



# Newsletter

of the

# International Association of GeoChemistry

Number 60, May 2014

## In This Issue

From the President.....	1
2015 IAGC Award Nominations.....	2
Membership Demographics.....	2
2014 IAGC Awards.....	3
Elsevier PhD Student Research Grants...5	
Upcoming Council Vacancies.....	7
GSA Annual Meeting.....	7
Applied Geochemistry News.....	8
Charitable Giving.....	10
2014 Meetings.....	11
GES-10.....	11
BIOGEOMON 2014.....	11
Urban Geochemistry.....	12
MinWat2014 .....	12
Goldschmidt 2014.....	13
ICHMET.....	14
IAGC Governance.....	15

Chris Gardner, Newsletter Editor  
IAGeoChemistry@gmail.com

## From the President

As we enter the northern hemisphere summer field season, a lot of us will be away from our offices, and things will be piling up on our desks. There are a few important IAGC items I'd like you to keep in mind this summer. First are the upcoming working Group Meetings, highlighted in this and previous newsletters. Second is the upcoming nominating season, where we will be seeking nominations for IAGC officers, Council members, and IAGC awards. The next group of IAGC officers and Council members will lead us into our 50<sup>th</sup> Anniversary, and we hope to be able to involve as many of our members as possible in our Working Groups and other activities.

As you can see in this edition of the Newsletter, we have a marvelous group of IAGC award winners for 2014, and I offer my heartfelt congratulations to all of our distinguished winners! Some of our awards are given annually, while others less frequently. On the next page you will find a description of awards to be presented this year, and our website has lists of past winners. Please give these awards your consideration, and nominate deserving colleagues.

I would especially like to highlight a new award that honors our friend Yousif Kharaka. For the first time, we will be giving up to two Kharaka Awards to scientists in developing countries, and I hope you will consider making nominations.

Rich Wanty, President  
rwanty@usgs.gov

## Association News

### 2015 IAGC Awards

The IAGC is accepting award nominations for 2015 between June 15 and November 15.

For the first time this year, we are very happy to accept nominations for the **Kharaka Award**. Beginning in 2015, the IAGC Kharaka Award is bestowed annually to deserving scientists (which may include senior graduate students) from **developing countries**. For 2015 we will award up to two Kharaka Awards. The award consists of a framed certificate plus an IAGC membership and Applied Geochemistry subscription for a term of three years, with award recipients profiled in the IAGC Newsletter and on the Association website. This award was made possible by IAGC member Yousif Kharaka and the many generous donations from our IAGC member community. The entire list of awards to be bestowed this year include:

**The Kharaka Award** - bestowed to two deserving scientists (which may include senior graduate students) from developing countries. The award consists of a framed certificate plus an IAGC membership and Applied Geochemistry subscription for a term of three years.

[http://www.iagc-society.org/kharaka\\_award.html](http://www.iagc-society.org/kharaka_award.html)

**The Distinguished Service Award** - bestowed on a deserving candidate to recognize outstanding service by an IAGC member to the Association or to the geochemical community that greatly exceeds the normal expectations of voluntary service:

[http://www.iagc-society.org/distinguished\\_service.html](http://www.iagc-society.org/distinguished_service.html)

**IAGC Fellow** - bestowed to a scientist who has made significant contributions to the field of

geochemistry:

[http://www.iagc-society.org/iagc\\_fellows.html](http://www.iagc-society.org/iagc_fellows.html)

**Certificate of Recognition** - awarded to IAGC Members for outstanding scientific accomplishment in a particular area of geochemistry, for excellence in teaching or public service, or for meritorious service to the Association or the international geochemistry community:

[http://www.iagc-society.org/certificate\\_recognition.html](http://www.iagc-society.org/certificate_recognition.html)

### Renew Your Membership for 2015!

It's never too early to renew your IAGC membership for the next calendar year. Our annual membership fee is STILL only \$25 and includes a hard copy subscription to *Elements* as well as online access. Membership also rewards you with lower cost registration rates at IAGC-sponsored working group conferences

[Renew with a credit card](#)

[Renew with a check](#)

[Check your membership status](#)

### Membership Demographics

As of the time of this writing, we have 620 IAGC members in 53 countries. This number includes 130 new members from AIG-10 meeting in Budapest, Hungary and 179 new members from the WRI-14 meeting in Avignon, France who joined as part of their registration.

## 2014 IAGC Awards

This International Association of GeoChemistry is pleased to announce our Society Awards for 2014. Congratulations to all the recipients, and thank you for your service to the IAGC and the geochemical community!

### Vernadsky Medal

The Vernadsky Medal is awarded biennially to honor a distinguished record of scientific accomplishment in geochemistry over the course of a career.



