

Newsletter of the International Association of GeoChemistry

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COMING SOON – The IAGC International Conference



It's long been understood that the Working Group meetings are the core of the IAGC and that these meetings have been the foundation of the IAGC over the years. It's also recognized that there is substantial overlap between Water-Rock Interaction (WRI), Applied Isotope Geochemistry (AIG), and the Geochemistry of the Earth's Surface (GES) technical areas and participant communities. Members routinely participate in multiple Working Group meetings and some have to decide between participation in one or another in years of overlap. It's also noted that the smaller IAGC Working Groups (e.g. Urban Geochemistry [UG], Global Geochemical Baselines [GGB]) do not presently have the possibility of organizing meetings except when convening technical sessions at other conferences like the Geological Society of America's annual meeting.



It's also become increasingly difficult to organize the Working Group meetings on a sound financial footing in a way that also sustains and grows IAGC, and that problem will only grow worse in the future. As a consequence, the continuation of separate Working Group meetings is really not a sustainable business model given the low base level of the IAGC membership. So, the idea of an amalgamated meeting that would attract a sufficiently large participation each time to be not only sustainable but also profitable to IAGC, is one whose time has arrived.

Having considered the numerous advantages that such a consolidation of the Working Group meetings would bring, the IAGC Council has acted positively on a membership proposal to amalgamate the separate Working Group meetings into a single consolidated biennial conference. So, in a way that would retain the positive legacy of the long-established Working Group Meetings, this conference will be described as:

The IAGC International Conference

(encompassing the xxth Water-Rock Interaction Symposium, xxth Symposium on the Geochemistry of the Earth's Surface, & xxth Applied Isotope Geochemistry Symposium).

The IAGC International Conference will have permanent overarching themes dedicated to the individual themes of the Working Groups - i.e. Water-Rock Interaction, **Applied Isotope** Geochemistry, Geochemistry of the Earth's Surface. Urban Geochemistry, Geochemical Baselines, and Environmental Geochemistry. The consolidated conference is planned to be a week-long meeting, with the technical program operating at two levels – sets of technical sessions organized by the Working Group around themes of their choice, and multiple inter-disciplinary symposia developed by the conference organizers. These would be mixed throughout the week to promote maximum interaction between participants and maximum length of participant attendance in the conference. Formal conference events would include a 'welcome' reception, all-conference invited keynote speaker, mid-conference field trip, and concluding awards ceremony and banquet.

Some of the benefits of establishing The IAGC International Conference include:

- Retaining a relatively small meeting, probably with ±400 participants, that would not have the large anonymity and impersonal environment that is characteristic of large geosciences meeting like AGU, EUG, and Goldschmidt.
- A conference of broader scope should attract a larger and more stable list of participants and encourage researchers to bring their best material since the meeting will provide a larger audience. The consolidated conference would thus showcase the best that the Working Group members have to offer in a single meeting.
- This biennial conference would include a 2year IAGC membership in the price of registration for non-members, thus both growing and stabilizing IAGC membership.

To facilitate this consolidated meeting, as well as providing conference-to-conference continuity. the IAGC Business Office will assume administrative and financial support for the biennial conference, serving as the permanent home for the consolidated conference and its registration site. The Business Office will develop the conference website with a new permanent domain name and collect registration fees for the meeting, working closely with meeting organizers to ensure smooth overall operation of the administrative process. The conference web page will be hosted on the IAGC server and later archived permanently in its entirety. Each conference will have a website under the primary domain name, and that conference web site will

be used to securely collect registrations and credit card payments. Participants will upload abstracts (rather than emailing them), which will be automatically shared for review with the conference abstract committee for interdisciplinary symposia and the different Working Groups for their technical sessions. After the conference, the site will be archived. abstracts will be assigned DOI numbers and "selfpublished" on the conference website, and then permanently archived there for reference. The IAGC has already registered with CrossRef to assign DOI numbers and make our abstracts more visible.

The major benefit of this approach is the creation of a common, unified administrative process for the consolidated IAGC International Conference, giving the IAGC and Working Groups total control of the meeting website, registration, and payments. This approach would relieve the responsibility and burden from the conference organizers for collecting registrations and then transferring new member conference fees and information to the Business Office after the meeting for IAGC membership registration. Under this new procedure, the Business Office will collect and maintain the conference registration list all the way through the process, which would be a major step forward in efficiency and in financial management. In the past, meeting organizers have frequently hired an outside consultant to create and manage meeting registration sites, with mixed results. Using the Business Office to perform this task does not necessarily increase cost, but instead keeps all money within IAGC, except for the funds actually needed to execute the conference.

