



# European Association of Geochemistry

[www.eag.eu.com](http://www.eag.eu.com)

## THE PRESIDENT'S CORNER

### A New Start



Bernard Bourdon

We are a few months away from the Goldschmidt meeting in Prague, and I have just stepped in as president of the European Association of Geochemistry. At this time, I would like to thank our past president, Eric Oelkers, for his tireless efforts over the past few years on behalf of the EAG – he leaves our society in an extremely healthy state. Under Eric's leadership, the Council has embarked on a number of important initiatives, such as the organization of workshops for young scientists on specific geochemical methods and lecture tours by distinguished scientists in our community. As of January 2011, we have a new vice president, Chris Ballentine, and two new Council members, Anders Meibom and Andrea Koschinsky. We are sad to see the departure of François Chabaux, who has served on the EAG Council for the last 3 years.

A key challenge to the EAG will be the successful organization of Goldschmidt meetings in the next few years. Our new model for running Goldschmidt meetings is based on efficient multi-year planning and supporting new convenors by providing corporate memory regarding past meetings. If you think that your city would make a good conference venue for the Goldschmidt and if it has a sizeable conference centre, please do not hesitate to contact our business office.

To maintain a vibrant society, we need input and help from all members. Thus, we welcome all interested persons willing to contribute to our activities or to promote new European initiatives in geochemistry. Among the new challenges we face is a pressing need for the EAG and the Geochemical Society to more fully integrate the geochemistry community outside of Europe and North America in our meetings.

**Bernard Bourdon**  
EAG President

## EAG SHORT COURSE SERIES

### Process-Oriented Biogeochemical Modelling in Aquifers – Recent Practice and Limitations

Groundwater Research Center, Dresden, Germany, 22–26 August 2011 (just after the Goldschmidt 2011 Conference in Prague)

#### Scientific program

The workshop will give participants the opportunity to better understand the possibilities and limitations in applied geochemical modelling. The focus will be on geochemical low-temperature processes affecting groundwater as a result of human activities. The subject matter includes chemical contamination and technological restoration methods. The workshop lectures will cover the scientific state, fundamentals, and recent applications of modelling geochemical processes in aquifers. In the second part of the course, participants will have the opportunity to demonstrate their own recent work, followed by a discussion of open questions, possible strategies and solutions. To help with workshop preparations, participants should send, prior to the workshop, a one-page abstract about the subject they will present and indicate, for example, the modelling software they use and the questions they would like to see discussed.

#### Target group

This five-day workshop is aimed at PhD students working on modelling complex geochemical processes in aquifers. The maximum number of participants is 12. The workshop language is English.

The cost of the workshop is 300 euros, which includes food and accommodation. If you are interested in participating, please contact Anne Weber ([aweber@dgfz.de](mailto:aweber@dgfz.de)). The registration deadline is 30 June 2011.

This course is organized by **Anne Weber** and **Claudia Helling**, Groundwater Research Center, and it is sponsored by the European Association of Geochemistry.



## GOLDSCHMIDT 2011: FOCUS ON THE SOCIAL PROGRAM AND FIELD TRIPS

The European Association of Geochemistry and the Geochemical Society are very excited about welcoming you to Prague for the Goldschmidt 2011 Conference ([www.goldschmidt2011.org](http://www.goldschmidt2011.org)). In addition to a comprehensive science program, Goldschmidt 2011 offers attractive social and field trip programs.

The social program includes:

- two sightseeing tours of Prague on Saturday and Sunday, August 13 and 14
- a welcome reception on Sunday, August 14
- a concert of classical music at the St. George Basilica on Monday, August 15
- a dinner in the Brevnov Abbey on Tuesday, August 16
- a conference banquet in the Municipal House on Thursday, August 18



Photo: Martin Novak

The field trips include:

- Trip A: Environment West: From UNESCO World Heritage to Communist Legacy, August 12–14
- Trip B: Environment East: National Parks – Castles – Country Houses, August 20–22
- Trip C: Medieval Mining: The Famous Silver Triangle, August 12–14
- Trip D: Bohemian Enigmas: Granulites, Ultrapotassic Magmatites and Tectites, August 20–22

Photos of Prague, field trip locations, and a short video interview with Bernard Marty, Chair of the Goldschmidt 2011 Organizing Committee, can be found at [www.eag.eu.com/goldschmidt2011](http://www.eag.eu.com/goldschmidt2011)

## 2011 EAG MEDALLISTS



**Donald Canfield,  
Recipient of the Urey Award**

Donald Canfield, currently the Director of the Nordic Center for Earth Evolution, is the 2011 recipient of the **Urey Award**, which he received for his outstanding contributions to our understanding of past and present ocean chemistry through a rigorous study of biogeochemical cycles. A distinctive feature of his research is a mastery of global approaches, while not ignoring biogeochemical and sedimentary processes at the smallest scale.



