

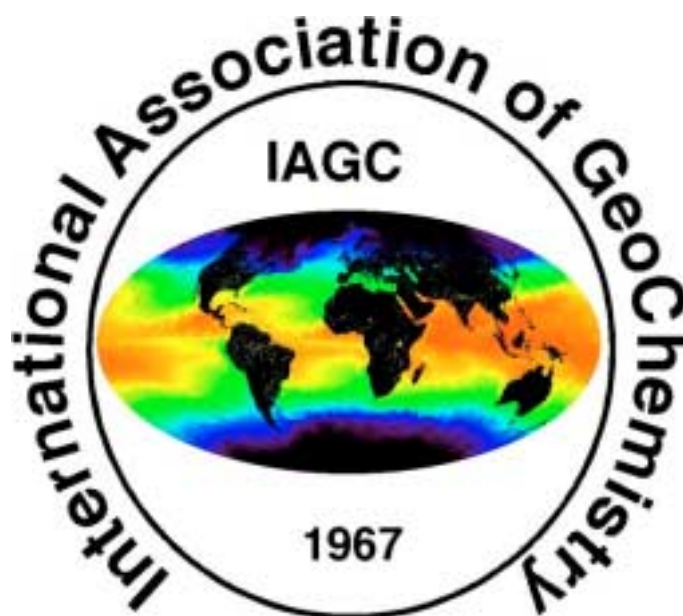
Newsletter

of the

International Association of GeoChemistry

Number 48, April 2008

Mel Gascoyne, Newsletter Editor



NEWS FROM THE ASSOCIATION

- **Student Research Grants – winners announced!**
 - **Status of *Applied Geochemistry***
 - **IAGC Sessions at the IGC in 2008**
 - ***Elements* on line!**

ASSOCIATION NEWS

President's Message

Dear IAGC Members:

Let me begin by offering my new year's greetings and wishing everyone a prosperous and professionally rewarding year in 2008.

I have the pleasure of making two announcements, both of which are positive news for IAGC.

First, IAGC Treasurer W. Berry Lyons, Director of the Byrd Polar Research Center at Ohio State University and the lead principal investigator for the McMurdo Long-Term Ecological Research Project in Antarctica, recently was honored by New York-based Explorers Club as one of eight recipients of a prestigious Lowell Thomas Award for 2007. Berry was cited for his studies on the geochemistry of global climate change. Please join me in congratulating Berry on this well-deserved honor. Berry can be contacted by e-mail at: lyons142@osu.edu.

Second, the petition campaign to form a new IAGC Working Group on 'Urban Geochemistry' was successful. Now the proposal will go to the IAGC Board for a vote, where endorsement is expected. So, barring any unforeseen circumstances this new Working Group should become reality within a month or so.

2008 will be another very busy year for IAGC. This is a year that new Council Members are elected, . IAGC will have 4 Council vacancies to fill for 2008. This is challenging work for the Nominations Committee, but we are all sure that Jan Kramers and his colleagues will do an excellent job in bring gender and geographic diversity to the Council, which will be officially inducted during the 4-yearly Council meeting that will be held between 10-14

August in Oslo, Norway during the 33rd International Geological Congress (IGC 33). The meetings are:

1. IAGC will have a strong presence at IGC 33 next August. As an IAGC contribution of the "International Year of Planet Earth" and the ICG33 official technical program, Andrew Parker is leading the organization of a special symposium on "Contributions of Geochemistry to the Study of the Planet" that will consist of two parts: (i) historical reviews of geochemistry and its various traditional applications and (ii) a series of presentations on future expected developments in geochemistry and its potential to solve environmental problems in the 21st century. Plans are underway to have the proceedings of these sessions published in book form by Elsevier. This symposium will include both invited and volunteered contributions.

