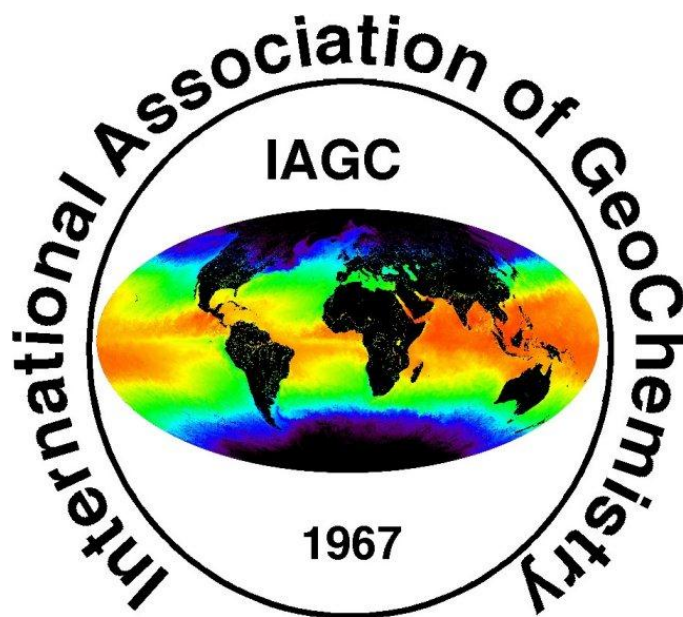


Newsletter

of the

International Association of GeoChemistry

Number 56, May 2012



In This Issue

News Flash	1
From the President	1
IAGC Awards for 2012	4
Upcoming Meetings	11
Report on AIG	14
News from Elsevier	16
Welcome New Members	18
IAGC Governance Change	21
Charitable Giving	22
ACS Gchem Medal Call	22
Urban Gchem WG News	23
Ingerson Lecturer for 2013	23
IAGC Membership Profile	24
Obituary – Ignacio Torres	25
The IAGC Leadership	26

* * * * *

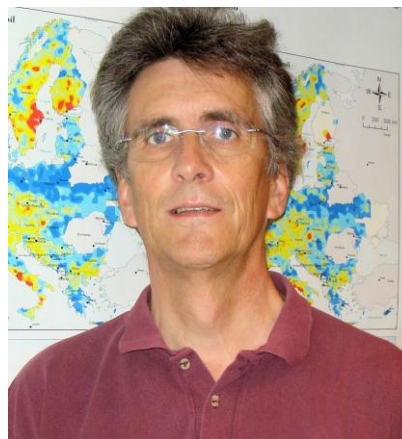
-- NEWS FLASH --



Applied Geochemistry vol.27 no.5 contains contributions from the special session honouring Professor Iain Thornton at the SEGH 2010 conference on 'Environmental Quality and Human Health'. These include papers on soil ingestion, arsenic and lead distribution and exposure, and *in situ* vs *ex situ* measurements. Athens passwords needed for offsite access. For more details, see page 17.

* * * * *

FROM THE PRESIDENT



IAGC members,

2011 has been a good, successful year for our organisation. The GES-9 (Geochemistry at the Earth's Surface) and the AIG-9 (Applied Isotope Geochemistry) Working Groups symposia were well attended and the participating members I had the chance to talk with were very satisfied with both events. In a way, both meetings demonstrated that there is a need for such smaller conferences, with 100-300 participants and a well-defined topic. They just provide better chances to meet and hold discussions with fellow scientists having similar interests, and it's easier to make new friends than at many of the major events with thousands of participants (though Council sometimes discusses whether it would not be nice for IAGC to have such a major money earning event rather than having to sponsor a diversity of small meetings).

2012 is one of those years where most of our awards are bestowed, starting with our most prestigious award, the Vernadsky medal. You will find the announcements for all awards in this issue of the Newsletter and I congratulate all award recipients on behalf of the IAGC.

At the end of 2012 the contract for the long time editor-in-chief of our journal, *Applied Geochemistry*, will expire and Ron Fuge, after 19 years of faithful service, will step back from this very intensive job. Thus, there will be a very large pair of shoes to be filled around the end of 2012. It might also happen that some of the associated editors, who have served in that capacity for many years, do follow suit and leave with Ron. Thus, there is likely to be a need for volunteers! The search committee has started work to identify qualified candidates, but we would really appreciate to hear from a number of volunteers – or, if you have the perfect candidate in mind, to see some nominations for the position of Editor-in-Chief of *Applied Geochemistry*. We would also like to hear from people that could imagine working together with the new editor on the editorial board. Given the nature of *Applied Geochemistry*, we would of course prefer members of the IAGC filling these positions rather than “outsiders.” Volunteers or people wishing to nominate somebody should get in contact with either me (clemens.reimann@ngu.no) or the Publications Committee Chair Philippe Negrel (p.negrel@brgm.fr). Also feel free to discuss the job with Ron (rrf@aber.ac.uk).

Although *Applied Geochemistry* has prospered under Ron’s leadership, IAGC is still under pressure from Elsevier, who value their Journals, among others, in terms of the impact factor. The IAGC is predominantly financed through the royalties we get for *Applied Geochemistry* from Elsevier. Last year, I asked the members to submit good papers to our journal and to discuss possibilities for review articles with Ron (rrf@aber.ac.uk). An easy way to obtain and hold a good impact factor for our journal is actually to cite the articles that have been published in *Applied Geochemistry* in your work. Please keep in mind that this really matters when preparing a manuscript. A good and increasing impact factor will make all future contract negotiations with Elsevier so much easier for your officers.

I know that there are strong forces out there who do not like the large publishing houses like Elsevier and Springer. The tenor is that the scientists do the work and the publishers get the money. Please remember that in the case of our journal we, the association, get at least some money back, which is sufficient to run the IAGC at the current level. The alternative, open access publishing, of course looks an attractive option seen with the eyes of the reader. However, even in the open access situation somebody pays, in that case not the libraries via their subscriptions, but the authors for the publication of their articles. Thus, the scientists write and then pay to get published. Is that the better or really cheaper solution? At a rate of \$1000 – 3000 for getting an “open access” article published, it is not very difficult to calculate which model is much more expensive for society and I guess that is the reason why we see open access journals popping up like ‘mushrooms following some warm rain.’ When looking at the open access model, I see many disadvantages, among others a serious quality issue. How likely is it, that articles will be rejected when you earn your money from the authors? And why should I continue writing papers when I have to pay getting them published? When do we see the day where somebody demands of journalists or book authors that they have to pay the newspapers/publishing houses for getting their articles/books published?

Shortly, from 15-20 July, this year’s large IAGC event - the BioGeoMon 2012 conference – will take place in Maine (www3.villanova.edu/conferences/biogeomon/index.html). Martin Novak from the Czech Geological Survey and the colleagues in Maine have put a lot of work into the organisation of this event and I hope that many of our members will be able to participate.

Clemens Reimann, Trondheim
President

* * * * *

ASSOCIATION NEWS

* * * * *

IAGC Awards for 2012

IAGC is proud to announce the recipients of its society awards for 2012. The official announcement and presentation of the awards will occur during the Goldschmidt Conference in Montreal, Canada from 24-29 June 2012:

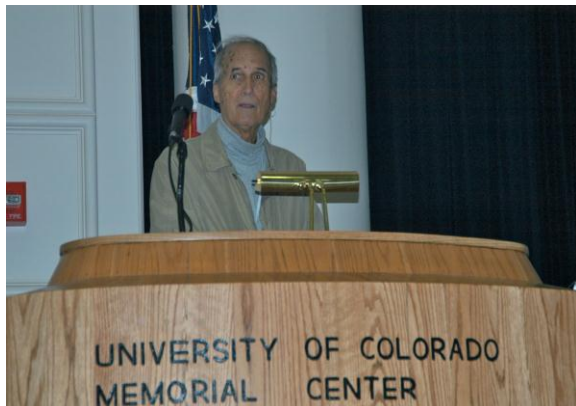
www.vmgoldschmidt.org/2012/index.htm.