**Maud Boyet,  
Recipient of the Houtermans Award**

The recipient of the 2011 **Houtermans Award** is Maud Boyet of the Laboratoire Magmas et Volcans, Clermont-Ferrand, France. Maud's scientific discoveries changed our view of how our planet has evolved. Using the  $^{146}\text{Sm}$ - $^{142}\text{Nd}$  isotope system as a tracer, she has shown that a large variety of terrestrial materials have compositions that are distinctly different from those of samples from meteorites and neighboring

planets. This difference was interpreted to indicate that our planet either accreted from material with a history different from that of neighboring planetary bodies or underwent major differentiation soon after it formed. She has since extended her studies to the early evolution of the Moon and has presented evidence that it may have formed from previously differentiated terrestrial mantle.



**Kei Hirose, Recipient of the Science Innovation Award**

The 2011 EAG Science Innovation Award, given in honor of **Ted Ringwood**, is presented to Kei Hirose of the Tokyo Institute of Technology. Kei has been recognized for his many pioneering contributions to ultrahigh-pressure mineral physics, in particular for his discovery (with Motohiko Murakami and coworkers) of the post-perovskite phase transition in the lowermost mantle. Post-perovskite is now believed to occur

at many locations close to the core-mantle boundary, and it plays a key role in the dynamics of our planet. The post-perovskite discovery is very much in the tradition of Ted Ringwood, after whom the medal is named; Ringwood first showed that major seismic discontinuities in the mantle can be related to structural phase transitions.



**Victoria Orphan,  
Recipient of the Gast Lectureship**

Victoria Orphan, an assistant professor at Caltech, is the 2011 awardee of the **Gast Lectureship**. Victoria Orphan's research focuses on the geobiology and microbial ecology of anoxic, benthic marine environments, including deep subsurface habitats, marine sediments, oil and gas seeps, and early Earth analogue environments. Employing a combination of molecular techniques, geochemistry, and

microscale stable isotope analysis, Orphan and her group are elucidating the metabolic links between microorganisms and their isotopic biosignatures associated with the cycling of C, N, and S in these ecosystems.

Full info at [www.eag.eu.com/award/](http://www.eag.eu.com/award/).

**ABOUT ALFRED EDWARD  
RINGWOOD, 1930-1993**



The 2011 **EAG Science Innovation Award** honors Ted Ringwood for his work in petrology and mineral physics. Alfred Edward "Ted" Ringwood was a prolific geochemist whose ideas shaped modern views of magma genesis, the formation and differentiation of the Earth, and the chemistry and structure of the Earth's interior. Ringwood received his PhD from the University of Melbourne in 1956. After working with Francis Birch at Harvard he joined the Australian National University in 1959, where he remained throughout his career. He played the lead role in the formation of the Research School of Earth Sciences at ANU in 1972 and served as its director from 1978 to 1983. As Professor of Geochemistry, Ringwood combined experimentation with the principles of crystal chemistry to develop theories for the formation and evolution of the Earth and Moon. His ideas were grounded by an observational perspective developed through many years of investigating meteorites and basaltic rocks. Having studied during the period when the main concepts of plate tectonics were being

established, Ringwood searched for the mechanisms connecting the dynamics of the Earth's interior with its surface expression. Using high-pressure and high-temperature experiments, Ringwood and his colleagues investigated the mineralogy of the Earth's mantle, developed the link between pressure-induced mineral phase transformations and increments in the velocity of seismic waves within the Earth, and framed the main concepts concerning the dynamics and fate of subducting lithosphere. Ringwood also applied his experimental and mineralogical expertise to industrial and environmental problems. In 1979 he proposed the synthetic rock, or SYNROC, concept for the safe encapsulation of nuclear waste products in resistant, highly stable mineral assemblages.

Ringwood produced a remarkable collection of original research, preserved in over 300 scientific papers and two textbooks. His far-reaching influence can still be experienced as his infectious fascination with the Earth and Solar System pervades his written works.