#### **Ian Hutcheon, University of Calgary, Canada**

Professor Ian Hutcheon is professor emeritus at the University of Calgary, Canada. Ian graduated with a PhD from Carleton University in 1977 following an MS

from Carleton in 1972 and a BS from the University of British Columbia in 1969. He subsequently worked at the Geological Survey of Canada before commencing at the University of Calgary in 1978. Ian has contributed much world-class and internationally-recognized research in the broad fields of petrology and geochemistry, including significant contributions to processes in high-grade metamorphic terrains, water-rock-gas interactions in sedimentary basins, diagenesis, and CO<sub>2</sub> sequestration. This work has been founded on a base of careful and meticulous observations combined with the rigorous application of fundamental thermodynamics and kinetic principles. Ian has also served on committees for many national and international scientific, government, and industrial bodies as well as delivering well-received short courses

across the globe. Together with the supervision of PhD and MS students and his extensive undergraduate teaching, this has helped inform and train many geoscientists. For this lifetime of application and achievement, Ian is a very worthy recipient of the Vernadsky medal for 2014.

### Distinguished Service Award

The Distinguished Service Award recognizes outstanding service by an IAGC member to the Association or to the geochemical community that greatly exceeds the normal expectations of voluntary service.



#### **Russell Harmon, US Army Corps of Engineers**

Dr Russell Harmon received a BA from the University of Texas, an MS from the Pennsylvania State University, and a PhD from McMaster University. Russ is currently the Director of

the International Research Office of the US Army Engineer Research and Development Center, where he conducts international science and technology engagement. Previously, Russ was a Program Manager at the RDECOM-ARL US Army Research Office, where he managed the extramural basic research program in terrestrial sciences. Russ is an internationally renowned isotope geochemist who has worked at NASA, the Scottish Universities Research and Reactor Centre (UK), and the Natural Environment Research Council Isotope Geosciences Laboratory (UK). Russ has also held faculty positions at Michigan State University and Southern Methodist University and is an adjunct faculty member at North Carolina State University. He has edited or co-edited more than 30 books and journal special issues, authored or co-authored

more than 220 peer-reviewed publications and has worked tirelessly for the IAGC over many years. He first became a member of the IAGC in 1983, and was a council member from 1992 until 2004 when he was elected Vice President. He served as President from 2007- 2010 and Past-President from 2010-2012. He has helped the organization in many other ways as well, including as the Chair of the Publications Committee, and was instrumental in helping to negotiate IAGC-Elsevier contracts over the past decade. He helped to modernize the IAGC through leading the revision of our statutes and the development of an official operations manual, and he is still serving the society currently as Chair of the Strategic Planning Committee. For this lifetime of achievement and dedication to the IAGC, Russell Harmon is awarded the IAGC Distinguished Service Award.

### Ebelmen Award

The IAGC Ebelmen Award is given biennially to a geochemist of particular merit and outstanding promise less than 35 years old at the time of nomination.



**Sophie Opfergelt,  
Université Catholique  
de Louvain, Belgium**

Dr Sophie Opfergelt is currently a research scientist at the Université catholique de Louvain, Belgium. Sophie completed her PhD at the Université Catholique de Louvain in 2008 and was also a postdoctoral researcher at the University of Oxford, UK. Sophie's research interests involve the application of novel stable isotope systems, such as silicon isotopes, to the understanding of biogeochemical processes, particularly the interactions between rocks, soils, and plants during weathering. She has refined techniques for the use of silicon isotopes to distinguish biological and inorganic processes and the role of

plants in the Si cycle. Sophie is at the forefront of this research and has become a globally-recognized expert in this field. For undertaking this original and challenging research, Sophie is awarded the Ebelmen Award for 2014.

### IAGC Fellows

The honorary title of IAGC Fellow is bestowed annually to scientists who have made significant contributions to the field of geochemistry.



**Karen Johannesson,  
Tulane University,  
USA**

Professor Karen Johannesson is currently a Professor at Tulane University, USA. Karen graduated with a BS from the University of New Hampshire in 1985 before undertaking an MS from Boston College in 1988 and a PhD from the University of Nevada in 1993. Karen is a recognized international authority in the behavior of the rare earth elements in the hydrosphere. She was one of the first to estimate rare earth element speciation in terrestrial waters and illustrated the importance of complexation and pH as controls on their behavior. Her more recent work has included the investigation of the behavior of oxyanion forming trace metals such as arsenic, selenium, and tungsten in groundwater systems and how their concentrations and speciation change along a flow path due to pH and redox changes. She has combined field, analytical, and experimental approaches in order to develop geochemical models that have improved the understanding of the biogeochemical process controlling trace element speciation and elemental cycles in the near-surface environment. Karen is also actively involved in graduate student supervision and undergraduate teaching. For carrying out this important research in the aquatic

biogeochemistry of trace elements over many years, Karen is named an IAGC Fellow for 2014.



**Jérôme Gaillardet, Institut de Physique du Globe de Paris**

Jérôme Gaillardet is a Professor at the Institut de Physique du Globe de Paris. Jérôme completed his PhD at the Université Paris 7 in 1996.