Since IAGC is an affiliated society of the Geological Society America, these awardees will also be recognized during the "Hall of Fame" display at the 2012 GSA Annual Meeting scheduled to be held in Charlotte, NC from 4-7 November 2012.

+ + + + +

IAGC Vernadsky Medal

The IAGC Vernadsky Medal is awarded every other year to a single person for a distinguished record of scientific accomplishment in geochemistry over the course of a career. The recipient for 2012 is **Robert A. Berner**, Alan M. Bateman Emeritus Professor of Geology and Geophysics Emeritus at Yale University. (USA).



Prof. Berner not only has had a distinguished record of scientific accomplishments in geochemistry over the course of his career, but he stands out as a shining example of how "small" curiosity-driven science can produce "big" results. Throughout his career, Bob worked with relatively modest funds, simple experimental equipment, and small groups of individuals to undertake truly innovative work that has resulted in major advances in (bio)geochemical science. He has mentored many of the outstanding young people in the field of sedimentary geochemistry today. In addition, the latter part of Prof. Berner's career complements and expands on the contributions of V. I. Vernadsky, who recognized the concept of the biosphere, established a new paradigm of life studies, and was a principal architect of our contemporary ecological and biogeochemical vision of the biosphere and noosphere.

Bob Berner obtained his BS (1957) and MS (1958) degrees from the University of Michigan and his PhD (1962) from Harvard University working with Professors Ray Seiver and Bob Garrels. He then went to the Scripps Institution of Oceanography as a Sverdrup Postdoctoral Fellow. In 1963, he joined the faculty at the University of Chicago but left that institution to go to Yale University where he was promoted to Professor in 1971. He remains at Yale as an Emeritus Professor after retiring in 2007.

Bob is a Member of the US National Academy of Sciences. Among his many other awards are the 1991 Doctor Honoris Causa from the Universite Aix-Marseille (France and Huntsman Medal in Oceanography (Canada); the 1993 Goldschmidt Medal of the Geochemical Society; the 1995 Arthur L. Day Medal of the Geological Society of America; and the 1996 Murchinson Medal of the Geological Society of London.

One of the most internationally recognizable and valuable research accomplishments of

Bob has been as co-founder with Bob Garrels and Tony Lasaga of the now famous *BLAG* model of atmospheric CO₂ variations through Cretaceous geologic time. Since then, Bob has gone on to refine this model extensively going back in geologic time to the beginning of the Phanerozoic in the *GEOCARB* model. Bob's current research deals with computer modeling of the carbon and sulfur cycles, emphasizing their coupling to controls on atmospheric CO₂ and O₂; the effect of CO₂ on paleoclimate and of O₂ on biological evolution; the role of plants in rock weathering and their controls on atmospheric CO₂ oscillations in the Phanerozoic; and weathering of kerogen in fossil shales as a measure of modulation of atmospheric O₂. Much of Bob's more modern research activities are highlighted in his latest book *The Phanerozoic Carbon Cycle*.

Over his career Bob has tackled a number of significant problems in (bio)geochemistry other than those involving atmospheric CO₂ and O₂ and has done so very successfully. These include the kinetic behavior of carbonates in the ocean and experimental studies of the stabilities and kinetics of carbonate minerals and other sedimentary mineral types which formed the basis of Bob's book *Principles of Chemical Sedimentology* (1971); field observations of the processes of early diagenesis, which formed the basis of his book entitled *Early Diagenesis: A Theoretical Approach* (1980); and studies of geochemical cycles, which were the basis of his book written with his wife Elizabeth Berner entitled *Global Environment: Water, Air, and Geochemical Cycles* (1995).

**CONGRATULATIONS BOB -
What a Career!**

+ + + + +

Distinguished Service Awards

The **IAGC 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 meritorious voluntary service. The 2012 recipients are **Ernest E. Angino** of the University of Kansas (USA) and **Luca Fanfani** of the University of Cagliari (Italy).

+ + + + +

Ernest E. Angino is being honored for his dedicated service to IAGC as Treasurer from 1980 - 1994. He is an Emeritus Professor from the Department of Geology at the University of Kansas, where he rose up through the academic ranks to Professor. At the University of Kansas, Ernie did research and teaching in the area of aqueous geochemistry. His studies included contributing to a significant understanding of the aqueous geochemistry of trace metals and the chemistries of Antarctic lakes as well as to the development of the important research area of geochemistry and health.

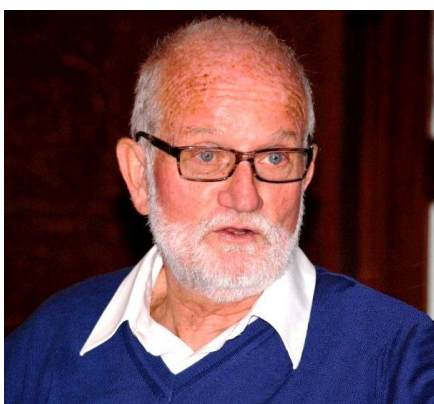


Ernie served as Chair of the Department of Geology at KU, during which time he was

instrumental in helping to organize the alumni association, which has resulted in significant gifts to the department that continues today. Ernie brought those organizational and management skills to IAGC during his time as treasurer and worked to increase the assets of IAGC, handing to his successor D.T. Long an extremely stable financial state of IAGC. During his tenure as Treasurer, Ernie proved to be an invaluable resource for the President and Secretary of IAGC on matters ranging from negotiations with the publisher of the society's journal, *Applied Geochemistry*, working with the international collaborators, and in the formulation of the various awards bestowed society. Ernie's dedicated service to IAGC went well beyond that of being Treasurer.

+ + + + +

Luca Fanfani has had a career as geochemist-mineralogist for more than 40 years. He has been full professor at the University of Cagliari (Italy) since 1976, and also Dean of the Faculty of Sciences since 2009. Luca is an active Member of the Management Committee of the IAGC Water-Rock Interaction Working Group and, as General Secretary, organized the WRI-10 Conference in 2001.



He served as a superior mentor to many young geochemists in Italy and other countries. He has authored or co-authored more than 60 scientific articles addressing a wide range of geochemical issues and recognized, long before most of his

colleagues, the important connection between geochemistry and mineralogy for understanding the transport and fate of harmful and toxic elements at the near surface environment. Luca has had a strong impact in the foundation of environmental mineralogy and geochemistry in Italy. He created a research group that grew to become a respected contributor to environmental mineralogy and geochemistry which became a nationwide reference for environmental geochemistry and mineralogy, stimulating the birth and growth of similar groups around the country. Luca was also a pioneer in understanding the importance of international cooperation and interaction, stimulating scientific cooperation with less developed countries, giving rise to several projects in Latin America and North Africa, and significantly contributing on the progress of environmental geochemistry in Italy. He created a research group that grew to become a respected contributor to environmental mineralogy and geochemistry which became a nationwide reference for environmental geochemistry and mineralogy, stimulating the birth and growth of similar groups around the country. Luca was also a pioneer in understanding the importance of international cooperation and interaction, stimulating scientific cooperation with less developed countries, giving rise to several projects in Latin America and North Africa, and significantly contributing on the progress of environmental geochemistry.

Many thanks Ernie and Luca for your dedicated service to IAGC!

+ + + + +

IAGC Fellows

The honorary title of IAGC Fellow is bestowed annually on outstanding scientists who are IAGC members and who, over the course of some years, have made significant contributions to the field of geochemistry. The IAGC Fellows for 2012 are **Norbert Clauer**, Emeritus Research

Director of the National Research Council (CNRS) and Scientific Director of the French Nuclear Waste Repository National Agency (France), and **Susan Brantley**, Professor of Geosciences at the Pennsylvania State University (USA).

He served on the IAGC Council from 2004-10, during which time he chaired the IAGC Publications Committee.

Congratulations Norbert & Sue!



