

## INTRODUCING THE 2008 EXECUTIVE COMMITTEE

*Elements* is overseen by an executive committee composed of a representative of each of the 14 participating societies. We would like to thank Jeremy B. Fein, Norman M. Halden, Russell S. Harmon, Cliff Johnston, Daniel J. Kontak, Kathryn L. Nagy, and Eric H. Oelkers, who recently completed terms on the Executive Committee. Current members of the committee are introduced below.



**ROBERT BOWELL** is Principal Geochemist for SRK Consulting in Cardiff, Wales. He holds a PhD in geochemistry. His main field of expertise is in the application of geochemistry in mineral processing and mining. He is also an active micromounter and enjoys mineralogy as a pastime. He is the past president of the Association of Applied Geochemists.



**GIUSEPPE CRUCIANI** is an associate professor of mineralogy in the Department of Earth Sciences of the University of Ferrara (Italy). His major research interests are in the crystallography and crystal chemistry of zeolite-like minerals and their synthetic analogues, rock-forming minerals (e.g. micas and melilites), and oxide systems. He is the SIMP representative.



**RODNEY C. EWING** is the Donald R. Peacor Collegiate Professor in the Department of Geological Sciences at the University of Michigan. He is also a professor in the departments of Nuclear Engineering & Radiological Sciences and Materials Science & Engineering. Ewing's research is on radiation effects in minerals and the crystal chemistry of actinide minerals and compounds. He is the past president of the Miner-

alogical Society of America and the International Union of Materials Research Societies. He has received the Dana Medal of the Mineralogical Society of America and the Lomonosov Medal of the Russian Academy of Sciences. He is *Elements'* founding editor.



**RAY E. FERRELL JR.**, past president of The Clay Minerals Society, is the Webster Parish Chapter Alumni Professor in the Department of Geology & Geophysics at Louisiana State University. He served as editor-in-chief for *Clays and Clay Minerals*. He has published on the origin of clay minerals and instrumental analysis techniques. Currently, Ray is exploring ways to increase student learning through the use of multimedia and enjoys grant support to increase minority participation in graduate geoscience programs.



**DAVID A. FOWLE** is an assistant professor in the Department of Geology at the University of Kansas. His research interests range from mineral-metal-bacteria interactions to trace-element cycling in lakes and soils. He currently serves as the secretary of the Mineralogical Association of Canada.



**JOHN M. HUGHES** received an undergraduate degree from Franklin and Marshall College and graduate degrees in Earth sciences from Dartmouth College, and then undertook a predoctoral fellowship at the Carnegie Institution of Washington. Professor Hughes joined the faculty of Miami University in 1981 in the Department of Geology. He served in various administrative positions at Miami and in July 2006, he moved to the University of Vermont, where he serves as provost and senior vice president, and professor of geology. His research is

in the area of X-ray crystallography. John currently serves as the treasurer of the Mineralogical Society of America.



**CATHERINE MÉVEL** holds a CNRS research position at the Institut de Physique du Globe de Paris (IPGP). She is currently managing the European Consortium for Ocean Research Drilling (ECORD) on behalf of 17 countries. She graduated in petrology at the Université Pierre et Marie Curie (UPMC), Paris, in 1975. Her main research interest concerns the generation and evolution of the oceanic lithosphere. She recently focused on serpentinization processes at mid-ocean ridges and their impact on chemical fluxes. She is the past president of the Société Française de Minéralogie et Cristallographie.



**MAREK MICHALIK** is a lecturer at the Institute of Geological Sciences of the Jagiellonian University. He graduated in geology in 1974 from the Academy of Mining and Metallurgy in Kraków and obtained his PhD in 1985 and habilitation in 2002 at the Jagiellonian University in Kraków. He is the president of the Mineralogical Society of Poland, a member of the editorial board of *Mineralogia* (formerly *Mineralogia Polonica*) and a member of the Presidium of the Committee on Mineralogical Sciences of the Polish Academy of Sciences.