He was also a researcher at University Paris-Diderot between 1996 and 2001, before joining the Institut de Physique du Globe de Paris in 2001. Jérôme is internationally recognized for his pioneering research in river geochemistry, in particular the innovative use of elemental and isotope geochemistry to estimate global weathering rates and the role of continental weathering in CO<sub>2</sub> sequestration. He is currently involved in international research collaborations via the Critical Zone Exploration Network and also in the application of novel isotopic tracers (such as B, Li, and Zn) in waters to understand both natural and polluted systems. Jérôme also has served on a range of national and international committees involved with both research and teaching. For this important and novel research, Jérôme is named an IAGC Fellow for 2014.

### Certificates of Recognition

IAGC Certificates of Recognition are awarded to IAGC Members for outstanding scientific accomplishment in a particular area of geochemistry, for excellence in teaching or public service, or for meritorious service to the Association or the international geochemistry community.

**Prof. Pierpaolo Zuddas**, of the Institute of Earth Sciences, Université Pierre et Marie Curie, Paris, France, is receiving the IAGC Certificate of Recognition for his leadership role in the 14th International Symposium on Water-Rock

Interaction (WRI-14). This highly successful IAGC Working Group meeting was held in Avignon, France in June 2013. Conference proceedings were published in the open-access Elsevier journal *Procedia Earth and Planetary Science* ensuring wide readership.

**Prof. Halldór Ármannsson**, of the Division of Geology & Environmental Sciences, Iceland GeoSurvey, Reykjavik, Iceland, is receiving the IAGC Certificate of Recognition for his involvement as a member of the WRI Working Group leadership over many years and the guidance he provided to the organizers of WRI-14 in Avignon.

**Dr. Attila Demény & Dr. István Fórtz** of the Institute of Geological & Geochemical Research, Hungarian Academy of Sciences, Budapest, Hungary, are receiving the IAGC Certificate of Recognition for their leadership roles in organizing and running the 10th International Symposium on Applied Isotope Geochemistry (AIG-10). This very successful IAGC Working Group meeting was held in Budapest, Hungary in September 2013. Proceedings of extended abstracts were published for the first time as a special issue of the *Central European Journal of Geosciences*.

### Elsevier PhD Student Research Grant Winners

The IAGC is happy to announce the recipients of the 2014 Student Research Grants, sponsored by Elsevier and the IAGC. Every year, we have many strong research proposals from students from around the world, and this year we had a record 27. Thanks to Vice-President Ian Cartwright and the Awards Committee, the proposals were ranked and four were chosen for funding. This is a particularly difficult decision to make, but IAGC is happy to help these four excellent students, and

grateful to Elsevier for providing much of the funding used to make the awards. Congratulations to our grantees! We wish all the students the best of luck as they complete their studies, and look forward to welcoming all of you into the research community.

**Lee Corbett, University of Vermont, USA**  
– **“High-Latitude Landscape Evolution and Sediment Transport”**



Lee earned her B.A. in Geology from Middlebury College in 2007 and her M.S. in Geology from University of Vermont in 2011.

She is currently three years into her PhD in the Rubenstein School of Environment and Natural Resources at University of Vermont. Most of Lee's work focuses on the long-term history of the Greenland Ice Sheet and the subglacial evolution of landscapes. She is particularly interested in “ghost glaciers,” which are frozen to the bed, incapable of performing erosion, and thus able to preserve ancient landscapes. To study ice sheet history and subglacial erosion, she analyzes concentrations of cosmogenic beryllium-10 and aluminum-26 in glacially-deposited boulders, ice-bound cobbles, marine sediments, and dirty basal ice.



**Charlotte Riggs, University of Minnesota, USA**  
– **“Soil organic matter cycling under anthropogenic global change”**

Charlotte Riggs received her bachelor's degree in Biology from Wesleyan University in 2008. She is currently a Ph.D. candidate in Ecosystem Ecology at the University of Minnesota, Twin Cities, advised by Dr. Sarah Hobbie. Charlotte studies how ecosystems respond to anthropogenic global changes, including elevated carbon dioxide and nutrient

deposition. She is particularly interested in soil biogeochemical processes, specifically, carbon and nitrogen cycling in soil. Her Ph.D. dissertation research explores the biological, physical, and chemical processes controlling the cycling of soil organic matter under global change. Charlotte also enjoys engaging others in the practice of science through teaching and training undergraduates.



**Benjamin Butler, Bangor University, UK**  
– **“Mineral dynamics in Sea Ice”**

Benjamin graduated from Bangor University, Wales, in 2011 with a BSc in Ocean Science. After

completion of an MSc in Environmental Chemistry in 2012, he embarked on a career in Marine Geochemistry via a PhD in the School of Ocean Sciences at Bangor University that investigates the mineral dynamics in sea ice. Benjamin's research involves working with highly concentrated seawater brines at sub-zero temperatures. Aside from the brines, his research centers around the behavior of cryohydrate minerals in the sea ice environment. To develop our understanding of the dynamics of these minerals, the brine composition analysis is coupled with high resolution powder X-ray diffraction studies at the UK's national synchrotron facility, Diamond Light Source. The project ultimately aims to investigate the elusive dynamics of sea ice minerals and how their behavior relates to the physical properties of sea ice in the environment.