Norbert Clauer
CNRS, France

Norbert Clauer. IAGC Member Norbert Clauer received his PhD from the Université Louis Pasteur in Strasbourg, in 1976 and presently is Emeritus Research Director of the French National Research Council (CNRS) and Scientific Director of the French Nuclear Waste Repository National Agency. As documented through more than 170 research publications, Dr. Clauer is a recognized international authority on clay minerals. Over the course of a distinguished research career, he has used the tools of chemistry and isotope chemistry to understand the mechanisms of clay crystallization and recrystallization, behavior of detrital and authigenic clay minerals during deposition, diagenesis, low-grade metamorphism and weathering, and the geochemistry of sedimentary brines. In recognition of his research, Norbert has been awarded the bronze (1978) and silver medal by the CNRS (1991) and the Georges-Millot Price by the French Academy of Sciences (1992 the Bailey Distinguished Member Award of the Clay Minerals Society (2008) and Chevalier of the French National Order of Merit (2008).



Sue Brantley
Pennsylvania State University

Sue Brantley. IAGC Member Susan Brantley received a PhD from Princeton University in 1987, and is presently is Professor of Geosciences at the Pennsylvania State University, Director of the Earth & Environmental Systems Institute and Director of the Center for Environmental Kinetics Analysis at Pennsylvania State University. As one of the leading aqueous geochemists of her generation, Sue's research has explored important questions like the chemical weathering rates of silicate minerals, the kinetics of water-rock interaction, soil-forming processes, and the effects of microbial processes on mineral dissolution and soil development. She is widely published in the top-tier geochemical journals, including the association's journal, *Applied Geochemistry*.

+ + + + +

IAGC Certificates of Recognition

The **IAGC Certificate of Recognition** is awarded (i) to any scientist for scientific

accomplishment in a particular area of geochemistry, (ii) to other geochemists for excellence in teaching or public service, or (iii) to an IAGC member for meritorious service to the Association or to the international geochemistry community. The recipients for 2012 are:



Ole Selinus
Geological Survey of Sweden

IAGC Member Olle Selinus is a PhD geologist with the Geological Survey of Sweden (SGU). During the 1960s and 1970s he worked in mineral exploration and since the beginning of the 1980s his research work has been focused on environmental geochemistry, including research on medical geology. Dr. Selinus has more than 100 research publications in environmental geochemistry and also has served as the organizer of several international conferences in this field and was Vice-President of IGC-33, the International Geological Congress in Oslo in 2008. He served as Editor-in-Chief for the book on *Essentials of Medical Geology*, and as President of the International Medical Geology Association, which began as an IAGC Working Group. He has received several international awards and has been appointed Geologist of the Year in Sweden because of his work in medical geology. Ole is cited for significant contributions to the fields of environmental geochemistry and medical geology.

+ + + + +

IAGC member Susan P. Anderson is Associate Professor of Geography in the Department of Geography at the University of Colorado and Fellow in the Institute of Arctic & Alpine Research. She received a PhD from the University of California – Berkeley in 1995.



Suzanne Prestrud Anderson
University of Colorado (USA)

Susan’s research interests are focused on the field-based mechanistic understanding of the chemical and physical processes that shape the Earth’s surface and control denudation rates. She is cited for organizing and leading the 9th International Symposium on the Geochemistry of the Earth’s Surface (GES-9) Working Group meeting Boulder, CO in June 2011.

+ + + + +

Neus Ottero received her PhD from the University of Barcelona in 2004 and is currently a tenure-track lecturer in the Department of Crystallography, Mineralogy and Ore Deposits, of the University of Barcelona and coordinator of the environmental projects of the Mineralogia Aplicada i Medi Ambient (Applied Mineralogy and Environment) Research Group.



Neus Otero
Universitat de Barcelona

Her interests are focused on the use of isotopic tools to evaluate the fate of contaminants in the environment, with a special focus on natural and induced attenuation of groundwater pollution. She is cited for co-organizing AIG-9, the 9th International Symposium of the IAGC Applied Isotope Geochemistry Working Group Meeting in Tarragona, Spain in September 2011.

+ + + + +



Albert Soler Gil
Universitat de Barcelona

Albert received his PhD from the University of Barcelona in 1990 and is a full Professor of Mineralogy in the Department of Crystallography, Mineralogy and Ore Deposits of the University of Barcelona. He is the coordinator of the Mineralogia

Aplicada i Medi Ambient (Applied Mineralogy and Environment) research group and his research interests are focused on the use of isotopic tools to identify contamination sources, to evaluate the evolution of the contaminants and to foresee natural attenuation processes. Albert is cited for co-organizing the AIG-9, the 9th International Symposium of the IAGC Applied Isotope Geochemistry Working Group Meeting in Tarragona, Spain in September 2011.

* * * * *

Elsevier-IAGC PhD Student Research Grants

The Elsevier-IAGC Student Research Grant program is designed to assist PhD students in geochemistry in undertaking and acquiring geochemical analyses in support of the student's research based upon a meritorious proposal. In addition to their grant stipend, each student receives a 1-year membership to IAGC.

IAGC received a large number of meritorious proposals this year and it was a difficult job to narrow down the list to three recipients. This year's recipients are:

Alice DuVivier, Durham University, UK (\$2500) – *Using Ca isotopes to evaluate the weathering influx in seawater: implications for the driving mechanisms of OAE 2*

Jill Ghelerter, Georgia State University, USA (\$2000) – *Enhanced Bioremediation of Oiled Salt Marsh Sediments Using Clay Minerals*

Peter Tollan, Durham University, UK (\$1500) – *Modern Arc Peridotites - Analogues for Continental Root Evolution*

Look for biographies and photos of the recipients in the upcoming issue of *Elements* and the fall newsletter.

**Congratulations Alice, Jill,
& Peter!**

2012 Faure Awards

The IAGC Faure Award is given to the best student research presentation at each IAGC-sponsored conference or IAGC-organized technical session at a major conference. This award consists of a certificate and a complementary 1-year membership to IAGC for the year following receipt of the award. Faure awards were presented at AIG-9 in Tarragona (ES) and at the IAGC-sponsored session on "Sources, Transport, and Fate of Trace and Toxic Elements in the Environment" at the Geological Society of America Annual Meeting in Minneapolis, MN (USA).

+ + + + +

AIG-9

Geneviève Bordeleau - "The use of stable isotopes to assess natural attenuation of explosives and to distinguish nitrate sources in groundwater on military training ranges".



Geneviève Bordeleau
Geological Survey of Canada

Genevieve majored in 2003 from McGill University with a degree in agricultural sciences, and a specialization in ecological agriculture, which was realized at the Royal Veterinary and Agricultural University in Copenhagen, Denmark. She then completed a Master's degree in Earth Sciences at the National Institute for

Scientific Research in Quebec, Canada, which included a research stay at the Christian-Albrecht Universität zu Kiel. She is currently in the last year of her Ph.D under the supervision of Richard Martel, Ph.D, from the National Institute for Scientific Research, and Martine M. Savard, Ph.D, from the Geological Survey of Canada. In her graduate studies, Genevieve focused mainly on the transport and degradation of explosives in soils and groundwater. More specifically, she has an interest in isotopic approaches for detecting the degradation of contaminants. She is currently doing a research stay at the University of Barcelona to broaden her knowledge of isotopes to other types of contaminants.

+ + + + +

Stefan Cretnik - "Chlorine and carbon isotope measurements can help assessing the effectiveness of a zero-valent iron barrier".



Stefan Cretnik
Helmholtz Zentrum Munich

Stefan was born in Munich, Germany in 1982. In 2003 he started academic studies of Chemistry / Biochemistry at the Ludwig-Maximilians-University Munich with the bachelor's thesis "Synthesis of a carbocyclic phosphoamidite to develop an artificial ligating nucleoside" (2007; Prof. T. Carell). He continued with a Master's degree with a focus on organics, physical chemistry and polymer chemistry in cooperation with the

Bavarian Motor Works entitled “Effect of relative motion during the binding process of adhesive compositions” (2009 Prof. K. Karaghiosoff and Dr. Sabine Weinrich). He began the PhD program in 2010 at the Helmholtz Zentrum Munich with mechanistic investigations of chloroethylene degradation, using model reactants and isotope analysis of carbon and chlorine.