Given that two Working Group meetings are scheduled for 2019 – WRI and AIG, which are historically the two largest of the three WG meetings, this is the ideal time to initiate the consolidated conference. The WRI-16 symposium is scheduled to take place in 2019 in Tomsk, Russia, so this venue will be the first in the

consolidated conference series. In this initial case, it will just be a WRI-AIG combination, as GES has already initiated the planning process for its next meeting in Switzerland. After that, it is anticipated that the second fully-consolidated conference involving all Working Groups will be held in 2021 at a central, readily accessible location in west-central Europe, with the conference moving westward to the Americas and then Australasia in subsequent years.

So, keeping checking the IAGC website (www.iagc-society.org) for details on the consolidated conference as it develops and we'll see you in Tomsk!

- -Richard Wanty, IAGC President (2012-2014)
- -Russell Harmon, IAGC President (2010-2012)
- -Chris Gardner, IAGC Business Office Manager

Association News

2018 IAGC Awards Nominations Extended

The IAGC will continue accepting award nominations for 2018 **through January 15**. This year, you may nominate colleagues for the following awards, using the <u>Award Nomination Cover Sheet</u>.

The Vernadsky Medal - awarded for a distinguished record of scientific accomplishment in geochemistry over the course of a career:

http://www.iagc-society.org/vernadsky.html

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

The Harmon 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

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

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

Charitable Giving

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.

US members who need an additional tax deduction for 2017 should make their contribution prior to 31 December.

Please donate right now through the IAGC web site (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).

Renew Your Membership for 2018!

Don't forget to renew your IAGC membership for 2018 by January so you don't miss any issues of *Elements* magazine! Believe it or not, 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. Online access to our journal, *Applied Geochemistry*, is also available.

Renew with a credit card

Renew with a check

Check your membership status



News from Michael Kersten, Applied Geochemistry Executive Editor



In this edition of the IAGC newsletter. I would like to share with you a few journal updates. The 2016 Journal Citation Report (© SCIE Clarivate Analytics, published June 2017) reports on a rise from 2.48 in previous year to now 2.58 as calculated based on the performance (citations) of papers published in 2015/16. Our journal is thus ranked in the top 50% (No. 29 of 83) of journals in the category Geochemistry & Geophysics. I accept this good position as my main task to maintain and develop further in the future. For this to foster, we have had three special issues published in 2017. The first one was on the still quite hot topic of "Environmental and Health Roles of Geogenic Arsenic" (Volume 77), edited by Huaming Guo and Stefan Norra. Another one was about "Urban Geochemistry" (Volume 83), edited by W. Berry Lyons, Christopher B. Gardner, and Dave T. Long as an outcome of the related IAGC working group. The third one was on "Transformation and Fate of Natural and Anthropogenic Radionuclides in the Environments" (Volume 85), with articles related to the Fukushima disaster as an outcome of a session presented at Goldschmidt 2016 in Yokohama, edited by Daniel Kaplan, Kazuya Tanaka and Toshihiko Ohnuki. Clearly, compiling those issues was quite a tremendous piece of work for all our guest editors, and I am full of gratitude to see our journal well enriched with those attractive volumes.

Unfortunately, we reached a severe backlog in publication amounting to as much as 46 articles in press by end of the year. This includes two more special issues on "Trace Metals in Soils" (edited by Jörg Rinklebe, Yong Sik Ok, Daniel S. Alessi and Filip M. G. Tac) and "Environmental Geochemistry" (edited by Clemens Reimann, Chaocheng Zhang, Ron Fuge and Mark Cave). Both issues were an outcome of major conference sessions in 2016 and, because similar in topic and as promised by publisher, should have been out within one volume together this year, but which was obviously not possible. To avoid such backlogs in future with articles awaiting final publication of up to more than one year, we decided to accept a new feature provided by the publisher - Virtual Special Issues (VSI). This should give special issue authors the benefits of an article based publishing the same as for authors of regular articles. VSI articles will be published in regular issues, in special sections if desired, as soon as accepted. At the same time, the special issue content will be brought together in an online VSI, easily accessible and navigable on ScienceDirect. Virtual special issues will follow standard procedures during the editorial phase for guest editors and authors. Publication times will be improved as VSI will follow the regular content workflow, which is on average four times faster than publication times for regular special issues. VSI introduce a new feature on ScienceDirect - the introductory preface box, which holds introductory information (e.g. contextual information), and can be updated throughout the VSI compilation process. It can act as a temporary placeholder while the editorial is being drafted. VSI titles can also be adjusted during the compilation phase, and section headings can be added when a VSI is completed.