**Li Yang, Durham University, UK – “Ultra-precise Geochronology in Ore Forming Processes”**

LI received his bachelor’s degree in Economic Geology at China University of Geosciences, Wuhan, and is currently a PhD student at Durham University, UK. His PhD research focuses on the development and application of ultraprecise geochronology for ore-forming processes with an emphasis on the time gap between magmatism and mineralization, duration of mineralization, as well as fluid evolution associated with Porphyry Copper Systems (PCS). To address these questions, China’s largest porphyry Cu-Mo system, Qulong in Tibet, has been selected to carry out detailed fieldwork and novel geochemistry analysis. The absolute timeframe of this PCS will be constructed with ultraprecise ID-TIMS U-Pb zircon and N-TIMS Re-Os molybdenite geochronology, with the origin of the metals and P-T-X paths of metalliferous fluids being evaluated using Os and O isotopes, respectively. This research will permit an improved understanding of mechanisms of metal origin and enrichment in QuLong deposit and possibly insights to all PCS.

**Upcoming Council Vacancies**

At the end of 2014, the terms of IAGC Council members Martine Savard, Philippe Negrel, Janet Herman, Teodóra Szócs, and Thomas Kretzschmar will come to an end, and we’re grateful for their service to the Society. There is also an additional vacancy on council due to Ian Cartwright’s transition to Vice-President. Because we have six vacancies to fill, the IAGC Governance has decided to solicit Council nominations from all of our members. If you would like to nominate a colleague,

please email the IAGC Business Office Manager, Chris Gardner, at [IAGeoChemistry@gmail.com](mailto:IAGeoChemistry@gmail.com) with your nomination.

**IAGC Co-Sponsored Sessions at the GSA Annual Meeting**

The IAGC is co-sponsoring three sessions at the GSA Annual Meeting, 19-22 October, 2014 in Vancouver, BC, Canada.

**T124. Sources, Transport, Fate, and Toxicology of Trace Elements and Organics in the Environment**

*Co-chairs: David T. Long, LeeAnn Munk, W. Berry Lyons*

Basic and applied research on trace elements and organics in the environment are encouraged. Topics include those that relate to understanding and modeling sources, transport, and fate; human and ecosystem health; and environmental assessment and remediation.

**T127. Urban Geochemistry**

*Co-chairs: W. Berry Lyons, David T. Long*

This session encourages presentations that qualify and quantify the geochemical and biogeochemical impacts (temporal and spatial) of urbanization and urban activities on soil, water, and air resources as well as on human and ecosystem health.

## **T197. Deep-Time Paleosols and Sediments from the Boundary Events (Flood Basalt Eruptions and Bolide Impacts): Their Applications and Limitations as Geological Proxies in Understanding the Paleo-Environmental Conditions during the Mass Extinctions**

*Co-chairs: M.R.G. Sayyed, Kunio Kaiho*

A variety of approaches to obtain paleo-environmental information from boundary sediments and paleosols are welcome. This session encourages future work in reconstructing climatic extremes during the periods of mass extinctions through critical and constructive discussions.

## **Applied Geochemistry News from Editor Michael Kersten**

As Editor-in-Chief, I'd like to update you with recent developments in our journal *Applied Geochemistry* (AG). With the start of my tenure in 2013 one of our goals was to bring on board 5 review articles and 2 special issues per year. In the last spring newsletter, there was a call for review papers and SI proposals which has turned out to be quite successful. When looking at the papers and SI's published or in the pipeline, we may find this target will easily be topped in 2014:

### **Invited review-type articles published or accepted end of March 2014**

[Reactivity of the calcite-water-interface, from molecular scale processes to geochemical engineering](#)  
Frank Heberling et al., In Press, Accepted Manuscript, Available online 26 March 2014.

[CO<sub>2</sub> intrusion in freshwater aquifers: Review of geochemical tracers and monitoring tools, classical](#)

[uses and innovative approaches](#)

Pauline Humez et al., In Press, Corrected Proof, Available online 18 February 2014.

[Variability of crystal surface reactivity: What do we know?](#)

Cornelius Fischer et al., *AG* Volume 43, April 2014, Pages 132-157.

[A review of high arsenic groundwater in Mainland and Taiwan, China: Distribution, characteristics and geochemical processes](#)

Huaming Guo et al., *AG* Volume 41, February 2014, Pages 196-217.

[Review of arsenic contamination, exposure through water and food and low cost mitigation options for rural areas](#)

Anitha K. Sharma et al., *AG* Volume 41, February 2014, Pages 11-33.