Also, IAGC will sponsor 4 thematic sessions at IGC 33 on Geochemical Mapping from the Global to Local Scale: 1)The Arthur Darnley Symposium, 2) Importance of Landscape Age, Tectonic Setting, and Lithology on Chemical Weathering Rates and River Geochemistry, 3) Frontiers of Stable Isotope Analysis for Environmental Science and Biogeochemistry, and 4) Geochemical Proxies of Paleoenvironmental Change in Terrestrial Environments. IAGC members are encouraged to contribute papers to these sessions.

2. The 8th Conference on Geochemistry of the Earth's Surface will be held in London, UK from 17-22 August 2008, sponsored by the IAGC Working Group on Geochemistry of the Earth's Surface, the UK Mineralogical Society and the British Natural History Museum. Sessions will cover the topics of: Mineral Weathering, Synchrotrons and Environmental Science, Global Geochemical Cycles and Climate Change, Contaminated Environments, Toxicology, Human Health and Biomineralization.

Registration and abstract submission instructions are given on the web site: <http://www.minersoc.org/GES8.htm>. Deadline

for early registration was 15th March 2008. Following review by a scientific panel appointed by the conference organizers, the abstracts will be published in *Mineralogical Magazine*.

3. IAGC will join with the Association of Applied Geochemistry in organizing and conducting the 2009 International Applied Geochemistry Symposium, which will be held in Fredricton, New Brunswick, Canada on 1-4 June 2009. It is also anticipated that an Ingerson International Lecture and the IAGC awards for 2009 will be presented at this meeting. If this initiative turns out to be successful in the opinion of both societies, then the stage will be set for a full IAGC-AAG partnership in future International Applied Geochemistry Symposia.

A call for proposals for Theme Sessions, Special Sessions, and Workshops has just been issued. Proposals should include a detailed title, 3 co-chairs (with representation from academia, government, and industry), and a 1 paragraph description of the session proposed. Please send your submissions to Shaun Frape (shaun@sciborg.uwaterloo.ca), Chair of the IAGC Plans and Program Committee by 15 February, 2009.

Russ Harmon
Interim President, IAGC

Student Research Grant Awards

To recognize and promote the work of young scientists in the field of geochemistry, the IAGC announced a Student Research Grant program in 2007. The objective of this initiative is to assist PhD students in geochemistry with undertaking and acquiring geochemical analyses in support of the student's dissertation research.

An IAGC Student Research Grant award consists of a grant of up to \$3000 (US) to support the analytical needs of a geochemistry PhD student, a certificate, and an article profiling the recipient in the IAGC

Newsletter and posted on the IAGC website. Each recipient of an IAGC Student Research Grant also will receive a complementary 1-year membership to IAGC for the year following receipt of the award, if not already a member.

The Student Research Grant Committee has completed its review of the 11 Student Research Grant applications received for 2008. The IAGC's Board of Executives is pleased to announce that four scientists will receive support in 2008:



Bryn Kimball (in photo) – An award of \$3000 for "Copper Isotope Fractionation During Sulfide Mineral Dissolution" Penn State, Supervisor: Prof. S. Brantley.

Ibrahim Barrie – An award of \$1000 for "Tectono-thermal Evolution of the Sierra Leone Passive Continental Margin: Constraints from Thermochronology" Univ. Amsterdam, Supervisor: Prof. P. Andriessen.

Alejandro Villalobos-Aragón – An award of \$1000 for "Using Chromium Stable Isotopes to Monitor Reactive Transport of Chromium in Leon, Gto., Mexico" Univ. Texas at El Paso, Supervisor: Dr. A.S. Ellis.

Lindsay MacKenzie – An award of \$1000 for "Sedimentology and Geochemistry of the Chengjiang Formation, China" Univ. Of Montana, Supervisor: Dr. N. Hinman

We wish the grantees a joyful research project that will contribute significantly to the field of geochemistry!

REPORT TO IUGS FROM IAGC FOR 2007

The following is a report to the International Union of Geological Sciences (IUGS) for 2007.

