

THIS ISSUE

Sulfur means different things to different people. For the economic geologist, sulfides can indicate potentially interesting mineralization; volcanologists use sulfur gas emissions to learn more about volcanoes; and many Earth scientists use sulfur isotope data to decipher the story of the Earth and other planets. Guest editor Charles Mandeville illustrates the versatility of sulfur in Earth science through six invited contributions.

Open access has many implications for the future of publishing and societies. Read the essay by MSA president John Brady on open access on page 118: publishing on the Internet is far from free, and open access simply shifts the costs from the users to the authors.

ELEMENTS FIFTH ANNIVERSARY

Elements' fifth anniversary will be highlighted at the three upcoming meetings mentioned below. Organizers have taken different tacks, and each venue will offer a unique approach.

Goldschmidt 2010 – Knoxville, Tennessee

Bruce Watson and Mike Hochella are convening a symposium entitled "Geochemistry Far from Equilibrium (A Session Celebrating the 5th Anniversary of *Elements* Magazine)." It will explore Earth's chemical processes occurring far from equilibrium at scales ranging from nanometers to kilometers. The keynote speaker will be Reid Cooper (Brown University).

IMA Conference, August 2010 – Budapest

At the International Mineralogical Association (IMA) meeting, an *Elements* plenary lecture is scheduled on each day of the conference. Each lecture will be delivered by an author in a previous issue of *Elements*. These presentations were orchestrated by Ian Parsons and David Vaughan.

SUNDAY, AUGUST 22 – Eva Valsami-Jones
Phosphates and global sustainability

AUGUST 23 – Rod Ewing

"Back-end" of the nuclear fuel cycle: Role of mineralogy in the safe management of radioactive waste

AUGUST 24 – Nigel Kelly

Zircon – More than just a chronometer

AUGUST 25 – Miháli Pósfai

Biomaterial attractions: Magnets in organisms

AUGUST 26 – Nita Sahai
Mechanisms of cellular and biomacromolecular interactions with minerals in humans and animals

AUGUST 27 – Glenn Waychunas

Mineralogy and geochemistry at lower dimensionality: Mineral-water interfaces and nanoparticles

Pardee Keynote Symposium,
2010 GSA Annual Meeting – Denver

The Geological Society of America (GSA) has accepted a proposal by the Mineralogical Society of America and the Geochemical Society to hold a Pardee Keynote Symposium, "Mineral Evolution: The Coevolution of the Geo- and Biospheres," during its 2010 annual meeting. This symposium will highlight *Elements'* Mineral Evolution issue (volume 6, number 1, February 2010) and is scheduled for Monday, 1 November 2010. Guest Editor Robert W. Hazen will act as convenor, and several of the authors who contributed to the Mineral Evolution issue will be invited speakers. The primary goals of the Pardee Keynote Symposia are to highlight significant new research that has an impact on our science and to appeal to a wide, multidisciplinary audience, and only a handful are offered at each GSA meeting.

WELCOMING NEW ADVISORY
BOARD MEMBERS

At the end of 2009, the following advisory board members ended their three-year terms: Roberto Compagnoni, Tim Drever, Maggi Loubser, and Eric Oelkers. We acknowledge their contribution to the life of *Elements* and thank them. We welcome the following new members (current advisory board members are listed on the editorial page in every issue of *Elements*).



Mauro Rosi is a professor of volcanology at the University of Pisa, where he currently serves as director of the Department of Earth Sciences. He uses quantitative field studies of volcanic explosive deposits to elucidate past eruptive

activity and analyze fundamental processes in volcanology. His research focuses on active volcanism, physical volcanology of eruptions, and volcanic hazards assessment. He has acted as an associate editor of the *Bulletin of Volcanology*. He has gained broad experience in the management of volcanic crises around the world and currently serves as a scientific advisor to the national Department of Civil Protection of Italy in volcanic crisis management.



Barbara Sherwood Lollar, F.R.S.C., is a Canada Research Chair professor at the University of Toronto and director of the Stable Isotope Laboratory. Her research interests include contaminant hydrogeology, the source and fate

of CO₂ in sedimentary basins and natural carbon sequestration analog settings, and the biogeochemical cycling of carbon by deep subsurface microbial communities. She has been awarded the NGWA Darcy Distinguished

Lectureship, the Canada Council Killam Fellowship, the E.W.R. Steacie Fellowship, and the NSERC Accelerator Award for research.



Torsten W. Vennemann received his BSc and BSc (Hons) degrees in geology and geochemistry, and his PhD degree (1989) on fluid-rock interactions during high-grade metamorphism from the University of Cape Town, South Africa. Thereafter,

he worked at the University of Michigan, USA (until 1995), focusing on the development of analytical methods and applications of stable isotope geochemistry to ore deposits. At the University of Tübingen, Germany, he became interested in paleoclimate and paleoceanography. At the end of 2002, he was appointed full professor of geochemistry at the University of Lausanne.



Bernard Wood is a research professor in the Department of Earth Sciences, University of Oxford, UK. His research interests are in the application of high-pressure, high-temperature experiments to understanding the structure and evolution

of the Earth. He has applied experiments to problems such as the thermodynamic properties of minerals, geobarometry and geothermometry, the nature of the seismic discontinuities in the mantle, and the factors controlling crystal-melt partitioning of trace elements. Currently his principal interest is the accretion and differentiation of the Earth. He has served as president of the VGP section of the American Geophysical Union and as president of the Mineralogical Society of Great Britain and Ireland.



Jon Woodhead completed his BA and DPhil studies at the University of Oxford before moving to Australia in 1988 to take up a postdoctoral research position at the Australian National University. In 1996 he moved to the University

of Melbourne and has been a research fellow in the School of Earth Sciences since. His interests encompass the broad application of isotope and trace element geochemistry to problems in the Earth and environmental sciences, with emphasis on technique development and innovation in MC-ICPMS and laser ablation technologies. He is currently co-editor-in-chief of *Geostandards and Geoanalytical Research*.

David Vaughan, Hap McSween, Tim Drever, Susan Stipp, and Pierrette Tremblay