### **Special Issues recently proposed and to be published in 2014/15**

“Hazardous Waste in the geosphere: Geochemistry for risk assessment” (Managing Guest Editor: Lara Duro, Amphos 21, Spain)

“Dissolved gases in groundwater and groundwater dating methods: how useful for hydrogeological modeling?” (Managing Guest Editor: Luc Aquilina, Rennes University, France)

“Environmental geochemistry of modern mining” (Managing Guest Editor: Robert Seal, US Geological Survey)

“Celebrating the contributions of Kirk Nordstrom: Geochemistry of mine drainage, natural background, arsenic, and geothermal systems” (Managing Guest Editor: Kate Campbell, US Geological Survey)

“Geochemical speciation codes and databases: Present status and future needs” (Managing Guest Editor: Dmitrii Kulik, Paul-Scherrer-Institute, Switzerland)

“Hydrochemistry and biogeochemistry of tropical mountainous rivers and estuaries”(Managing Guest Editor: Steven Goldsmith, Villanova University, USA)

All of these are quite attractive themes and may well serve to increasing the Impact Factor of the journal.

An ever debated issue is how to assure that important data are not lost, without overloading the papers and supplementary material files with extended data tables. To my taste, the best solution is to create interactive links to the data via the ScienceDirect webpage of a paper.

Elsevier encourages authors to deposit raw experimental data sets underpinning their research publication in data repositories, and to enable interlinking of articles and data. To facilitate geographically distributed data, Elsevier has introduced recently a tool to make maps locating the extended databases more interactive, which is KML (Keyhole Markup Language) file functionality for interactive maps. You can enrich your online version of the article by providing KML files which will be visualized using Google Earth maps.

The KML files can be uploaded directly in our EES online submission system. KML is an XML schema for expressing geographic annotation and visualization within web-based Earth browsers. Elsevier will generate Google maps from the submitted KML files and include these in the article when published online. Submitted KML files will also be available for downloading from your online article on ScienceDirect. For more information how it works see [http://www.elsevier.com/wps/find/intro.cws\\_home/oglemaps](http://www.elsevier.com/wps/find/intro.cws_home/oglemaps).

This tool is available via web at no cost except of additional typing work to be done. The data-linking application may well ease validation/reusing of such georeferenced data. For this we recommend that the data should concomitantly be deposited in the international online data library PANGAEA (<http://www.pangaea.de>) for free access. The data are quality controlled and archived by an editor in standard machine-readable formats and are available via Open Access.

After processing, the author receives an identifier (DOI) linking to the supplements for checking. As your data sets will be citable you might want to refer to them in your article. In any case, data supplements and the article will be automatically linked. Similarly, the English science foundation NERC recently set up the ability to issue Digital Object Identifiers (DOIs; <http://www.nerc.ac.uk/research/sites/data/doi/>) to datasets held in its Environmental Data Centers. A DOI is a character string (a "digital identifier") used to uniquely identify and provide a permanent link to a digital object, such as a data set or journal paper.

Assigning DOIs to datasets means that you as an author are able to cite data alongside traditional journal papers. This way, you can easily further publicize your data in a way that ensures your efforts in creating it are acknowledged, without a blow-up of your article and annexes. Electronic archiving of supplementary data enables readers to replicate, verify, and build upon the conclusions published in your paper.

To conclude, I would like to thank everyone involved for their tremendous work for our journal. It is an extremely valuable service to the IAGC in particular, and the academic community as a whole. The reputation and standing of the journal are at a very good level. The about 50 Associate Editors really do a good job. I would like in particular to thank Paul Cumine and his

publishing team at Elsevier for their wonderful hard work.

Our aim is to join the top 50% fastest journals, and I am confident that, working together, this can well be achieved!

With very best wishes,  
-Michael Kersten and the AG Editorial team

## Charitable Giving

### Ignacio Torres

Thank you to all IAGC members who donated money in honor of our friend and colleague Ignacio Torres, who passed away unexpectedly on January 15, 2012. Thanks to your generosity, we have collected \$995 for his wife Gaby and two children.



### Donations to the IAGC

Members can make a charitable gift to IAGC, either for general fund support or for special initiatives during online membership renewal. You may donate at any time online, either during your membership renewal or separately. Please donate right now through the IAGC web site:

[www.iagc-society.org/donate.html](http://www.iagc-society.org/donate.html)

*IAGC is a 501(c)3 non-profit organization and donations to the Society are tax-deductible in the U.S. (EIN: 48-0943367).*

The following members donated while renewing their membership dues for 2014. Thanks to you, we are now able to offer the Y. K. Kharaka Award to two deserving students from developing

countries for the first time this year. Thanks for your generosity and for supporting the IAGC and our mission!

