



UQAM

Plenary Speakers at Goldschmidt 2012

Bernard Bourdon (ENS Lyon, EAG President)

Robert Howart (Cornell University)

Terry Engelder (Pennsylvania State University)

Lee Kump (Pennsylvania State University)

Larry Cathles (Cornell University)

Patrice Christmann (BRGM)

Ros Rickaby (University of Oxford, 2012 Gast Lecturer)

GOLDSCHMIDT 2012

The V.M. Goldschmidt 2012 Conference will be held at the Palais des Congrès in Montréal, June 24–29, 2012, under the general theme “Earth in Evolution.” Nearly 2900 abstracts have been submitted for 167 sessions within 23 diverse themes, such as “Evolution of the Solar System,” “Geomicrobiology,” “Earth Resources,” and “Geoengineering and Remediation.”

AWARDS TO BE PRESENTED AT GOLDSCHMIDT 2012

GEOCHEMICAL SOCIETY



2012 Goldschmidt Medal: **Edward M. Stolper** (California Institute of Technology)



2012 Patterson Medal: **Stefan Schouten** (Royal Netherlands Institute for Sea Research)



2012 Clarke Medal: **David T. Johnston** (Harvard University)

EUROPEAN ASSOCIATION OF GEOCHEMISTRY



2012 Urey Medal: **Alexander Halliday** (University of Oxford)



2012 Houtermans Medal: **Frédéric Moynier** (Washington University in St. Louis)



2012 Science Innovation Award in Biogeochemistry (Lowenstam Medal): **Katherine Freeman** (Pennsylvania State University)

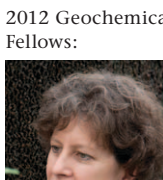


Daniel Sigman (Princeton University)

GS/EAG



2012 Gast Lecturer: **Ros Rickaby** (University of Oxford)



2012 Geochemical Fellows:

Susan L. Brantley (Pennsylvania State University)



James Farquhar (University of Maryland)



Andrew Gleadow (University of Melbourne)



Timothy L. Grove (Massachusetts Institute of Technology)



Bjørn Jamtveit (University of Oslo)



Hans Keppler (Universität Bayreuth)



Lee R. Kump (Pennsylvania State University)



Mark D. Kurz (Woods Hole Oceanographic Institute)



Kevin D. McKeegan (University of California – Los Angeles)



Andrew Putnis (Universität Münster)

MINERALOGICAL SOCIETY OF AMERICA



2012 Dana Medal: **Roberta L. Rudnick** (University of Maryland)

INTERNATIONAL ASSOCIATION OF GEOCHEMISTRY



2012 IAGC Fellowship: **Susan L. Brantley** (Pennsylvania State University)



2012 Vernadsky Medal: **Robert A. Berner** (Yale University)

OTHER AWARDS



2012 Shen-su Sun Award: **Di-Chen Zhu** (China University of Geosciences – Beijing)



European Association of Geochemistry

www.eag.eu.com

2012 EAG MEDALLISTS

Alex Halliday, FRS, Recipient of the Urey Award



Alex is currently the head of the Mathematical, Physical and Life Sciences Division at Oxford University. Through his development of MC-ICPMS technology, Alex pioneered a revolution in the determination of natural isotope systems. He identified and exploited a series of short-lived radionuclides, including Hf–W, to provide powerful new constraints on the early evolution of the inner solar system, and he is responsible for renewed worldwide interest and activity in cosmochemistry. He has made major contributions to understanding

oceans and climate through the study of coral and ferromanganese crusts. His enthusiasm, support and promotion not just of geochemistry but of the geosciences at large have done much to raise the profile of our field within the wider scientific community. The Urey Award is bestowed annually by EAG for outstanding contributions advancing geochemistry over the recipient's career.