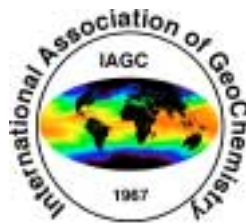
The IAGC (<http://www.iagc.ca>) is a pre-eminent international geochemical organisation whose prime objective is to foster co-operation in, and advancement of, geochemistry in its broadest sense. We sponsor meetings and publications organised by our Working Groups to study problems that benefit from international co-operation. The Association's journal, *Applied Geochemistry*, is issued 12 times a year and periodically publishes special issues on topics of current importance. In addition, a Newsletter is published twice a year and made available to its members (over 500) either electronically or by regular mail for those that prefer a printed copy.

The IAGC has been very active for many years with the involvement of Council Members and ordinary members in making a number of important changes to the IAGC and its method of operation.

The major achievements and plans for 2007/08 discussed during the IAGC Business Meetings, can be found the website.

IAGC-SPONSORED MEETINGS IN 2007/08 (A REMINDER)

- Goldschmidt 2007 meeting in Cologne, Germany
- the 12th Water/Rock Interaction Conference in Kunming, China.
- the 7th Applied Isotope Geochemistry Conference, Stellenbosch, South Africa.
- Goldschmidt 2008 meeting in Vancouver, Canada,
- IGC 33 in Oslo, Norway.



International Association of
GeoChemistry (IAGC)

at the

33rd International Geological Congress 2008

<http://www.33igc.org>

IAGC-related sessions:

CONTRIBUTION OF GEOCHEMISTRY TO
THE STUDY OF THE PLANET – A
TRIBUTE TO WALLACE BROECKER
(IAGC)

GCC-01 Contribution of geochemistry to the
study of the Planet: Historical perspectives
Andrew Parker, Andrew Herczeg, Russell
Harmon

GCC-02 Contribution of geochemistry to the
study of the Planet: Today and tomorrow
Andrew Parker, Andrew Herczeg, Russell
Harmon

ENVIRONMENTAL GEOCHEMISTRY

EGC-04 Geochemical mapping from the
global to the local scale: The Arthur Darnley
Symposium David B. Smith, Clemens
Reimann, Jane A. Plant, Reijo Salminen
(IUGS/IAGC Task Group on 'Global
Geochemical Baselines')

EGC-05 Importance of landscape age,
tectonic setting, and lithology on chemical
weathering rates and river geochemistry W.
Berry Lyons, Russell Harmon (IAGC)

EGC-06 Geochemical proxies of
palaeoenvironmental change in terrestrial
environments Ian Fairchild, Attila Demény
(IAGC)

EGC-07 Frontiers of stable isotope analysis
for environmental science and biogeochemistry
Martin Novak, Peter M. Wynn (IAGC)

Tax on your IAGC dues payment? – how to avoid it!

By now, many of you will have received an invoice for 2008 IAGC dues in which you may have been charged tax. One of our members has questioned this since, quite rightly, he does not pay tax for other memberships, why should he do so for IAGC membership? The reason given by Catherine Parlow of Elsevier is as follows:

“Because Elsevier mainly sells books and journals (which are taxable in most regions) all products are set up with those parameters in our database. We cannot change this for the few dues arrangements that Elsevier still handles. This is in no way a "handling charge.”

Anybody who was charged tax for dues-only can ignore the tax charge when submitting payment. If paying by credit card, please notate on the form not to charge tax and fax it to 407-363-9661 to my attention (i.e. Catherine Parlow) so I can ensure that tax is not charged during processing.”

If you have any questions, please feel free to contact Catherine as follows:

Catherine Parlow
Team Manager
Society Customer Service - Orlando
Elsevier
e-mail: Catherine.Parlow@elsevier.com

GSA FALL MEETING



Celebrating the International Year of Planet Earth

<http://www.geosociety.org/meetings/>

**5-9 October 2008 • Houston, Texas
George R. Brown Convention Center**

Note that IAGC is an Affiliated Society of GSA and, as a consequence, all IAGC members pay a reduced registration fee at the GSA Annual Meeting and this is the same as paid by GSA members.