The only drawback is that current setup does not allow for print copies of a VSI. Therefore, this new feature will not become a prerequisite for publishing a special issue, since it may still be compiled on the conventional way just as previously (at least for the next future). However, I hope this new feature will increase satisfaction with compilation of and publishing in special issues for both our guest editors and authors once accepted.

I wish you all the best for a Happy New Year 2018,

Michael Kersten Editor-in-Chief Applied Geochemistry

2017 Meeting Reports

The 11th International Symposium on Geochemistry of the Earth's Surface (GES-11)

The 11th International Symposium on Geochemistry of the Earth's Surface, (GES-11), cosponsored by the IAGC was held 11-16 June,



(clockwise from left) GES Working Group Leader, Steven Banwart, Chairman of the Organizing Committee Congqiang Liu, and Jiubin Chen on the opening of the meeting.

2017 in Guiyang, China. The chairman of the meeting, Prof. Congqiang Liu, and the local organizing committee from the Institute of Geochemistry, Chinese Academy of Sciences, Shijie Wang, Jiubin Chen, Yun Liu, Tingyu Li, Hu Ding and Sheng Guo, invited geochemists from around the world to convene at the beautiful Renaissance Guiyang Hotel. Guiyang is the provincial capital of Gui Zhou province, and served as the perfect backdrop for the week's scientific and social activities. Participants enjoyed the region's historic splendors, peculiar karst landforms, and cool summer weather.



GES-11 participants in the Conference hall.

About 200 scientists from more than 10 countries participated in the plenary conference session lasting five days. The conference theme was Surface-Earth System Sciences: Toward a sustainable Earth. The excellent scientific program centered on six sessions selected by the GES-11 scientific committee composed of: Conggiang Liu (Institute of Geochemistry, CAS, China), Chen Zhu (Indiana University, USA), Suzanne Anderson (University of Colorado, USA), Steven Banwart, (Leeds University, UK), Susan Brantley (Penn State, USA), Jianmin Chen (Fudan University, China), Xi Chen (Hehai University, China), Donald DePaolo (Lawrence Berkeley Lab, USA), William Dietrich (University of California, USA), Jerome Gaillardet (IPGP,

France). **Yves** Godderis (Geosciences Environment Toulouse. France), Marty Goldhaber (US Geological Survey, USA), Dali Guo (Institute of Geographic Sciences and Natural Resources Research, CAS, China), Michael Kersten (Johannes Gutenberg University Mainz, Germany), Yahai Lu (Peking University, China), Romain Millot (BRGM, France), Mingan Shao (Institute of Geographic Sciences and Natural Resources Research, CAS, China), Harald Strauss (University of Münster, Germany), Yongge Sun (Zhejiang University, China), Derek Vance (ETH Zurich, Switzerland), Yanxin Wang (China University of Geosciences, Wuhan, China), Fengchang Wu (Chinese Research Academy of Environmental Sciences, China), Sheng Xu (Scottish Universities Environmental Research Centre, UK), Ganlin Zhang (Institute of Soil Science, CAS, China) and Yongguan Zhu (Institute of Urban Environment, CAS, China). There were a total of 23 invited oral presentations and 120 poster presentations, with oral sessions presented in the mornings and poster sessions presented in the afternoons.

The six sessions covered the following topics:

- 1. China critical zone sciences for sustainability
- 2. Hydro-ecological and hydrogeochemical processes and cycling
- 3. Land-vegetation-air interaction
- 4. Frontiers in traditional and nontraditional isotope geochemistry
- 5. Land-ocean interaction and oceanic biogeochemistry
- 6. Geochemistry of mineral-water-microbe interfaces

Mid-week, scientists were invited to explore the Qingyan historical village in the suburban region of Guiyang City. The local organizers held a warm conference banquet on Wednesday evening with a wonderful live entertainment, the Colorful Guizhou.



The live entertainment, Colorful Guizhou, performed by multi-ethnic Guizhou people.

Participants had a great time during their stay in Guiyang, thanks to the warm welcome by the local organizing committee, the friendly atmosphere of scientific communication, and specialized knowledge of critical zone. This successful meeting has set a foundation for the next GES meeting (GES-12), to be held in ETH Zurich, Switzerland.