**MANUEL PRIETO**, president of the Spanish Mineralogical Society, received his PhD in geology at the University of Madrid, Spain, in 1982. Since 1991 he has been a professor of mineralogy at the University of Oviedo. His research interest is crystallization behavior in low-temperature geochemical systems, particularly nucleation in porous media and mineral-water interactions involving solid solutions. He has co-authored over 70 papers on these topics.

## EDITORIAL (cont'd from page 147)

value of certain kinds of safe science can be huge: Where would we be, for example, without thermodynamic databases? Where would we stand in the climate change discussion if C. D. Keeling had not begun to monitor atmospheric CO<sub>2</sub> at Mauna Loa 50 years ago? Like risky science, safe science can also create new frontiers, but the pathway is fundamentally different: safe science contributes to, among other things, the databases required to develop models that can both unify ideas and stimulate further questions.

It is probably fair to say that some scientists are motivated by living on the edge—doing risky science because of the potential benefit and attention it garners both immediately and in the longer term. Others are more comfortable contributing to a bigger picture that will be assembled at a later time, possibly by a different researcher. I think the history of MPG science encourages us to embrace both philosophies. Cast in purely monetary terms, the analogy of wise investment in the stock market may be appropriate here: we should develop a mixed portfolio; take some chances when the odds and potential gains look good, but stick with some consistent (if seemingly unexciting) performers for the long haul, too.

This “Deep Earth” issue of *Elements* describes science that has had its high-risk aspects (e.g. development of the multi-anvil apparatus in the 1980s and, more recently, the quest for post-perovskite and high-pressure “H-storing” phases). However, it also includes some safer strategies whose importance is undeniable (e.g. measurement of the physico- and thermochemical properties of deep-Earth phases). Interestingly, the science of the deep Earth has opened several frontiers simultaneously: the nature of our planet's deep interior; the fundamental physics of ultra-high pressure; and the technology needed to sustain the relevant P-T conditions and characterize the samples produced. We hope the articles will make compelling reading, whatever your taste in great science.

**Bruce Watson\***  
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\* Bruce Watson was the principal editor in charge of this issue.



**CLEMENS REIMANN** holds an MSc in mineralogy and petrology from the University of Hamburg (Germany), as well as a PhD in geosciences and a DSc in applied geochemistry from Leoben Mining University (Austria). He has worked as a lecturer in mineralogy and petrology and in environmental sciences at Leoben Mining University, as an exploration geochemist in eastern Canada, and in contract research in environmental sciences in Austria. He was chief of an analytical laboratory in an Austrian cement company before joining the Geological Survey of Norway as a senior geochemist. Dr. Reimann is an elected member of the Royal Norwegian Academy of Sciences and currently serves as vice president of IAGC.



**NEIL C. STURCHIO** is a professor of geochemistry and head of the Department of Earth and Environmental Sciences, University of Illinois at Chicago (UIC). He is also the founding director of the Environmental Isotope Geochemistry Laboratory at UIC. He received his PhD in Earth and planetary sciences from Washington University in 1983. His interests include experimental studies of mineral–fluid interactions and kinetic isotopic fractionation, geochemical and isotopic studies of groundwaters, and natural and anthropogenic radioactivity. He has been a member of the Geochemical Society since 1981.



**PETER TRELOAR** received a first degree from the University of Bristol and a PhD from the University of Glasgow. He subsequently spent five years at Cambridge in the electron microscope lab, sparking a career-long interest in microbeam techniques. Two years at the University of Zimbabwe in the early 1980s were followed by a five-year research fellowship in the Himalayan Research group at Imperial College. He has been at Kingston University since 1990, latterly as Reader in Petrology. He served on the Council of the Mineralogical Society for nine years, five as Publications Manager.



**FRIEDHELM VON BLANCKENBURG** is a professor of geochemistry. His interest is in the application of isotope geochemical techniques to current questions in the Earth, environmental, and ocean sciences. He graduated from the Technical University of Berlin and completed his PhD at ETH Zürich, Switzerland. He spent seven years as a research fellow at the universities of Cambridge and Oxford, England, followed by four years as a lecturer at the University of Berne, Switzerland. He moved to Hannover, Germany, in 2001, where his group established a laboratory specializing in cosmogenic nuclide and heavy stable metal (e.g. Fe, Si) isotope studies, mostly related to Earth surface processes.