+ + + + +

GSA 2011

Aaron Jubb – “Probing adsorption of aqueous selenate at mineral surfaces via Total Internal Reflection Raman Spectroscopy”



Aaron Jubb
The Ohio State University

Aaron M. Jubb was born in Fort Hood, TX in 1984. In 2006 he received a B.A. in chemistry from Lawrence University in Appleton, WI where he was an undergraduate research associate with Dr. David E. Thompson. He is currently working toward a Ph.D. in chemistry at The Ohio State University under the supervision of Dr. Heather C. Allen where his thesis project is mainly focused upon elucidating inorganic anion behavior at buried aqueous – mineral interfaces through the use of surface sensitive vibrational spectroscopic techniques. His other research interests include the application of physical chemistry

methodologies to study atmospheric and geochemical systems.

**Congratulations Genevieve,
Stefan, & Aaron !**

* * * * *

Meetings in 2012

+ + + + +

BIOGEOMON 2012: The 7th International Symposium on Ecosystem Behavior

BIOGEOMON 2012, hosted by the University of Maine, will be held 15-20 July in Northport, Maine, USA. BIOGEOMON's emphasis is on biogeochemistry as an evolving and integrated discipline, including research at the watershed, landscape, ecosystem, and global scales. The primary goals of this conference are to provide a forum for the dissemination and discussion of recent research findings, to explore future directions for biogeochemical research, and to foster interdisciplinary collaboration among researchers of all ages. The themes for the conference are:

- Long-term integrated monitoring and modeling,
- Biosphere-atmosphere interactions,
- Extreme events in ecosystem biogeochemistry,
- Linkages among biogeochemical cycles,
- Critical unknowns in nitrogen dynamics,
- Biogeochemistry of peatlands,
- Carbon cycling in poorly- and well-drained soils,
- Experimental manipulations of ecosystems
- Trace element biogeochemistry and ecosystem impact,
- Applications of isotopes and tracers,
- Bio-energy production impacts in forested systems,
- Biogeochemical aspects of ecosystem restoration and rehabilitation,
- Ecosystem services and management.

The URL for the conference web page is:
<http://www3.villanova.edu/conferences/biogemon/index.html>

+ + + + +

9th ISEG - International Symposium on Environmental Geochemistry

Organized by the University of Aveiro in Portugal, **ISEG9** – the 9th International Symposium on Environmental Geochemistry will be held at the University of Aveiro from 15-21 July 2012 in Aveiro, Portugal. This event is a joint organization of the GeoBioTec Research Center and the CESAM Associated Laboratory, and is supported by the IAGC, the Society of Environmental Geochemistry and Health (SEGH), and the International Medical Geology Association (IMGA). As with previous ISEG meetings, contributions from all fields of environmental geochemistry and health are welcome. However, the main themes of the conference are:

- Geochemical records of environmental changes: climate changes and human activities
- Sustainability in Mining and Related Environmental Issues
- Geochemistry and Health & Medical Geology
- Environmental Toxicology & Epidemiology
- Environmental contamination and remediation
- Water resources and aquatic environments
- Biogeochemistry of trace elements, organic pollutants and radio-nuclides
- Environmental Analytical Geochemistry
- Modeling Environmental Systems: GIS platforms and Data Analysis
- Perception and communication of environmental health risks and social inequality

The URL for the conference web page is:
9iseg.web.ua.pt/web/index.php

+ + + + +

2012 GSA Annual Meeting

As an Affiliated Society, the IAGC continues to have a strong presence and involvement in the Geological Society of America Annual Meeting. This year the meeting will be held in Charlotte, NC, USA 4-7 November, 2012.

The IAGC will be sponsoring 6 technical sessions at this international conference, so please consider submitting an abstract to one of our sessions. The URL for the GSA annual meeting is:

<http://geosociety.org/meetings/2012/>

T1. Sources, Transport, Fate, and Toxicology of Trace Elements and Organics in the Environment

Conveners: David T. Long, W.B. Lyons, & LeeAnn Munk

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.

T7. Progress in Forensic Geochemistry

Conveners: Russell Harmon & Jose R. Almirall

The scope of forensic geochemistry has expanded due to rapid development of analytical tools for elemental and isotope ratio analyses. This session covers geochemical approaches to tracing environmental contaminants, materials provenancing, and other forensic applications.

T8. Hydrochemistry and Biogeochemistry of Tropical Mountainous Rivers and Estuaries

Conveners: Steven Goldsmith, Russell Harmon, & Ryan Moyer

This session seeks contributions that examine the hydrochemistry of tropical mountainous rivers and/or the biogeochemical cycling and fluxes of material delivered by tropical mountainous rivers to their associated estuarine and coastal waters.

T9. Geochemistry of Urban Environments

Conveners: W.B. Lyons, David T. Long, & Russell Harmon

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

T67. Innovative Classroom Approaches to Teaching Biogeochemistry

Conveners: Steven Goldsmith, Sarah K. Fortner, Stephen Levas

This session seeks contributions that entail innovative classroom approaches to teaching biogeochemistry at a variety of levels (K–12, undergraduate, and graduate). Of particular interest are approaches that blend research and classroom experiences.

T129. Advances in Spectroscopy for Geological and Mineralogical Analysis

Conveners: Thomas Tague & Sheila Seaman

This session will focus on the application of a growing variety of spectroscopic techniques to geologic problems and further understanding of structures and properties of minerals, glasses, and other geologic materials.

* * * * *

Meetings in 2013

+ + + + +

14th International Symposium on Water-Rock Interaction

Avignon, France

June 9-14, 2013

www.wri14-2013.fr

----- **Main Themes** -----

Fundamentals of water-rock interactions

- Experiments, theory and modeling of interaction processes between water and rock, minerals or glass
- Simple and complex systems including organic matter and gaseous phases
- Thermodynamics, kinetics and coupled transport phenomena

Specific Environments

- Research in sedimentary, crystalline, volcanic, saline, & arid environments
- Deep, shallow and surface context

Applications and Environmental Hazards

- Mineralization processes and petrogenesis
- Geothermal resources, rock gas recovery, & carbon sequestration
- Industrial contamination, mine tailings, & waste disposal
- Transport of toxic elements and soil remediation
- Water quality and resources

Important Dates

- June 2012 – Second Announcement and call for papers
- October 2012 – Deadline for receipt of manuscripts
- December 2012 – Deadline for early registration
- March 2013 – Final announcement and Program Publication

* * * * *

SPECIAL FEATURES

+ + + + +

REPORT ON THE 9TH INTERNATIONAL APPLIED ISOTOPE GEOLOGY SYMPOSIUM (AIG-9) IN TARRAGONA, SPAIN

Co-sponsored by IAGC, the 9th International Symposium on Applied Isotope Geochemistry (AIG-9) took place in Tarragona, Spain from 18 to 23 September 2011. The organizing committee chaired by Albert Soler and Neus Otero and the local organizing committee from the University of Barcelona (Carme Audi, Raul Carrey, Albert Folch, Massimo Marchesi, Jordi Palau, Roger Puig, Monica Rossell and Clara Torrento) invited isotopists from around the world to a meeting that focused on all applied aspects of isotope science.



The 2000-year old Roman amphitheatre in Tarragona, site of the conference icebreaker.

The venue selected for the meeting was the Ciutat de Tarragona Hotel in historic downtown Tarragona. This small city in the heart of Catalunya, with its historic splendors and World Heritage status, served as the perfect backdrop for scientific and social interactions throughout the week. The meeting provided an intimate setting for 138 scientists from 24 countries to interact in a plenary session lasting four days. The

excellent scientific program centered on seven themes proposed and guided by the scientific committee: Ramon Aravena (University of Waterloo, Canada), Tom Bullen (USGS, USA), Isabel Cacho (University of Barcelona, Spain), Angels Canals (University of Barcelona, Spain), Ian Cartwright (Monash University, Australia), Matthew Fantla (Pennsylvania State University, USA), Neus Otero (University of Barcelona, Spain), Thomas Prohaska (University fur Bodenkultur, Austria), Martine Savard (Geological Survey of Canada, Canada), David Widory (BRGM, France).

