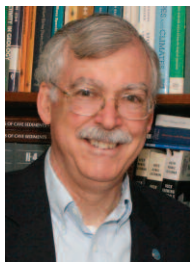




www.iagc.ca

## International Association of GeoChemistry

### SERVING THE GEOCHEMISTRY COMMUNITY WORLDWIDE



The mission of the International Association of GeoChemistry (IAGC) is to foster international cooperation that leads to scientific advancement in the broad field of geochemistry. This remains as much a challenge today as it was when IAGC was formed 40 years ago. This objective is accomplished through a variety of means, for example, sponsoring scientific conferences and educational activities, establishing internal specialty-area working groups, and disseminating new geochemical knowledge through scientific publishing. IAGC is probably best

known through publication, since 1986, of the monthly geochemical journal *Applied Geochemistry*. During most of its history, IAGC has functioned primarily through its working groups, which are affiliations of geochemists interested in a particular area of geochemistry. IAGC has several long-established working groups: Applied Isotope Geochemistry (Chair: Jodie Miller, University of Stellenbosch, South Africa), Geochemical Training in Developing Countries (U. Aswathanarayana, Mahadevan International Centre for Water Resources Management, India), Global Geochemical Baselines (David B. Smith, USGS, USA), Geochemistry of the Earth's Surface (Sigurdur Gislason, University of Iceland, Iceland), Thermodynamics of Natural Processes (German Kolinin, Russian Academy of Sciences, Russia), and Water-Rock Interaction (Halldor Armansson, Iceland). In 2007, the IAGC Council accepted a membership petition to admit a seventh working group, Urban Geochemistry, which will be chaired by Rolf Tore Ottesen and Morten Jartun of the Geological Survey of Norway. The periodic conferences of the Applied Isotope Geochemistry, Geochemistry of the Earth's Surface, and Water-Rock Interaction working groups are premier international meetings.

During the past eighteen months, IAGC has embarked on several new initiatives to more fully address its international mission. An awards program was begun in 2006, with the first set of awards conferred at the 2007 Goldschmidt Conference in Cologne, Germany. Fred Mackenzie of the University of Hawai'i was the recipient of the Vernadsky Medal, which is awarded for a distinguished record of scientific accomplishment in geochemistry over the course of a career. Seifu Kebede of the University of Addis Ababa and Dana Royer of Wesleyan University shared the Ebelmen Award, which recognizes a geochemist of particular merit and outstanding promise who is less than 35 years of age. Keara Moore, Brenda Ekwurzel, Bradley Esser, Bryant Hudson, and Jean Moran were the recipients of the Hitchon Award for the most significant paper published in *Applied Geochemistry* during the previous two years. A new IAGC Fellow Award will be implemented in 2008 to recognize outstanding scientists who, over the course of some years, have made significant contributions in the field of geochemistry, with particular emphasis on applied geochemistry. In addition, the Faure Award is bestowed at IAGC-sponsored conferences for the best student paper/poster presentation. Finally, perhaps the most important new IAGC initiative is the Student Research Grant program (see accompanying article).

IAGC is also interested in working cooperatively with its "sister" geochemistry societies. IAGC has sponsored sessions at the annual GS-EAG Goldschmidt Conference for a number of years and advertises the conferences of other geochemical societies in the IAGC Newsletter and on its website. Next year, IAGC will partner with the Association of Applied Geochemists to organize and conduct the 24<sup>th</sup> International Applied Geochemistry Symposium, which will be held on the campus of the University of New Brunswick in Fredericton, New Brunswick, Canada, from 1 to 4 June 2009. This conference is the world's premier forum for exchange of ideas on a broad range of issues related to the use of geochemistry in the mineral resources industry and is an increasingly important meeting for geochemists working in environmental geochemistry. Conference information is available on the website [www.unb.ca/conferences/IAGS2009](http://www.unb.ca/conferences/IAGS2009) (see also advertisement on page 264).