Registration deadline: Early Bird, 14 July 2008, Standard, 15 July thru 2 September 2008

Abstract deadline: 3 June 2008

APPLIED GEOCHEMISTRY (IAGC'S JOURNAL)

Applied Geochemistry is in robust good health. In 2006 in volume 21, 145 full papers were published in 2300 pages. Two special issues one entitled "Frontiers in Analytical Geochemistry – An IGC Perspective" and the second "Mercury: Distribution, Transport, and Geochemical and Microbial Transformations from Natural and Anthropogenic Sources", were published. The second of these arose from the 2005 Goldschmidt meeting in Moscow Idaho. In addition two "half issue" specials were included, one on "Mineralogy and Geochemistry of Acid Mine Drainage and Metalliferous Minewastes" – again arising from the 2005 Goldschmidt meeting, and another on "Archaeological Geochemistry" arising from the EGU meeting in Vienna.

In volume 22 two special issues have been published. One was entitled "Halogens and Their Isotopes in Marine and Terrestrial Systems", yet another deriving from the 2005 Goldschmidt, and a second "Selected papers from the 7th International Conference was on Acid Deposition, Prague, Czech Republic, 12–17 June, 2005.

On 1st November 2006 the journal changed its submissions policy. From that date, authors who wished to do so could submit electronically, while paper copy submissions are still acceptable. In the 10 months prior to this date 208 manuscripts were received. In the period November 1 to 2006 - June 30 2007, 166 manuscripts have been submitted electronically and 71 as paper copies. While this appears to be a very healthy submission rate, it is perhaps pertinent to point out that of the 166 electronically submitted manuscripts, 67 have been rejected, most without review, 11 have been accepted, 22 are being revised and the rest are under consideration. Thus of the submissions with decisions 67% have been rejected! I feel that this is a rather worrying aspect of electronic submission – it seems to encourage authors

to submit manuscripts on a chance that they will be acceptable. Of the 71 paper copy submissions to date, only 8 were rejected.

Electronic submission has not been without its problems and several Associate Editors have expressed their concerns regarding its inflexibility. Elsevier are currently changing the system to make it somewhat easier to use.

Ron Fuge, Executive Editor

"ELEMENTS" ON LINE

With assistance from *Elements* personnel, we are now installing on-line access to past issues of *Elements* and ask you note the following so that your access is processed correctly:

Click on the following link:

<http://www.elementsmagazine.org/archives/index.lasso>,

Enter your e-mail address where shown.

Enter your password (which is now your membership number): These numbers were sent out to members by e-mail from me and/or Alex Speer of *Elements* during early to mid April.

Save this link and remember your membership number – we cannot allow personalised passwords because the password is also your membership number. Note that access to *Elements* past issues is only possible as long as you are a paid-up member of the IAGC. If you have not paid up the dues (\$20) for 2008, go to the IAGC website www.iagc.ca and download a copy of the application form and fax or mail it in (do not e-mail it).

Send me an e-mail if you have any problems gascoyne@granite.mb.ca. As an affiliated society, IAGC contributes regularly to the publication of the magazine *Elements*. The magazine has gained an international reputation and IAGC has benefited significantly from the collaboration with participating societies. See the *Elements* website (www.elementsmagazine.org)

WORKING GROUPS

IAGC has 7 working groups, all of them are very active and organize well-recognized meetings.

- Water/Rock Interactions
- Thermodynamics of Natural Processes
- Geochemistry of the Earth's Surface
- Geochemistry and Health
- Applied Isotope Geochemistry
- Global Geochemical Baselines
- Urban Geochemistry

The Working Groups provide annual reports and the major achievements are published in IAGC's Newsletter and the Elements Magazine.

The Urban Geochemistry Working Group was initiated in 2007 and is in a stage of establishment and development. More details will be given on the IAGC website shortly.