These seven themes included:

- Advances in isotope techniques and instrumentation (keynote: Bodo Hattendorf, "Instrumental approaches to improve accuracy and precision of isotope ratio measurements with laser ablation-multicollector ICP-MS"),
- Isotope signals of climate change (keynote: Luke Skinner, "Ventilation of the deep ocean since the last glacial period: carbon cycle impacts"),
- Isotopes in environmental and forensic studies (keynote: Martin Elsner, "Current challenges in isotope studies of environmental contaminants: multi-element isotope analysis and investigations of micropollutants"),
- Using isotopes to unravel biogeochemical cycles (keynote: Christina De La Rocha, "Our current understanding of silicon isotope biogeochemistry and its relevance to reconstructions of the silica cycle"),
- Isotope hydrology (keynote: Bernhard Mayer, "The role of stable isotopes in tracing movement and reactions of CO₂ at geological CO₂ storage sites"),
- Isotope geology (keynote: Avner Vengosh, "An overview of the energy-water quality nexus: using isotopic tools to elucidate the impact of energy production on water resources in the U.S."),
- Isotopes in biological applications (keynote: Thomas Walczyk, "Exploration of human iron metabolism using stable isotope techniques"),

The wide array of oral and poster presentations illustrated the increasingly

broad scope of applied isotope geochemistry and showed how isotopes are providing important new and unique information for unraveling scientific problems.

The IAGC annual awards were also presented to recipients in attendance. IAGC Fellow status for 2011 was awarded to **Avner Vengosh** (Duke University, USA) and **Shaun Frape** (University of Waterloo, Canada) for their important contributions to the field of applied isotope geochemistry. Both new Fellows received their certificates during the conference dinner.



IAGC president Clemens Riemann presents the Fellows certificates to Avner Vengosh (top) and Shaun Frape (bottom).



IAGC Faure Award Committee for AIG-9 presented the award for best student oral presentation to **Geneviève Bordeleau**, INRS-ETE, Canada (“The use of stable isotopes to assess natural attenuation of explosives and to distinguish nitrate sources in groundwater on military training ranges”),

and the award for best student poster presentation to **Stefan Cretnik**, Helmholtz Centre Munich, Germany (“Chlorine and carbon isotope measurements can help assessing the effectiveness of a zero valent iron barrier”). The awards include a \$250 cash prize and a 1-year complimentary IAGC membership.



IAGC vice-president Richard Wanty congratulates Best Student Oral Presentation winner Genevieve Bordeleau (top) and Best Student Poster Presentation winner Stefan Cretnik (bottom).



The social program included the conference icebreaker inside the Roman Amphitheatre with its exceptional views of the Mediterranean Sea, and the conference dinner inside the Roman Circus with its mysterious atmosphere that surrounded the Roman people 2000 years ago. In addition, the mid-conference field trip took participants to the central part of Catalunya and included a visit to a medieval castle and the deep insides of an old potash mine. A large group of accompanying members had an exceptional time visiting a variety of

cultural sites throughout the week while the scientists were busy with conference business.

AIG-9 was fortunate to have several governmental and corporate sponsors in addition to IAGC, including: Gobierno de Espana-Ministero de Educacion, Generalitat de Catalunya-Departament de Territori i Sostenibilitat, Agencia de Residus de Catalunya, Agencia de Gestio d'Ajuts Universitaris i de Recerca, Repsol, Thermo Scientific, Spectromat GMBH, Nu Instruments, Picarro Instruments, Elementar, and Vertex Technics. These sponsors were essential for increasing the involvement of students and participants from disadvantaged countries in the conference.

All participants are grateful for the warm reception provided by the local organizing committee, and congratulate them on their efforts on behalf of fostering scientific communication and the development of new scientific collaborations in an exceptionally friendly atmosphere. Based on the success of this meeting it is clear that AIG is an important conference opportunity that will continue long into the future. Planning has already begun for AIG-10, which is scheduled to occur in 2013 near Budapest, Hungary!

Thomas Bullen
U.S. Geological Survey
On behalf of the AIG-9 Organizing
Committee

* * * * *

News from Elsevier

+ + + + +

Applied Geochemistry.

Faster & Higher Quality Publication

The latest 'Impact Factor' for *Applied Geochemistry* (2010), released June 2011

came in at 2.017. This continues the progressive rise resulting from the excellent work by Executive Editor Ron Fuge over the past several years.

The time from submission to final decision decreased by over 10 weeks for 2012, compared with 2008, whilst time from acceptance to online publication fell by over 3 weeks in the same period.

+ + + + +

Open Access Solutions and Posting Policies with *Applied Geochemistry*

All authors of papers for *Applied Geochemistry* have the option to make their articles 'open access' through the Elsevier "sponsored access option". Authors can only select this option after receiving notification that their article has been accepted for publication to prevent a potential conflict of interest where a journal would have a financial incentive to accept an article. Elsevier's policy is not to charge subscribers for 'open access' content, so when calculating subscription prices content published under the subscription model is taken into account, and that published under 'sponsored access' is excluded. For further information please see: www.elsevier.com/wps/find/authors.authors/sponsoredarticles

Furthermore, all Elsevier authors retain the rights to post a pre-print version of their article on Internet websites including electronic pre-print servers, and/or a revised personal version of the text of the final journal article (to reflect changes made in the peer review process) on personal/institutional websites or servers for scholarly purposes, incorporating the complete citation and with a link to the Digital Object Identifier (DOI) of the article. Elsevier are extremely proud to be categorized as a RoMEO Sherpa "Green" status:

www.sherpa.ac.uk/romeo/search.php

making Elsevier among the most liberal

publishers around when it comes to posting policies. More information is available at the following link:

<http://www.elsevier.com/wps/find/authorsview.authors/rights>.

+ + + + +

Recent Special Issues in *Applied Geochemistry*

“Recent Progress in Environmental Geochemistry - A tribute to Iain Thornton
<http://www.sciencedirect.com/science/publication?issn=08832927&volume=27&issue=5>
Volume 27, Issue 5 (2012).

“Fundamental Processes of Radionuclide Migration in the Geosphere”
<http://www.sciencedirect.com/science/publication?issn=08832927&volume=27&issue=2>
Volume 27, Issue 2 (2012).

+ + + + +

Latest Issue, and Most Downloaded/Most Cited Articles to be added end May: latest issue listing with link to homepage listings for Most Cited/Downloaded

+ + + + +

Applied Geochemistry Supports Google Maps

As an author of *Applied Geochemistry*, in addition to supporting your article/research with movies, videos and audio, you can now further enrich your articles through inclusion of interactive maps. By providing Elsevier with KML files* at submission, we can generate embedded Google Maps within the published online article that are fully interactive.

View a live example from Computers & Geosciences here:

<http://dx.doi.org/10.1016/j.cageo.2010.03.006>.

(cid:image001.jpg@01CD2700.41A97400).

For more information see:

<http://www.elsevier.com/googlemaps>.

* KML files are XML schema for expressing geographic annotation and visualization within Internet-based Earth browsers and can be extracted from GIS.

+ + + + +

Announcing Reciprocal Database Linking Between Raw Datasets in PANGAEA and Articles in *Applied Geochemistry*

Elsevier strongly advocates reciprocal database linking between articles and relevant datasets. This helps authors to enhance their work and its presentation, and puts their article in the context of wider research data where available. At the same time, readers have push-button access to the original and/or related datasets allowing them to gain deeper insights, get a broader overview and draw conclusions faster. *Applied Geochemistry* is enabled for reciprocal linking with the PANGAEA database, (www.pangaea.de/) a publicly funded open-access repository for geoscientific and environmental data based on datasets supplied by the author. Where there are available datasets related to an article, the data supplement at PANGAEA and article are automatically linked, and the reader can navigate to these datasets located at the external repository. We encourage you to deposit data related to your *Applied Geochemistry* article(s) with PANGAEA; please use PANGAEA's web interface (www.pangaea.de/submit/) to do so. We have also created a PANGAEA app in which the geo-location of the data samples is rendered on an interactive Google Map available alongside the article.