**Russell Harmon**  
Interim President, IAGC



### IAGC STUDENT GRANTS

In order to recognize and promote the work of young scientists in the field of geochemistry, the International Association of GeoChemistry initiated a Student Research Grant program in 2007. The objective is to assist PhD students in geochemistry worldwide to undertake and acquire geochemical analyses as part of their dissertation research. This award consists of a grant of up to \$3000 (US), a certificate, a complimentary membership to IAGC for the year following receipt of the award, and an article profiling the recipient in the IAGC Newsletter and posted on the IAGC website. Up to three grants will be awarded each year. The deadline for applications is **15 October**. Additional information and application forms are available at the IAGC website [www.iagc.ca](http://www.iagc.ca).

The Student Research Grant Committee (R. Harmon, chair; E. Galimov, K. Notsu, and A. Parker) has completed its review of the 11 applications received for 2008 and is pleased to announce the recipients:

**Bryn Kimball** – an award of \$3000 for "Copper Isotope Fractionation During Sulfide Mineral Dissolution," Pennsylvania State University, supervisor: Prof. S. Brantley

**Ibrahim Barrie** – an award of \$1000 for "Tectono-thermal Evolution of the Sierra Leone Passive Continental Margin: Constraints from Thermochronology," University of Amsterdam, supervisor: Prof. P. Andriessen

**Alejandro Villalobos-Aragón** – an award of \$1000 for "Using Chromium Stable Isotopes to Monitor Reactive Transport of Chromium in Leon, Gto., Mexico," University of Texas at El Paso, supervisor: Dr. A.S. Ellis

**Lindsay MacKenzie** – an award of \$1000 for "Sedimentology and Geochemistry of the Chengjiang Formation, China," University of Montana, supervisor: Dr. N. Hinman

We wish the grantees successful research work that will significantly contribute to the field of geochemistry!

**Clemens Reimann**  
Vice President, IAGC

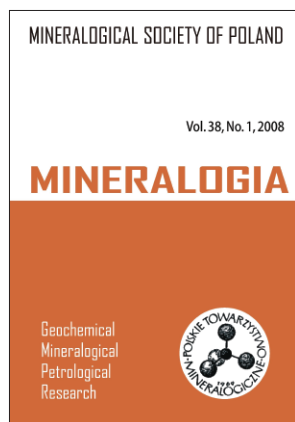
Cont'd on page 271



www.ptmin.agh.edu.pl

## Mineralogical Society of Poland

### MINERALOGIA POLONICA JOURNAL CHANGES ITS TITLE AND COVER



*Mineralogia Polonica*, the official journal of the Mineralogical Society of Poland, was founded in 1970. Two issues have been printed every year to date. *Mineralogia Polonica*, publishing in English from its beginning, has been very important for the development of mineralogical science in Poland. Based on a long discussion with our foreign contributors and other colleagues from abroad, we have concluded that the title suggests that the journal is focused on local mineralogical problems in Poland. To avoid this misunderstanding, we decided to modify the title and, accordingly, the journal cover. The new and simple title *Mineralogia* (with subtitle *Geochemical,*

*and Petrological Research*) indicates the open character of the journal. Our intention is to publish original papers, review papers, and short notes from the broad fields of geochemistry; mineralogy; petrology; technical, experimental and applied mineralogy; and environmental geochemistry and mineralogy. We also decided to introduce changes in the review and preparation of papers to ensure a high scientific level and a relatively short time span between paper submission and publication (electronic and paper versions). The regular series *Mineralogia* will be accompanied by the irregular one (*Mineralogia – Special Papers*), containing conference abstracts.

It is our deep conviction that the journal published by our scientific society should be accessible freely to the whole scientific community. Similarly to the former *Mineralogia Polonica*, all full-text papers in the new journal will be accessible via the society website (www.ptmin.agh.edu.pl), Direct Open Access Journals (www.doaj.org), Metapress (www.metapress.com), and via the *Mineralogia* webpage (www.mineralogia.pl).