Frédéric Moynier, Recipient of the Houtermans Award



The EAG is proud to announce that Frédéric Moynier has been selected as the 2012 Houtermans medallist. Frédéric is originally from Provence, France. He received his bachelor's degree and a PhD from the École Normale Supérieure de Lyon. After graduation in 2006, he did a post-doc at the University of California, Davis, before being appointed as assistant professor at Washington University in St Louis. Frédéric has made major contributions towards improving our understanding of the early solar system, the early differentiation of the

Earth, the origin of the volatile elements in terrestrial planets, mass-independent isotope fractionation mechanisms, and nucleosynthesis and stellar environments during the birth of our solar system. The Houtermans Award is bestowed annually on a scientist no more than 35 years of age or within 6 years of the PhD for a single exceptional contribution to geochemistry.

Kate Freeman and Daniel Sigman, Co-recipients of the Science Innovation Award

Katherine H. Freeman and Daniel M. Sigman are the 2012 co-recipients of the EAG Science Innovation Award, a medal named in honour of Heinz Lowenstam for his contributions to biogeochemistry.



Kate Freeman is a professor of geosciences at the Pennsylvania State University, USA. She has been recognized for her role in the development of compound-specific isotope analysis and the subsequent application of this technique to a diverse range of problems, including topics in biogeochemistry, microbial geochemistry, palaeo-oceanography, and palaeobotany.



Danny Sigman is the Dusenbury Professor of Geological and Geophysical Sciences at Princeton University, USA. He has been recognized for his innovations in the development of techniques for the determination of nitrogen and oxygen isotopes in nitrogen-bearing compounds in nature and, importantly, the application of these techniques to understanding the dynamics of the carbon cycle through glacial/interglacial intervals.

Both individuals stand out in their generation of biogeochemists; their contributions and scholarship have profoundly shaped their field of research and have provided exciting opportunities for the next generation of biogeochemists.

Full details are available at www.eag.eu.com/awards

Geochemical Perspectives

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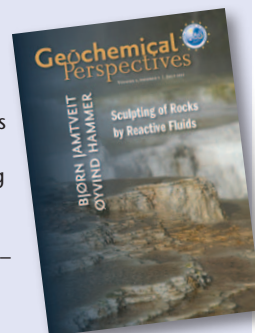
BJØRN JAMTVEIT
ØYVIND HAMMER

Sculpting of Rocks
by Reactive Fluids

COMING SOON!

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The sculpting of rocks by reactive fluids produces many interesting and often beautiful patterns. Examples range from botryoidal aggregates and stromatolites grown from stagnant fluids to travertine terraces and karst morphologies shaped, at least in part, by flowing fluids. Intimate coupling among growth, dissolution, transport and stress, generating volume changes, is often important in porous rocks, and these coupled processes also produce fascinating replacement patterns that provide valuable information about fluid–rock interactions at depth. This issue emphasizes similarities between patterns formed in a wide range of fluid–rock systems and focuses on the controlling role of processes rather than materials.



MY EAG TOUR THROUGH CENTRAL EUROPE



Karim Benzerara

Leaving the institute and the students for ten days in November! At first this sounded like a dreadful idea. However, the Distinguished Lecture Tour organized by the EAG has been a wonderful experience that will long stand out in my mind. This was a unique

opportunity for unforgettable encounters with scientists, now friends, around Europe. Taking this time to meet scientists abroad, exchange experiences, and share our not-so-different points of view on diverse research systems was refreshing, valuable and very instructive.

The trip started in Prague, Czech Republic, the scene of the last Goldschmidt Conference. Martin Mihaljevic and Martin Novak organized my stay there. I gave two talks: one at Charles University and one at the Geological Survey. I will remember from Prague the interesting visit to the facilities of the mineralogy department of Charles University; the pleasant dinners and lunches with Czech colleagues (do they always involve that much beer?); and the romantic streets and bridges of Prague.