Russ Harmon  
Katherine Walton-Day  
James Paces  
Yousif Kharaka  
Alan Shiller  
Ari Roisenberg  
Wyndham Edmunds  
Carleton Bern  
Dirk Kirste  
Janet Herman  
Cynthia Venn  
Miriam Kastner  
Suzanne Anderson  
Mark Engle  
Stuart Simmons  
Neil Rose  
Fred Mackenzie  
Michael Hochella  
Gwendolyn Macpherson  
David Smith  
Radomir Petrovich  
Patrice de Caritat  
Rich Wanty  
Iñaki Vadillo Pérez  
Rona Donahoe  
Rona McGill

## 2014 Meetings

### 10<sup>th</sup> International Symposium- Geochemistry of the Earth's surface (GES-10)

**Between Rocks and Sky: Earth's Critical  
Zone.**

August 18 - 22, 2014

Collège des Bernardins - Paris

**Registration Deadline : July 1, 2014**

[www.ipgp.fr/GES10](http://www.ipgp.fr/GES10)

The next Geochemistry of the Earth's Surface meeting (GES-10) will be held in the Collège de Bernardins in Paris, France, between August 18th and 22nd, 2014. GES-10 will emphasize Critical Zone cutting edge research at all scales, from the elementary processes to global biogeochemical cycles.

The GES meeting is a small-size, friendly meeting (< 200 attendees) featuring a limited number of invited oral presentations and extensive poster sessions. Invited oral presentations will be organized in the morning and poster session will cover all afternoons. A half-day is scheduled to explore the Quartier Latin, in the footsteps of Vernadsky and Marie Curie. Social events will include wine tasting (the blood of the Critical Zone) and a relaxing, convivial banquet. Prior to the meeting, a field trip will be organized in France.

GES is a good format for students to meet established scientific leaders and participation of early career scientists is particularly encouraged. Partial support will be available for students to attend and present their work.

Contact and information:

Jérôme Gaillardet, [gaillardet@ipgp.fr](mailto:gaillardet@ipgp.fr)

The organizing committee:

- Suzanne Anderson, *CU Boulder, USA*
- Steve Banwart, *Sheffield U., UK*
- Jérôme Gaillardet, *IPGP, France*
- Sigurdur Gislason, *U. of Iceland*
- Yves Godderis, *CNRS, France*
- Mark Hodson, *U. of York, UK*
- Gaojun Li, *Nanjing U., China*
- Kate Maher, *Stanford U., USA*
- Jean-Dominique Meunier, *Cerege, France*
- Suzan Stipp, *U. of Copenhagen, Denmark*
- Alexis Templeton, *CU Boulder, USA*
- Philippe Van Cappellen, *U. of Waterloo, Canada*

### BIOGEOMON 2014- 8<sup>th</sup> International Symposium on Ecosystem Behavior

July 13-17, 2014

University of Bayreuth, Germany

[www.bayceer.uni-](http://www.bayceer.uni-bayreuth.de/biogeomon2014/)

[bayreuth.de/biogeomon2014/](http://www.bayceer.uni-bayreuth.de/biogeomon2014/)

The focus of BIOGEOMON is on the biogeochemistry of forest and natural ecosystems as influenced by anthropogenic and environmental factors. We invite empirical and modeling studies on fluxes and processes related to the turnover of major and trace elements at the ecosystem, watershed, landscape, and global scale.

Themes:

- 1) Long term trends in the functioning of ecosystems
- 2) Environmental controls on fluxes and processes in ecosystems
- 3) Fluxes between the atmosphere and ecosystems
- 4) Below ground turnover of C and nutrients in forest soils
- 5) Linking biodiversity and biogeochemistry

- 6) Biogeochemistry of wetlands
- 7) Dissolved organic matter in ecosystems and at the interface to hydrosphere
- 8) Trace element biogeochemistry
- 9) Critical unknowns in the cycling of P in forest and wetland ecosystems
- 10) Links between the N cycle and other elements
- 11) Weathering and chemical processes as keys to ecosystem functioning
- 12) Restoration and rehabilitation of ecosystems

The conference is hosted by the Bayreuth Center of Ecology and Environmental Research (BayCEER).

## Urban Geochemistry Working Group Meeting

August 4-7, 2014  
Columbus, Ohio, USA

**Registration Deadline: June 15, 2014**

[www.IAGC-Society.org/UG.html](http://www.IAGC-Society.org/UG.html)

The newly-revitalized Urban Geochemistry working group is happy to announce that the first Urban Geochemistry Working Group meeting will be held 5-7 August, 2014 in Columbus, Ohio, USA on the campus of The Ohio State University. Hosted by Berry Lyons (Ohio State University) and David Long (Michigan State University), it will be a three day meeting with four plenary talks, a series of poster sessions, and a discussion of the future of this new group. Space is still available, so register online today! For more information, visit our website or contact Chris Gardner at [IAGeoChemistry@gmail.com](mailto:IAGeoChemistry@gmail.com).

### Plenary Speakers:

**Gabriel Filippelli** - *"New Dimensions in Urban Health Research and Action"*

Professor of Earth Sciences, Director of the Center for Urban Health, Indiana University-Purdue University Indianapolis (IUPUI).