We invite you to publish your papers in *Mineralogia*, and we hope you will like the experience.

**Marek Michalik**

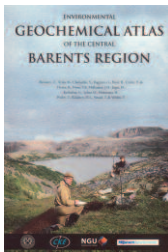
President of the Mineralogical Society of Poland

### 4<sup>th</sup> MID-EUROPEAN CLAY CONFERENCE MECC'08

Zakopane, Poland  
22–27 September 2008  
www.mecc08.agh.edu.pl  
e-mail:mecc08@agh.edu.pl

IAGC (cont'd from page 268)

### Special Offer for IAGC Members: 10 Years of the Kola Project



In 1998, the Geological Survey of Norway (NGU) published the now-classic *Environmental Geochemical Atlas of the Central Barents Region* or, in short, *The Kola Atlas*. The atlas presents the results of an international (Finland–Norway–Russia) multimedia (terrestrial moss, topsoil and the O-, B- and C-horizon of podzol profiles), multi-element (more than 60 chemical elements, radioisotopes and other parameters), geochemical mapping project, covering 188,000 km<sup>2</sup> in the European Arctic. IAGC members who do not yet have the atlas in their library can now get it free of charge, provided they pay the postage (the book weighs 2.5 kg). The official sales price of the book is 450 NOK, about US\$90. The NGU still sells about one copy every three months or so but wants to reduce the stock substantially. Orders should be sent to Clemens.Reimann@ngu.no.

### START-UP MEETING FOR EUROPEAN-SCALE GEOCHEMICAL MAPPING PROJECT

The EuroGeoSurveys Geochemistry Working Group met in Berlin, March 5–7, 2008. At this meeting the GEMAS Project (Geochemical Mapping of Agricultural Land and Grazing Land Soils of Europe) was officially started. Thirty-four European geological survey organizations have agreed to collect samples of arable land (ploughing layer, 0–20 cm) and of land under permanent grass cover (0–10 cm) at a density of 1 site per 2500 km<sup>2</sup> in their territory. The total area covered will be about 5.8 million km<sup>2</sup>. The project is a continuation and extension of the Baltic Soil Survey, which resulted in a very successful geochemical atlas. The project is led by Clemens Reimann, IAGC Vice-President. The European metals industry, represented by EuroMetaux of Brussels, will support this project with a contribution of 130,000 Euros per year, over a four-year period.

**Clemens Reimann**

SFMC (cont'd from page 269)

### PRIX HAÛY-LACROIX 2008



Mélanie Auffan receiving the Prix Haüy-Lacroix 2008 from Patrick Cordier, SFMC President

studies. Our goal was to develop appropriate methods to assess the safety of NP. Using a standardized bio-physicochemical approach controlling the properties of NP all along their interactions with biological targets, it is possible to compare toxicological data and to identify mechanisms of toxicity. We propose a classification of the potential toxicity of metallic NP related to a redox sensitivity that predisposes them to induce an oxidative stress towards biological targets. Indeed, chemically stable metallic NP in physiological redox conditions do not exhibit any cytotoxicity in our experimental conditions, whereas metallic NP with strong oxidative (e.g. CeO<sub>2</sub>) or reductive (e.g. Fe<sup>0</sup> or Fe<sub>3</sub>O<sub>4</sub>) power appear cytotoxic for *Escherichia coli* and genotoxic for human fibroblasts. The main source of toxicity is the electronic and/or ionic transfers during oxidation (e.g. Fe<sup>2+</sup> and/or Fe<sup>0</sup>) or reduction reactions (e.g. Ce<sup>4+</sup>, Mn<sup>3+</sup>, Co<sup>3+</sup>) either within the NP lattice or on release to solution. These results raise many questions concerning the toxicity of nanometric crystallites. While this redox activity may be desirable for several applications (e.g. catalysis, sensors), we have pointed out that this same trait can also have negative implications in an environmental context.