GES-11 participants in poster sessions.

In addition to the IAGC, GES-11 was co-organized by the State Key Laboratory of Environmental Geochemistry (SKLEG), Institute Geochemistry, Chinese Academy of Sciences Ťianjin University, Guangzhou (IGCAS), University, and cosponsored by the National Natural Science Foundation of China (NSFC), LabTech Ltd, Lica United, PRI-ECO and Thermo Fisher Scientific. All sponsors provided the essential support for guaranteeing the success of the conference.

-Jiubin Chen, On behalf of the Organizing Committee for GES-11, State Key Laboratory of Environmental Geochemistry, IGCAS



Prof. Jiubin Chen and his group celebrating the success of the meeting

12th International Symposium on Applied Isotope Geochemistry (AIG-12)

The AIG-12 Symposium was held in Copper Mountain, Colorado from 17-22 September. A total of 56 colleagues from 10 countries participated in 4 days of oral and poster presentations, as well as a mid-week field trip. We enjoyed enthusiastic discussions, including excellent presentations by the dozen or so students in attendance.

Excellent keynote presentations were provided by Romain Millot (BRGM, France) on Li isotope geochemistry, Tom Johnson (University of Illinois, USA) on a review of 20 years of research on non-traditional (non-CHONS) isotopes, and François Chabaux (University of Strasbourg, France) on using isotopes in weathering geochemistry. In addition to the keynote presentations, the wide range of topics covered included isotopes in oil and gas exploitation, wine production, isotope hydrology, compound-specific isotope analysis, use of isotopes in forensic investigations, ocean acidification, the nuclear industry, noble-gas isotopy, and isotope geobiology.

Two Faure awards (http://www.iagcsociety.org/faure award.html) were presented by Philippe Négrel, IAGC President, to the best student oral and poster presenters. The winners were Patrick Griffin (Indiana University, USA) for his presentation entitled, "Amino acid $\delta^2 H$ as ecological, indicator of metabolic, biogeochemical processes" for best presentation and Masoomeh Kousehlar (Miami University, USA) for her poster entitled, "Air quality assessment and determination of Pb sources in the atmosphere of Tehran, Iran, by tree bark biomonitoring." The Faure Award consists of a certificate, a 1-year membership in IAGC, and \$100 cash. Congratulations to Patrick and Masoomeh!

The mid-week field trip was led by Dr. Vince Matthews, former State Geologist for the State of Colorado. Vince led us on an enlightening trip around the mines and town of Leadville, CO, including an excellent overview of the local and regional geology and ore deposits, as well as amusing stories of the history of mining and miners in the area. On a perfect blue-sky day that makes Colorado famous, we enjoyed Vince's talks, spectacular autumn scenery, a picnic lunch at 3500 meters above sea level, and a tour of the National Mining Hall of Fame and Museum in Leadville.



Dr. Vince Matthews discusses the geology of the Leadville, Colorado mining region.

The abstracts submitted for the meeting were edited by Ian Cartwright (IAGC Past-President). Beginning with the AIG-12 meeting and continuing into the future, we will publish the Proceedings abstracts online at

www.appliedisotopegeochemistry.org, so the abstracts will be open-access and searchable. In addition, a special issue of *Applied Geochemistry* is planned to highlight selected papers from the AIG-12 meeting. The special issue will be edited by Ian Cartwright (Monash University, Australia), Jennifer Harkness (The Ohio State University, USA), and Richard Wanty (U.S. Geological Survey, USA).

AIG-12 was sponsored by IsotopX, and we thank them for their generous support.

The intimate setting of Copper Mountain Resort, the enthusiastic attendees, and the breadth and quality of the presentations made the meeting a great success, and we look forward to future meetings of our working group.



Attendees of the AIG-12 field trip at the Ibex Mine near Leadville, Colorado. Elevation 3500 meters above sea level.



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Renew Your IAGC Membership for 2018!

Don't forget to renew your IAGC membership for 2018 before January so you don't miss any issues of *Elements* magazine! 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.

Online access to our journal, *Applied Geochemistry*, is available 2018 at \$70 for student members and \$92 for professional members. You must pay your IAGC dues in order to purchase *Applied Geochemistry*.

To renew online using a credit card through PayPal or Square Market, via check, or to simply check your membership status, follow the links below and enter either your membership number or email address:

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