A live example from *Geochimica et Cosmochimica Acta* can be viewed at:

[http://dx.doi.org/10.1016/00167037\(95\)00105-9](http://dx.doi.org/10.1016/00167037(95)00105-9).

(cid:image002.jpg@01CD2700.41A97400).

More information is available at:
http://www.elsevier.com/wps/find/authored_newsitem.cws_home/companynews05_01434,

and

http://www.elsevier.com/wps/find/authored_newsitem.cws_home/companynews05_01616.

+ + + + +

The Research Article of the Future

The above initiatives are just two earth science examples from Elsevier's wider 'Article of the Future' project; the ongoing effort to change the way readers interact with journal articles, with a focus on creating clear and interactive presentation, enhancing content and providing full context to help readers to understand and interrogate results. Please view domain specific prototypes and give us your feedback at: www.articleofthefuture.com. Should you have any suggestions of further ways to enhance the online article, please contact your publisher, Katherine Eve k.eve@elsevier.com.

* * * * *

How Many IAGC Members?

Currently, IAGC has 442 dues-paying members. We obtained 119 new members from the GES-9 Working Group meeting in Boulder, CO in June 2011 and 89 new members from the AIG-9 Working group meeting in Tarragona, Spain in September 2011. These members paid for a 1-year IAGC membership for 2012. If you joined the IAGC at one of these meetings, but did not provide a mailing address to receive a print copy of *Elements*, please visit the following page to enter your information:

www.iagc-society.org/queries/IAGC/update_information.html.

So far in 2012, 26 new members have also joined through our website. Welcome to all

new members! Remember, to renew your membership or update your personal information, please visit:

www.iagc-society.org/membership.html.

* * * * *

Welcome New Members

IAGC has added 243 new members over the past year. About two-thirds of this increase came from attendance at GES-9 and AIG-9 and a third from new web site registrations.

Thomas Prohaska
Laureline Bourcier
Anna uczynska
Ramon Aravena
Bill Buhay
John Gibson
Emily Henkemans
Waleed Saeed
Jean Birks
Madeline Rosamond
Jason Venkiteswaran
Macarena Bustamante Acua
Mette M. Broholm
Anne Rautio
Riikka Kietavainen
Nina Kortelainen
Yann Lahaye
Paula Niinikoski
Francois Fourel
B. Emile Boulou-Bi
Anthony Nonell
David Widory
Myriam Demuth
Anko ischer
Karsten Osenbrueck
Jurgen Sultenfu?
Conrad Dorer
Alexander Poser
Shiran Qiu
Alexandra Schulz
Irina Segal
Nataliya Teplyakov
Tiziano Boschetti

Marco Petitta
Luisa Stellato
Gloria Garcia-Tovar
Raymundo Martinez-Serrano
Lhoussaine Bouchaou
Ioan Cociuba
Delia Papp
Juan Jose Gomez-Alday
Josep Mas-Pla
Anna Mencia
Marc Villas
Angels Canals
Isabel Anson
Carme Audi
Meritxell Aulinas Junca
Paul Baudron
Jose M. Carmona
Raul Carrey
Silvino Casta
Isaac Corral
Maria Fe Teijeiro
Albert Folch
Jose Ignacio Garcia Alonso
Antonio Garralon
Jofre Herrero Ferran
Aranzazu Martinez-Aguirre
Francisco Javier Montalvan
Isabel Pascual
Roger Puig
Luz Robredo
Valenti Rodellas
Monica Rosell
Adriana Rossi
GEORGINA VIDAL-GAVILAN
Sara Chlot
Nathalie Perez
Antoine Baillieux
Jordi Palau
Hazel Reade
Marie Noele Croteau
Charles outhitt
Matthew antle
Rosemary Capo
David Clow
Yongwen Gao
Stephen Good

Robert Michel
Julie Sueker
Nathaniel Warner
Yi Yi
Christophe Innocent
Clara Torrento
I?aki Vadillo-Perez
Keir Soderberg
Jan Fietzke
Anja Wunderlich
Megan Andrews
Steven Banwart
Elizabeth Berner
Alex Blum
Jean-Jacques Braun
Kate Campbell
Hu Ding
Anthony Dosseto
Eydis Eiriksdottir
Andmorgan Fisher
Gudrun Gisladdottir
Christopher Gorski
Qingjun Guo
Lixin Jin
Carla Koretsky
Nikolaus Kuhn
Yun Chao Lang
Matthias Leopold
Siliang Li
Congqiang Liu
Lin Ma
Utra Mankasingh
Blaine McCleskey
Christopher Mills
Sheila Murphy
Sophie Opfergelt
Jason Price
Peter Reiners
Marjorie chulz
Clint Smith
Harald Sverdrup
Robert tallard
Andrew Tye
Peter van der Beek
Fushun Wang
Zhifang Xu

Zhiqi Zhao
Mark Chappell
Elizabeth Griffith
Mark Hodson
JoAnn Holloway
Jean Morrison
Mark Noll
Kristin Schirmer
Lesley Warren
Jeff Writer
Robert Anderson
Michelle Barger
Anna Bencokov
Gemma Byrne
Francois Chabaux
Jorge Delgado Martin
Emil Dimitrov
Miriam Duhnforth
Melissa Foster
Jerome Gaillardet
B.W. Goodfellow
Qingjun Guo
Thomas B. Hofstetter
Niels Hovius
Barbara Jessup
Andreas Kappler
Patrick Kelly
Florian Kobierska
Abigail Langston
Darcy Li
Rebecca Lybrand
Amy Lyttle
Andrew MacLeod
Jean-Dominique Meunier
Taylor Mills
Sheila Murphy
Jessica U. Navarrete
Nikolaos Nikolaidis
Eric Oelkers
Samuel Parry
Inge Regelink
Thomas J. Reich
Kathryn Resner
Susan Riggins
Wendy Roth
Marjorie Schulz

Emily Seldomridge
Robert Striegl
Eric T. Sundquist
James PM Syvitski
Kathryn Tindale
Mark Torres
Pauline van Gaans
Jeroen van Leeuwen
Derek Vance
Martina Vitkova
Nicole West
Katherine Wright
Nathan Yee
Kyungsoo Yoo
Anita Zumsteg
Baerbel Hoenisch
William Jesse Hahm
Harry Langford
Nikolaos Paranychianakis
Pascale Louvat
Nils Moosdorf
Paul Behum
Daniel Moraetis
Susanne Arens
Stefano Bernasconi
Diana Karwan
Rachel Gabor
Hartmann Jens
Robert Berner
Elizabeth M. Herndon
Lisa Mayhew
Diego Servida
Laviniu Apostoea
Prafulla Sahoo
Paul Ekwutoziam
Salih Awadh
Omar Mahdy
Edward Muller
Colleen McLean
Melissa Collins
Paolo Romagnoli
Jana Lung
Taryn Noble
Chiara Marieni
Yoichi Matsuzuru
Tundi Newberry

Edward Greiner
Anastasia Ilgen
Luca Fanfani
Andres Navarro
Fernanda Magalhaes
Andrea Pasquini
Kristin Salzsauler
Marina Cuk
Neven Cukrov
Maja Todorovic
Jana Stojkovic
Marina Cuk
Jason Cherry
Joel Moore
Timothy Dee
Jacoby Scher
Dale Sutherland
Alice Du Vivier
Pete Tollan
Jill Ghelerter
Jiancheng Kang
Ned Murphy
Neil Banerjee
Masaharu Sakai

* * * * *

IAGC Governance Change

A meeting of the IAGC Board was held on 21 September 2011 in Tarragona, Spain during the AIG-9 symposium. Participating were President Clemens Reimann, Vice-President Rich Wanty, Treasurer Berry Lyons, plus Council Members Ian Cartwright, Martine Savard, and Teodora Szocs. Board members not in attendance assigned their proxy vote to one of the attendees.