**MICHAEL J. WALTER** is a reader in the Department of Earth Sciences, University of Bristol, U.K. His research interests are in high-pressure and high-temperature experimental petrology, geochemistry, and mineral physics. He is an EAG councillor.



**MICHAEL WIEDENBECK** has been the president of the International Association of Geoanalysts since 2006. Since 1998 he has managed the ion microprobe laboratory at the GeoForschungsZentrum Potsdam, Germany. He is interested in the development of new reference materials and improved analytical techniques for *in situ* geochemical analyses. In his recent research, he has investigated the influence of atomic-scale structure on the calibration of microanalytical methods.

## EDITORIAL MATTERS

### *This Issue*

As our guest editors point out in their introduction, humankind has always been fascinated by what is below our feet. This issue brings you some of the insights into the nature and properties of deep-Earth phases that have been provided by mineral-physics experiments at extremely high temperatures and pressures.

### *Editorial Meeting at Goldschmidt*

*Elements'* editors will have their yearly meeting on Monday July 14, during the 2008 Goldschmidt Conference in Vancouver. If you see us during the conference, please let us know how we are doing and tell us how we can make *Elements* even more relevant to you. Check the *Elements* display at the MAC and MSA booths, where the managing editor will be spending a lot of her time.

### *Future Topics*

This is the 20<sup>th</sup> issue of *Elements*. We have now covered 20 topics, and many more are waiting. If you feel your area of research deserves a thematic issue, contact one of the editors outlining why this topic is timely and how you would cover the subject (check our proposal form at [www.elementsmagazine.org](http://www.elementsmagazine.org)).

### *Back Issues*

Back issues are now available for sale. Some topics have been particularly popular for seminars and upper undergraduate classes. Buying multiple copies is very reasonable, plus you introduce students to learned societies, a very lofty goal indeed. Why is buying a single copy so expensive? Mainly because of the high cost of processing and handling a sale (which is independent of the amount of the sale). It is also possible to download an article from the GeoScienceWorld website at \$5 an article ([www.elements.geoscienceworld.org](http://www.elements.geoscienceworld.org)).

### *A Peek at 2009*

Hap McSween will join the editorial team when Bruce Watson steps down as principal editor in early 2009. We look forward to working with Hap. Having been the guest editor for our “Water on Mars” issue, he knows exactly what it takes to bring an issue to press. Hap was a most efficient guest editor, and his involvement in outreach means he has a special interest in getting the level of presentation just right. Until Hap joins the editorial team formally, we will be including him in our e-mail discussions.

We will kick off 2009 with an issue on bentonite (Derek Bain, Guest Editor). In April, we will follow with an updated view of the Moon (John Delano), in June with an issue on gems and gemology (Emmanuel Fritsch), and in August with an issue on mineral magnetism (Joshua M. Weinberg and Richard Harrison). Topics for the remainder of 2009 and early 2010 will be selected at our editorial meeting. We have the enviable position of having received many exciting proposals to choose from. Our concern will be to ensure that the needs of all our members are met.

### *Encourage our Advertisers*

*Elements* relies on advertising income to balance its budget. Advertisers invest in space and want to see that their advertisement pays off. How can you encourage our advertisers? By mentioning you have seen their ad in *Elements* when you contact them for information or buy one of their books or products. Some of our advertisers also make special offers. For example, AGU offers a 15% discount on its books to *Elements* readers: all you have to do is use the code mentioned in the ad when you place your order. This is a way for an advertiser to track the impact of its advertisement and a way for you to save money.

### *Good News!*

The May 23 issue of *Science* (page 989) picked the article by Gabriel Filippelli in the phosphate issue (4: 89–95) as an Editor's Choice article. This is nice recognition for the author and good publicity for *Elements*.

**Bruce Watson, Susan Stipp,  
and David Vaughan**  
Principal Editors

**Pierrette Tremblay**  
Managing Editor

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