IAGC Membership renewals

Invoices for IAGC dues and Applied Geochemistry subscriptions from Elsevier Journals were late in arriving this year. They and the second reminder should have arrived by now. Please do not send in your payments to the IAGC Business Office unless you have not received an invoice.

Applications and payment from new members will be processed as usual by the IAGC Business Office. These new members should have started receiving Elements and/or issues of *Applied Geochemistry* in February (issues are bimonthly). Please contact the Business Office if you have not received at least issue #1 (for February).

START-UP MEETING FOR NEW EUROPEAN-SCALE GEOCHEMICAL MAPPING PROJECT

The EuroGeoSurveys Geochemistry working group had a meeting in Berlin from March 5-7, 2008. At this meeting the GEMAS-Project (Geochemical Mapping of Agricultural Land and Grazing Land Soils of Europe) was officially started. 34 European Geological Survey Organisations have agreed to collect samples of arable land (ploughing layer, 0-20 cm) and of land under permanent grass cover (0-10 cm) at a density of 1 site per 2500 km² in their territory. The total area covered will be about 5.8 Million km².

The project is a continuation and extension of the Baltic Soil Survey (Reimann et al., 2003) which resulted in a very successful geochemical atlas, one of the few geochemical atlases that is sold out. The meeting in Berlin was used for field training for the new project. More than 40 participants went together into the field to harmonize sampling methods. The project is led by Clemens Reimann, IAGC Vice President. Clemens managed to obtain substantial industry funding for this project. The European metals industry, represented by EuroMetaux in Brussels, will back this project with 4 x 130.000 Euros, over a period of four years.

Clemens Reimann, Vice-President, WG Chairman

Reference

Reimann, C., Siewers, U., Tarvainen, T., Bityukova, L., Eriksson, J., Gilucis, A., Gregorauskiene, V., Lukashev, V.K., Matinian, N.N., & Pasieczna, A. 2003. *Agricultural Soils in Northern Europe: A Geochemical Atlas*. Geologisches Jahrbuch, Sonderhefte, Reihe D, Heft SD 5, Schweizerbart'sche Verlagsbuchhandlung, Stuttgart, ISBN: 3-510-95906-X.

Report on the 7th Int. Symp. on Applied Isotope Geochemistry

The Applied Isotope Geochemistry Working Group held its 7th International Symposium in Stellenbosch South Africa from the 10th to the 14th of September 2007. The event was attended by over 110 scientists from 26 different countries covering all the continents (except Antarctica!). Four days of talks were held in the university's Music Conservatory with a mid-conference field trip around the Cape Peninsula, including a visit to Cape Point and the Cape of Good Hope, held on Wednesday.

The talks presented at the conference covered a diverse range of applications, including Palaeoenvironments, Organic Biogeochemistry, Marine and Coastal Systems, Metamorphic and Igneous Systems, Natural and Anthropogenic Pollution, Tracers of Ecosystem Processes, Atmospheric Connections, Isotope Hydrogeochemistry and Novel Techniques, Approaches and Perspectives. Ten keynote presentations complemented these sessions.

After the conference, 38 delegates participated in a six-day field trip to Namibia. This whirlwind field trip looked at many different geological, biogeochemical and environmental problems across west central Namibia and as far north as the world famous Etosha National Park, and how isotopes had been used to contribute to our understanding of these various systems. Sites visited included the desert landscape outside of Swakopmund, Brandberg igneous complex, salt works on the west coast, hydrological environments of the Swakop and Omaruru Rivers, glacial deposits of the Otavi Group and the Tsumeb Pb-Cu-Zn mine. In addition, time was had spending one day game at Etosha National Park where the elephants, rhinoceros and lions stole the show.

Jodie Miller

University of Stellenbosch

IAGC AWARDS: NOMINATIONS WANTED

The IAGC bestows several awards on an annual or biannual basis. The **Vernadsky Medal** is awarded to a single person for a distinguished record of scientific accomplishment in geochemistry over the course of a career. The **Ebelmen award** can be shared between two candidates. It shall be given biennially to a geochemist of particular merit and outstanding promise who is less than 35 years old at the time of nomination.