Berry Lyons reported on the Association budget. The income for 2010 was \$57,580, deriving mainly from royalties, interest on accounts and new memberships associated with the Guanajuato Water-Rock Interaction meeting. Expenses for 2010 were \$40,369, of which ~\$17K was used to run the business office and associated functions, ~\$12K was paid to *Elements*, \$7.5K went to

support the Water-Rock meeting, and \$5.5K was used for awards. Total accounts for IAGC were \$127,805 at the beginning of 2010 and \$142,289 at the end of 2010. As of 7 September 2011 (just prior to the business meeting), there was \$155,646 in all accounts. By comparison, income for 2011 was \$69,595 and expenditures were \$58,426.

Several different issues were discussed during the Board meeting – using the WG meetings to financially underwrite IAGC, an alternative/supplement to the current Student Research Grants Program, the difficulty in getting IAGC Members to respond to the call for award nominations, the Elsevier contract, the likelihood that a new Executive Editor for *Applied Geochemistry* will soon be needed, IAGC within the *Elements* consortium, and the IAGC Working Groups. Two formal decisions were taken by the Board as a consequence of this discussion.

First, it was decided that current chair of the Urban Geochemistry Working Group was declared “not in good standing”, as the group has not met its statutory obligations to IAGC, and that the Working Group Leader would be asked to step down. Then, it was decided that the Working Groups should play more of a role in the operation and future of IAGC. To implement this decision, the Board decided that, going forward, the Working Groups that organize the periodic conferences that constitute the scientific activity of IAGC should have a place on the IAGC Board. For the short term this means that the Leaders of the Water Rock Interaction, Geochemistry of the Earth’s Surface, Applied Isotope Geochemistry, and BIOGEOMON Working Groups will have representation on the IAGC Board, with voting rights, commencing with the Association leadership change scheduled for 2013. Therefore, rather than elect replacements for the four term-limited Council Members,

the size of the elected Council with be reduced from 10 to 6, these Working Group Leaders will assume the vacant seats. This change will be implemented in a revision to the IAGC Statutes and By-Laws that will b brought to the Board for ratification during the latter half of 2012.

* * * * *

Charitable Giving

Members can now make a charitable gift to IAGC, either for general fund support or for special initiatives during online membership renewal. Many thanks to the following members who so far have contributed in 2012:

Charleton Bern
Rafael Cavalcanti de Albuquerque
Rona Donahoe
Mark Engle
Allan Hall
Russell Harmon
David Janecky
Gwen Macpherson
David Naftz
Harue Nakaya
Kirk Nordstrom
Radomir Petrovich
Alan Shiller
Teodora Szocs
William Walker
Rich Wanty

You may also donate at any time online at <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).

+ + + + +

Kharaka Fund Appeal

Based upon an initial gift from Yousif Kharaka, a dedicated IAGC Member and mainstay of the Water Rock Interaction Working Group, the IAGC Board in 2009

established the **IAGC Y. K. Kharaka Award** that annually will be bestowed on 3 deserving scientists (which may include senior graduate students) from developing countries. The award will consist of a framed certificate plus an IAGC membership and *Applied Geochemistry* subscription for a term of three years. It was also decided by the Board that the initiation of the award would be delayed until a fund of \$5000 was raised and invested to create a sustainable situation.

As the Newsletter goes to press, there is just about \$2300 in the Kharaka Award Fund. This means that only another \$2700 is needed. So, if each IAGC Member would make a charitable donation of only \$7 at the time of membership renewal at the end of this year, then it would be possible to make the inaugural set of Kharaka Awards in 2013. Alternatively, 60 Members each making a charitable gift of \$50 right now through the IAGC web site would realize this fund raising goal.

<http://www.iagc-society.org/donate.html>

* * * * *

ACS Geochemistry Division Medal - Call for Nominations

The Division of Geochemistry of the American Chemical Society is currently soliciting nominations for the 7th awarding of the Geochemistry Division Medal. The GEOC medal is awarded biennially to an individual for outstanding accomplishment in any area of Geochemistry.

Previous GEOC medal winners include: Frank J. Millero (2001), John M. Hayes (2003), Patrick G. Hatcher (2005), Robert C. Aller (2007), and Fred T. MacKenzie (2009), and John A. Tossell (2011).

The award consists of a bronze medallion plus \$2000. The awardee will receive an allowance for travel to the award ceremony, as well as registration costs for the ACS meeting at which the award will be conferred. The 7th Geochemistry Division Medal will be presented at the 245th ACS National meeting to be held in New Orleans, LA, 7-11 April 2013.

Letters of Nomination and supporting materials should be sent to the Chair of the GEOC Medal Committee, Dr. Douglas Kent, at the email address given below, by 1 June 2012.

Nominations should be sent electronically and include a detailed description of the nominee's outstanding accomplishments, relevant citations and, at the discretion of the nominator, any other supporting information. Two letters from individuals other than the primary nominator are requested, but not required. Nominators should confirm, prior to submission of the nomination, that the nominee is willing to be considered for the award. Nominees are considered for two award cycles. Thus, new nominations, reviewed for the 2013 award and that are not successful, will be automatically reconsidered in the next award cycle (nominators will be contacted and invited to submit additional or updated information). Additional details of the award can be found at the Divisional web site at:

geochemistrydivision.sites.acs.org

Dr. Douglas Kent
Chair, GEOC Medal Committee
U. S. Geological Survey, Menlo Park, CA, USA
Tel: 1 605 329 4461 Fax: 1 605 329 4545
dbkent@usgs.gov

* * * * *

Urban Geochemistry Working Group

The IAGC is re-forming the Urban Geochemistry Working Group under the

leadership of Dr. Berry Lyons (The Ohio State University, USA) and Dr. David Long (Michigan State University, USA).

To kick off this new working group, Dr. Lyons and Dr. Russell Harmon (US Army Corps of Engineers) will be guest editors for the December 2012 issue of *Elements*, which will feature Urban Geochemistry as the thematic topic.

Additionally, Berry and Dave will be co-chairing an Urban Geochemistry session at the annual Geological Society of America (GSA) meeting in November 2012 in Charlotte, North Carolina (USA).

If you would like to be involved with this exciting newly reorganized working group, please contact the IAGC Business Manager, Chris Gardner, at iageochemistry@gmail.com.

* * * * *

Berry Lyons - The IAGC Ingerson International Lecturer for 2013



The IAGC Ingerson International Lecture is based on a bequest by Dr. Earl Ingerson, first President of the Association. The Lecturer is selected for odd-numbered years. The selection for 2013 is Prof. W. Berry Lyons of The Ohio State University, who will deliver his lecture at the 14th Water-Rock Interaction Symposium in Avignon, France. After that, Berry will be available during 2013 & 2014 for seminars at

academic and research institutions on the basis of expenses-paid invitation.

* * * * *

The IAGC Membership Profile

The table below shows the nationalities of all 858 IAGC members, past and present, in the current database. Clearly, the Association draws most of its membership from North America & Europe and really needs to do a better job attracting members from Central & South America, Africa, and SE Asia.