**Joel Moore** - *"Stable isotopes of CO<sub>2</sub> as a method to quantify anthropogenic and natural sources of carbon in an urban setting"*

Assistant Professor, Department of Physics, Astronomy, & Geosciences, Towson University

**Yu-Ping Chin** - *"From Caffeine to Hand Soap: The Fate of Everyday Chemicals in Urban Watersheds"*

Professor, School of Earth Sciences, The Ohio State University

**Emily Elliott** - *Title TBA*

Assistant Professor, Department of Geology and Planetary Science, University of Pittsburgh

## MinWat2014 - International Interdisciplinary Conference on Mineral Waters:

**Genesis, Exploitation, Protection and Valorisation**

September 8-11, 2014

Karlovy Vary (Carlsbad), Czech Republic

<http://minwat2014.vuv.cz/>

### CONFERENCE OBJECTIVES

The major objective of the conference is to bring together four groups of experts:

- 1) hydrogeologists and hydrogeochemists who deal with the search for and protection of mineral water resources. This regards hydrogeologists from universities, research institutes and private consultancy firms particularly those interested in

thermal and mineral waters, who want to see up-to-date studies on the structure and functioning of such hydrosystems, who want to learn about methodologies they can use to characterise existing springs or springs to be developed in the next future

2) professionals involved in distribution of bottled mineral waters whose activities are essentially dependent on the results of hydrogeological exploration. This includes also the managers and hydrogeologists from bottling companies

3) professionals for whom the mineral water is a tool used for treatment of various diseases and their prevention. There exists a broad spectrum of issues, which are dealt with in balneology, i.e. balneotherapy and balneotechnics. Experts in this group are represented mostly by physicians who use mineral waters for medicinal procedures, for complex balneotherapy and physiotherapy

4) administrations (local, regional, national, European, etc.) that evaluate projects aimed at development of new sources of natural mineral waters. It also includes professionals and administrators involved in designing the regulatory measures for safeguarding and protection of natural mineral water resources.

#### CONFERENCE THEMES

*Theme A:* Hydrogeology and hydrogeochemistry – origin, protection and management

*Theme B:* Bottled water – market and demand, health issues

*Theme C:* Balneology – balneotherapy and balneotechnics

#### Technical Session Themes:

- Cosmochemistry
- Planetary Chemistry
- Early Earth
- Deep Earth
- Mantle to Crust
- Continental Crust
- Subduction
- Melts, glasses, magmas
- Evolution of Earth's Environment
- Geochemistry: Nano-scale to Meso-scale Results
- Emerging issues in mineral resources
- Geochemistry of volcanic systems and natural hazards
- Emerging issues in energy resources
- Climate Change: Past, Present, and Future
- Atmospheric aerosol in air quality and climate: the science and solutions
- Weathering, Climate, Tectonics and Surface Processes
- Oceans and Atmosphere
- Geobiology
- Biogeochemistry
- Environmental geochemistry
- Frontiers in Analytical and Computation Techniques
- Mineralogy and Mineral Physics
- Hydrogeochemistry
- Coastal Geochemistry
- Organic Geochemistry

## Goldschmidt Conference 2014

June 8-13, 2014  
Sacramento, California, USA  
<http://goldschmidt.info/2014/>

## 17<sup>th</sup> International Conference on Heavy Metals in the Environment (ICHMET) September 22-26, 2014 Guiyang, China

The 17th International Conference on Heavy metals in the Environment (ICHMET) will be held in Guiyang, China from 22 to 26 September, 2014. It aims to provide a unique platform for discussion and presentation of state-of-the-art research activities to a broad international scientific community in field of all heavy metals in a trans-disciplinary context.

The Local Organizing Committee of the 17th ICHMET, invites you to submit an abstract through our online submission system : <http://ichmet2014.gyig.ac.cn/>. The abstract should be limited to 400 words, concise and should include the purpose of the research, the methodology, as well as essential results and conclusion.

There are 12 General sessions as well 9 Special Sessions. For a list of the Sessions please see below. First, choose the type and name of the session to which you wish to contribute. In addition, please choose the presentation format. Please note that although you may present an unlimited number of poster presentations, the oral presentations are limited to one per speaker.

**Submission Deadline:** The deadline for submitting your abstract is by May 31<sup>st</sup> at 23:00 (11P.M.) (Chinese time- GMT-8), at which point the online submission system will be closed.