IAGC Certificates of Recognition are awarded annually (i) to any scientist for a particular scientific accomplishment in a particular area of geochemistry, (ii) to other geochemists for excellence in teaching or public service, and (iii) to an IAGC member for meritorious service to the Association or the international geochemistry community. The honorary title of **IAGC Fellow** is a special tribute bestowed biennially on outstanding geochemists who have made significant contributions to the field or sub-field of geochemistry over the course of some extended period of years.

The IAGC awards committee is dependent on good recommendations for all these prizes. Time and again the committee faces the situation that there are insufficient nominations for one or several of these awards. This does certainly not reflect that there are no deserving scientists, it rather reflects that the IAGC members are not sufficiently using their ability to nominate good candidates. A cry from the heart of the nominations committee: **please remember the existence of these awards and take the little amount of time it takes to write a recommendation, you can do this any time a year, whenever a name comes to your mind.**

All nominations should be sent to by the IAGC secretary Attila Demeny
(demeny@geochem.hu).

IAGC/AAG JOINT MEETING

Following the approval by both the IAGC Council and the Steering Committee of the Association of Applied Geochemists, IAGC and AAG will join together to organize and conduct the 2009 International Applied Geochemistry Symposium, which will be held in Fredericton, New Brunswick, Canada, from 1-4 June 2009. It is also anticipated that an Ingerson International Lecture and the IAGC awards for 2009 will be presented at this meeting.

The organizers cordially invite the IAGC membership to propose Theme Sessions, Special Sessions, and Workshops for the meeting. Proposals should contain a detailed title, 3 co-chairs (with representation from academy, government and industry -- if possible) and a 1 paragraph description of the session proposed. The deadline for the receipt of proposals was March 15th, 2008.

For more information contact Prof. David Lentz - Chair IAGS'09, Dept. of Geology, University of New Brunswick, 2 Bailey Drive, Box 4400, Fredericton, NB, E3B 5A3 CANADA, Tel: (506) 447-3190, FAX: (506) 453-5055, email: dlentz@unb.ca.

We are looking forward to your proposals, suggestions, or comments.

Attila Demeny
IAGC Secretary

Goldschmidt 2008: "from Sea to Sky"

July 13 - 18 in Vancouver, Canada

The Goldschmidt Conference is the premier annual meeting in geochemistry. Vancouver is repeatedly voted to be one of the best cities on the planet. Goldschmidt in Vancouver should be a meeting not to be missed!

The University of British Columbia campus is the perfect setting for a large, prestigious meeting like the Goldschmidt Conference. The natural beauty of the campus, coupled with the spectacular views of the Pacific over the Burrard Inlet, the north-shore mountains and the downtown core of Vancouver inspire thousands of visitors each summer. Accommodation is available to suit every budget, either on campus UBC or downtown in Vancouver; simply visit the [accommodation pages](#).

All those who attended the 2005, 2006 or 2007 Goldschmidt Conferences will automatically receive the circulars for Goldschmidt 2008. However, if you did not attend these meetings you can add your address to the [mailing list](#) to make sure you receive all the conference information as soon as it becomes available.

Mark the dates in your diary now: July 13 - 18, 2008. We look forward to seeing you in Vancouver!

Applied Geochemistry – Are you missing any issues?

The IAGC Business Office is willing to mail out missing issues of AG, volumes 17, 18, 19, 20, 21 & 23 to fill in the gaps of members' collections, free of charge! Let us know if you are missing an issue.

How to Contact Us:

To join or renew your IAGC membership, subscribe to or track down errant issues of *Applied Geochemistry* or *Elements*, or to send in comments, etc., contact: IAGC Business Office, Box 501, Pinawa, Manitoba R0E 1L0, Canada. Or use the membership form on our web site at www.iagc.ca

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