After the Prague weekend, I flew to Budapest, Hungary. Csaba Szabó kindly welcomed me at the airport late in the evening. The next day, escorted by Csaba and Mihály Pósfai, I had an exciting tour of the new facilities at the Eötvös University. After my talk in a huge room that was well populated, especially by young people, despite the competing Science Week at the university, I had a very friendly dinner in a restaurant located "in the middle of nowhere". What a refreshing recollection!

I then flew to Bucharest, Romania. This was my first time there. I have always been curious about Romania because of the close historical connections between France and Romania. Madalin Enache welcomed me at the airport. I was hosted like a king in a beautiful hotel facing the Romanian Academy. The next day, I gave two talks in a row at the Academy in a beautiful lecture room, which I would guess dated from the late 19th century or so. Madalin took me for lunch and then for a walk around Bucharest. I discovered a restless city with a very unique appeal: Orthodox churches with a very evocative atmosphere inside; some very old, degraded but charming buildings cohabiting with huge grey buildings from the Communist period.

My last stop was in Bratislava, Slovakia. Here, I had a unique and wonderful welcome by Bronislava Lalinska. Bronislava, together with Peter Sottnik and their partners and friends, took me for dinner in a kind of pub-restaurant. After a very enjoyable dinner, I attended a concert by a Czech funk band: JAR. This was of course completely different from our Budapest or Bucharest evenings but equally thrilling. The next day, after my talk, I visited the Comenius University and the geology and mineralogy departments. Noticeably, because of Science Week, there were dozens of high school students in the halls of the university presenting their science projects, dealing with topics as diverse as the formation of bone or a robot able to move around obstacles. This is definitely a nice way to introduce high school students to the university for a week, and I promise that I will someday suggest a similar event here in Paris.

Despite the difficulties that everybody recognizes when coming back to the office after several days of absence, the sweet memories of all these encounters provided me with serenity and detachment for almost a week. I am sure that I will see again each of these persons, maybe for future collaborations or just a dinner at a conference or in Paris. For all of this, I wish to thank the EAG Council and Marie-Aude (EAG business manager): my tour was a humanistic and enriching adventure.

Karim Benzerara

EAG Distinguished Lecturer 2011

EAG AT THE EGU: EMINENT SPEAKERS AND CO-SPONSORED SESSIONS

At this year's EGU meeting in Vienna (22–27 April), the EAG will present two scientists with the distinction of Eminent EAG Speaker. The recipients will give an invited talk and receive a 500-euro personal honorarium.

The two Eminent Speakers are Dr. Kirsten Küsel of the Institute of Ecology at the Friedrich Schiller University Jena, Germany, and Dr. Martin Van Kranendonk of the Australian Center for Astrobiology, University of New South Wales, Australia.

Kirsten Küsel is widely recognized for her contributions to the field of geomicrobiology and in particular for her work on how microbes contribute to the global geochemical cycle. She will speak in the session "Nexus between Microbes, Metals and Minerals in the Environment," and the title of her talk is "Cold War Biogeochemistry: Microbes as Architects for Metal Attenuation."

Martin Van Kranendonk is well known for his contributions to our understanding of geological and geochemical conditions on the early Earth. He will give a presentation entitled "Two Types of Archean Continental Crust: Plume and Plate Tectonics on Early Earth" in the session "Origin and Evolution of Earth's Crust and the Formation of a Habitable Planet," co-sponsored by the EAG.

In addition, the EAG is proud to co-sponsor a number of other sessions at the 2012 EGU meeting:

- Subduction Processes: Geochemical Inputs and Outputs
- Deep Mantle Mineralogy, Geochemistry and Geodynamics
- Elements Critical to 21st Century Economies

Finally, we invite you to visit the EAG at booth 14.

"The most exciting phrase to hear in science, the one that heralds new discoveries, is not 'Eureka!' but 'That's funny ...' " – Isaac Asimov (1920–1992). In the definite hope of heralding new discoveries, we present the first installment of the new EAG comic strip series. It will be a humorous look at the current world of science from a geochemist's point of view, which we will develop into a multi-issue story that will shake the very foundations of the science establishment – possibly.

