioglobal. net.

It is envisaged that three or four of these awards will be made each year.

Applications are reviewed by an expert group of ioGlobal's geochemists

Eligibility Criteria

Preference will be given to:

- students with no other source of funding
- students working on exploration geochemistry projects
- projects no or very minimal confidentiality requirements

The ioStipend is international. Applications are welcome from qualified institutions globally.

Some technical input may be provided by ioGlobal on request.

Requirements for receiving the ioStipend

Firstly, there are minimal strings attached. Recipients would have to agree to

- 1. Have their project promoted on the ioGlobal web site in an area devoted to R&D carried out under the program (couple of passport photo shots, brief description)
- 2. Acknowledge ACME Labs and ioGlobal for support in technical and public presentations of results
- 3. Write a short article for Explore describing the project outcomes, and allow this to be published on the ioGlobal web site.

David Lawie, John Gravel

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Association of Applied Geochemists APPLICATION FOR MEMBERSHIP*



Ple	ase complete only the relevant section for membership. See below	for mailing instruction	ons.	67
	, wish to ap			
	Applied Geochemists. I have read the Code of Ethics of the Associate nour and abide by them.	ion and in the event	of being ele	cted a Member/ Student Member agree
	EMBER: State Employer and Employee title			
I ar	n actively engaged in scientific or technological work related to appart as a			
	(employer)	as a (employment title)		
	UDENT MEMBER: Student status must be verified by a Professor ertify that the applicant is a full-time student at			
	ertify that the applicant is a full-time student at	(institution)		
	(Professor/ AAG Fellow Signature)		(Printed Nar	me and Title)
Wit	tness my hand this day of, 20			
			(Signature	of applicant)
NA	ME AND ADDRESS: PLEASE PRINT (to be completed by applic	ant)		
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An	nual Dues :			
All	applications must be accompanied by annual dues. All payments m	nust be in US funds.	Select one o	f the four listed below.
1	2012 member dues	US\$	100	
2	2012 student member dues		10	
	- If receipt required, include a self-addressed envelope and add		2	
	- If your check is not drawn from a U.S.A. or Canadian bank, add	l	15	
	ment by check, International Money Order, UNESCO Coupons, Interptable. For credit cards users, minor variations in your billing ma			
Тур	oe: VISA American Express Master Card Credit card a	ccount number:		

*Application for voting membership (Fellow) requires the sponsorship of three voting members. Request a voting member application from the Association office.

Exp. date: ______ Signature: ____

Please note: Your application form will be acknowledged upon receipt. The Admissions Committee reviews all applications and submits recommendations to Council, who will review these recommendations at the next Council Meeting or by correspondence. If no objection is raised the names, addresses and positions of candidates will be listed in the next issue of the AAG Newsletter. If after a minimum of 60 days have elapsed following submission of candidate information to the membership no signed letters objecting to candidates admission are received by the Secretary of the Association from any Member, the Candidate shall be deemed elected, subject to the receipt by the Association of payment of required dues. Send completed application, together with annual dues to:

Association of Applied Geochemists

P.O. Box 26099, 72 Robertson Road, Ottawa, Ontario, CANADA K2H 9R0

TEL: (613) 828-0199, FAX: (613) 828-9288, email: office@appliedgeochemists.org WEBSITE: http://www.appliedgeochemists.org

Newsletter No. 155 **JUNE 2012**

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EXPLORE is published quarterly by the Association of Applied Geochemists, P.O. Box 26099, 72 Robertson Road, Ottawa, ON Canada K2H 9RO.

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Type and layout of EXPLORE: Vivian Heggie, Heggie Enterprises, Thornton, CO (303) 288-6540; vjmheggie@comcast.net

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Quarterly newsletters in March, June, September, December

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March newsletter: January 15 June newsletter: April 15 September newsletter: July 15 December newsletter: October 15

Information for Contributors

Manuscripts should be double-spaced and submitted in digital format using WORD. Photos and figures (colour or black and white) should be submitted as separate digital files and as high resolution jpeg or PDF files. Tables should be submitted as separate digital files in EXCEL format. All scientific/technical articles will be reviewed. All contributions may be edited for clarity or brevity.

Formats for headings, abbreviations, scientific notations, references and figures must follow the Guide to Authors for Geochemistry: Exploration, Environment, Analysis (GEEA) that are posted on the GEEA website at: http://www.geolsoc.org.uk/template.cfm?name=geea_instructions_for_ authors

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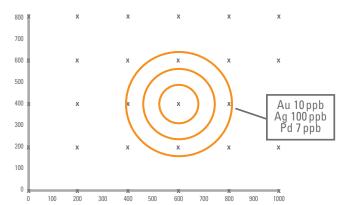
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