United States	298	35%
Canada	77	9%
Spain	44	5%
Mexico	43	5%
Germany	39	5%
United Kingdom	39	5%
France	37	4%
China	32	4%
Australia	31	4%
Switzerland	21	2%
Japan	18	2%
Italy	17	2%
Sweden	15	2%
Hungary	11	1%
India	11	1%
Russia	11	1%
Netherlands	10	1%
Iceland	8	1%
Israel	8	1%
Brazil	7	1%
Finland	7	1%
Greece	6	1%
Austria	5	1%
Chile	5	1%
Norway	5	1%
Poland	5	1%

Romania	5	1%
Belgium	4	0.5%
Czech Republic	4	0.5%
Denmark	3	0.4%
South Africa	3	0.4%
Egypt	2	0.2%
Ethiopia	2	0.2%
Korea	2	0.2%
New Zealand	2	0.2%
Portugal	2	0.2%
Slovenia	2	0.2%
Argentina	1	0.1%
Botswana	1	0.1%
Bulgaria	1	0.1%
Croatia	1	0.1%
Ecuador	1	0.1%
Hong Kong	1	0.1%
Indonesia	1	0.1%
Malawi	1	0.1%
Malaysia	1	0.1%
Mongolia	1	0.1%
Morocco	1	0.1%
Namibia	1	0.1%
Qatar	1	0.1%
Saudi Arabia	1	0.1%
Serbia	1	0.1%
Turkey	1	0.1%

* * * * *

OBITUARY

Ignacio Torres (1964-2012)



Our dear friend and colleague **Ignacio Torres** passed away unexpectedly on January 15, 2012 after a routine medical check-up at the age of 47. Ignacio S. Torres Alvarado, or 'Nacho' as called by his friends, leaves behind his wife Gaby and two children. We are deeply shocked by this tragic incident. Ignacio was born in November 1964 in Torreón, State of Coahuila in Northern Mexico. In 1988, he graduated as a Geology Engineer with honorable mention from the National Autonomous University of Mexico (U.N.A.M.) with his thesis: "Petrography, Mineragraphy, X-ray and Fluid Inclusion Studies at the Northern Zone of the Geothermal Feld of Los Azufres, Michoacán." Ignacio continued his academic career in Germany, where he concluded a 1-year-specialty program about "Geohydrology and Geotechnical Issues in Tropical and Subtropical Regions" at the Eberhard Karls University of Tübingen (1988-1989). From November 1989 to October 1990, Ignacio was hired as junior researcher at the Institute for Electrical Research (IIE) in Cuernavaca, Mexico. He returned to Tübingen in 1996 to conclude his doctoral studies with M. Satir and P. Metz at the Institute for Mineralogy,

Petrology and Geochemistry about "Water-rock interactions at the geothermal field of Los Azufres, Mexico: "Mineralogical, Thermochemical, and Isotopic-geochemical investigations". Ignacio returned to Mexico to start a thriving academic career at the Center for Energy Research (Centro de Investigación en Energía, CIE) of the U.N.A.M in Temixco, Morelos State, Central Mexico, first as associate (1997-2002) then as permanent professor (2003-2012) in geothermal studies. Since February 2009, he has served as the Academic Coordinator of the post-graduate program at CIE.

Ignacio received awards from several societies throughout his career, such as the Gabino Barreda Medal from UNAM, selection as member of the Mexican Academy of Science (AMC), and the National System for Scientists (SNI), and election as President of the Mexican Institute for Geochemistry (INAGEQ) from 2002 to 2004. As recognition of his active participation in IAGC's Water-Rock Interaction (WRI) working group, in 2010 he received the Friend of Water-Rock Interaction Award. During his young career, he published several dozens of journal papers, book chapters, extended abstracts and registered patents, mainly related to mineralogical, geochemical and isotopic issues in hydrothermal systems.

Nacho was anxious to support and enhance the use of renewable energy in Mexico, which is also reflected in the establishment of the Bachelor's program on renewable energy at CIE. He was known for his open manner of interacting with people. His ample international network of private contacts and professional collaborators represent an exceptional example for productive worldwide relations. Ignacio will be especially missed by his Mexican and German friends.

- Thomas Kretschmar



www.wri14-2013.fr

14th International Symposium on Water - Rock Interaction

Avignon, France
June 9-14, 2013

Venue : Palais des Papes

MAIN TOPICS

Fundamentals of water-rock interactions

Experiments, theory and modeling of interaction processes between water and rock, minerals or glass
Simple and complex systems including organic matter and gaseous phases
Thermodynamics, kinetics and coupled transport phenomena

Specific environments

Research in sedimentary, crystalline, volcanic, saline and arid environments
Deep, shallow and surface context

Applications and environmental hazards

Mineralization processes and petrogenesis
Geothermal resources, rock gas recovery, carbon sequestration
Industrial contamination, mine tailings, waste disposal
Transport of toxic elements and soil remediation
Water quality and resources

June 2012

Second announcement and call for papers

October 2012

Deadline for receipt of manuscripts

December 2012

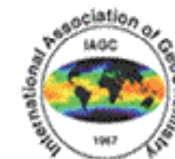
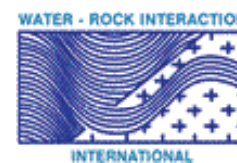
Deadline for early registration

March 2013

Final announcement and Program publication

Université Claude Bernard  Lyon 1

UPMC
SORBONNE UNIVERSITÉS



IAGC Executive Officers

PRESIDENT

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

VICE-PRESIDENT

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

PAST-PRESIDENT

Russell S. Harmon
Department of Marine, Earth and
Atmospheric Sciences
North Carolina State University
Box 8208
Raleigh NC 27695 USA
Email: rsharmon@unity.ncsu.edu

TREASURER

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

SECRETARY

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

JOURNAL EDITOR

Ron Fuge
Institute of Geography and Earth
Sciences University of Wales
Aberystwyth
Ceredigion, SY23 3DB UK
Email: rrf@aber.ac.uk

* * * * *

IAGC Council Members

Rona J. Donahoe
Department of Geological Sciences
The University of Alabama
Tuscaloosa, AL 35487-0338 USA
Email: rdonahoe@geo.ua.edu

Nancy Hinman
Department of Geology
32 Campus Dr., MC 1296
University of Montana
Missoula, MT 59812-1296 USA
Email: nancy.hinman@umontana.edu

Harue Masuda
Department of Geosciences,
Osaka City University
Sumiyoshi-ku, Osaka 558-8585
JAPAN
Email: harue@sci.osaka-cu.ac.jp

Zhonghe Pang
Institute of Geology & Geophysics
Chinese Academy of Sciences
P.O.Box 9825, Beijing 100029
CHINA
Email: z.pang@mail.iggcas.ac.cn

Ian Cartwright
School of Geosciences
Monash University
Clayton Vic. 3800 AUSTRALIA
Email: ian.cartwright@monash.edu

Janet Herman
Department of Environmental Sciences
University of Virginia
Charlottesville, VA 22904-4123 USA
Email: jherman@virginia.edu

Martine Savard
NRC/GSC
490 de la Couronne
Quebec G1K 9A9
CANADA
Email: msavard@nrcan.gc.ca

Thomas Kretzschmar
Geology Department- CICESE
Carretera Tijuana-Ensenada No 3918
Ensenada, BC, CP 22860 MEXICO
-or-
PO Box 434843
San Diego CA 92143-4843 USA
Email: tkretzsc@cicese.mx

Philippe Negrel
BRGM
3 Avenue Claude Guillemin,
45060 Orléans
Cedex 2 FRANCE
Email: p.negrel@brgm.fr

Teodóra Szócs
Geological Institute of Hungary
Stefania ut 14
PO Box H-1442 Budapest,
Pf 106 Hungary
Email: szocst@mafi.hu

* * * * *

Working Group Leaders

APPLIED ISOTOPE GEOCHEMISTRY

Martine Savard
NRC/GSC
490 de la Couronne
Quebec G1K 9A9
CANADA
E-mail: msavard@nrcan.gc.ca

BIOGEOCHEMISTRY

Martin Novak
Department of Geochemistry
Czech Geological Survey
Prague 1 CZ-118 21 CZECH
REPUBLIC
Email: martin.novak@geology.cz

GEOCHEMISTRY OF THE EARTH'S SURFACE

Sigurdur Reynir Gislason
Institute of Earth Sciences
University of Iceland
Askja, Sturlugata 7 101
Reykjavik ICELAND
Email: sigrg@raunvis.hi.is

GLOBAL GEOCHEMICAL BASELINES

David B. Smith
U.S. Geological Survey
Denver Federal Center
Box 25046, MS 973
Denver, CO 80225 USA
Email: dsmith@usgs.gov

WATER-ROCK INTERACTION

Halldór Ármannsson
ÍSOR, Iceland Geological Survey
Grensásvegur 9 108
Reykjavik ICELAND
Email: halldor.armannsson@isor.is

* * * * *

BUSINESS OFFICE MANAGER

Chris Gardner
275 Mendenhall Laboratory
125 South Oval Mall
Columbus, OH 43210 USA
Email: iageochemistry@gmail.com

* * * * *