### General session

1. Heavy metals in soils
2. Heavy metals in water
3. Heavy metals in atmosphere
4. Heavy metals in food crops
5. Environmental processes of heavy metals

6. Historical records of heavy metals in the environment
7. Sources, emissions and controls of heavy metals
8. Exposure and health effects of heavy metals
9. Heavy metal isotopes in the environment
10. Antagonistic and synergistic effects of heavy metals
11. Measurement techniques and data management technologies of heavy metals
12. Environmental policies and cost-effectiveness of heavy metal pollution

### Special sessions

1. Monitoring and Transport of Speciated Mercury in the Atmosphere
2. Heavy Metals in Sediments and Remediation Technologies
3. Bioavailability and phytoremediation of heavy metals in soil
4. Toxic metal exposure and effects – the exposome approach
5. Trace metals and Natural organic matter dynamics
6. Mercury pollution in China
7. Fate and Behaviour of Engineered Nanoparticles in the Environment
8. Applications of Metal Isotope Tracers in Fate and Uptake Studies
9. Effects of Nanoparticle Dynamics on Fate and Transport of Heavy Metals



## IAGC Executive Officers

### **PRESIDENT** (2012-2014)

Richard Wanty  
US Geological Survey  
MS 964d Denver Federal Center  
Denver, CO 80225  
USA  
Email: [rwanty@usgs.gov](mailto:rwanty@usgs.gov)

### **PAST-PRESIDENT** (2012-2014)

Clemens Reimann  
Dept. of Geochemistry  
Norwegian Geological Survey  
Trondheim N-7491  
NORWAY  
Email: [clemens.reimann@ngu.no](mailto:clemens.reimann@ngu.no)

### **VICE-PRESIDENT** (2012-2014)

Ian Cartwright  
Monash University  
School of Geosciences  
Clayton, VIC 3800  
AUSTRALIA  
Email: [ian.cartwright@monash.edu](mailto:ian.cartwright@monash.edu)

### **TREASURER** (2008-2014)

W. Berry Lyons  
Department of Geological Sciences  
The Ohio State University  
Columbus, OH 43210-1398,  
USA  
Email: [lyons.142@osu.edu](mailto:lyons.142@osu.edu)

### **SECRETARY** (2008-2014)

Thomas D. Bullen  
Water Resources Division  
U.S. Geological Survey  
MS 420, 345 Middlefield Road  
Menlo Park, CA 94025  
USA  
Email: [tdbullen@usgs.gov](mailto:tdbullen@usgs.gov)

### **JOURNAL EDITOR**

Michael Kersten  
Johannes-Gutenberg-Universität  
Mainz  
GERMANY  
Email: [kersten@uni-mainz.de](mailto:kersten@uni-mainz.de)

### **BUSINESS OFFICE MANAGER**

Chris Gardner  
275 Mendenhall Laboratory  
125 South Oval Mall  
Columbus, OH 43210  
USA  
Ph: +1-614- 688-7400  
Fax: +1-614-292-7688  
Email: [iageochemistry@gmail.com](mailto:iageochemistry@gmail.com)

## Council Members

Martine Savard (through 2014)  
NRC/GSC  
CANADA  
[msavard@nrcan.gc.ca](mailto:msavard@nrcan.gc.ca)

Philippe Negrel (through 2014)  
BRGM  
FRANCE  
[p.negrel@brgm.fr](mailto:p.negrel@brgm.fr)

Janet Herman (through 2014)  
Department of Environmental  
Sciences  
USA  
[jherman@virginia.edu](mailto:jherman@virginia.edu)

Teodóra Szócs (through 2014)  
Geological Institute of Hungary  
HUNGARY  
[szocst@mafi.hu](mailto:szocst@mafi.hu)

Thomas Kretzschmar (through 2014)  
Geology Department CICESE  
MEXICO  
[tkretzsc@cicese.mx](mailto:tkretzsc@cicese.mx)

Halldor Armannsson  
(Water-Rock Interaction Chair)  
Iceland Geosurvey  
ICELAND  
[Halldor.Armannsson@isor.is](mailto:Halldor.Armannsson@isor.is)

Steven Banwart  
(Geochemistry of the Earth's Surface  
Chair)  
The University of Sheffield  
UNITED KINGDOM  
[s.a.banwart@sheffield.ac.uk](mailto:s.a.banwart@sheffield.ac.uk)

Attila Demeny  
(Applied Isotope Geochemistry  
Chair)  
Hungarian Academy of Sciences  
HUNGARY  
[demeny@geochem.hu](mailto:demeny@geochem.hu)

Martin Novak  
(Biogeochemistry Chair)  
Czech Geological Survey  
CZECH REPUBLIC  
[martin.novak@geology.cz](mailto:martin.novak@geology.cz)

## Other Working Group Chairs (non-council)

David B. Smith  
(Global Geochemical Baselines)  
U.S. Geological Survey  
USA  
[dsmith@usgs.gov](mailto:dsmith@usgs.gov)

David Long  
(Urban Geochemistry)  
Michigan State University  
USA  
[long@msu.edu](mailto:long@msu.edu)

Ron Fuge  
(Environmental Geochemistry Chair)  
Aberystwyth University  
UNITED KINGDOM  
[rrf@aber.ac.uk](mailto:rrf@aber.ac.uk)

Olle Selinus  
(Environmental Geochemistry Chair)  
Linneaus University  
SWEDEN  
[olle.selinus@gmail.com](mailto:olle.selinus@gmail.com)