

# The International Association of GeoChemistry

In this issue, the IAGC features the history and activities of one of its more active working groups, Water-Rock Interaction (WRI). Yousif Kharaka, the current chairman, describes in the next page the development of WRI from its inception in the early 1970s, starting with the first conference WRI-1, to its current plans for WRI-12 in 2007. The next issue of *Elements* will feature another IAGC working group, Geochemical Training in Developing Countries, in an article by Dr. U. Aswathanarayana, Chairman.

# THE IAGC MISSION STATEMENT AND GOLDSCHMIDT

The IAGC recently prepared its Mission Statement and, in it, has tried to address the many and diverse activities of the Association. Comments are welcome.

The International Association of GeoChemistry (IAGC) is a private, not-for-profit international organization, committed to excellence in the geochemical sciences, that promotes the application of the tools of geochemistry across the entire spectrum of the Earth and environmental sciences. This is accomplished through establishing internal specialty working groups, sponsoring scientific conferences and educational activities, and disseminating new geochemical knowledge through scientific publishing. The specific objectives of the IAGC are:

- 1. To foster the use of geochemical techniques and tools to advance the understanding of the Earth and its component systems for the benefit of mankind and modern society
- 2. To contribute to advancement in geochemical research throughout the world, including both fundamental geochemical research aimed at understanding the global Earth system and applied geochemical research that use the tools and techniques of geochemistry to address problems of particular relevance to the welfare of mankind and society
- 3. To promote international and educational cooperation in geochemistry through outreach activities that include:
  - establishing internal specialty working groups in topical areas that would benefit from international scientific cooperation

- sponsoring international scientific meetings related to geochemistry
- disseminating new knowledge through publication of the journal Applied Geochemistry
- fostering communication in geochemistry across the international scientific community
- encouraging the early career development of young geochemists
- contributing to geochemical education
- enhancing the visibility of the science of geochemistry and demonstrating its importance to mankind and society

Our greater involvement with the Goldschmidt Conference for 2005 is reflected in key aspects of our Mission Statement: *sponsoring scientific conferences* and *fostering communication in geochemistry across the international scientific community*. At Goldschmidt 2005, the IAGC sponsored three special sessions: "The Geochemistry of Mercury", "The Halogens and their Isotopes in Marine and Terrestrial Aqueous Systems", and "Watershed-Scale Geochemistry". And, of course, each delegate at the conference received a coffee mug with the IAGC and Goldschmidt logos emblazoned on it! The IAGC will continue to support meetings, especially those convened by its working groups; examples for this year are AIG-6 in Prague, GES-7 in Aix-en-Provence, and the GSA symposium in Salt Lake City.

# Congratulations to IAGC's Working Group Chairman, Dr. U. Aswathanarayana



The president of the American Geophysical Union, Professor John A. Orcutt, recently announced that Dr. Uppugunduri Aswathanarayana has been selected for the Excellence in Geophysical Education Award of AGU for 2005. Dr. Aswathanarayana is the first Indian to receive this award. It will be presented during the awards ceremony on May 25 at the time of the Joint Assembly of the AGU, New Orleans, May 23–27, 2005.

## **UPCOMING IAGC-SPONSORED CONFERENCE**

# The 6<sup>th</sup> International Symposium on Applied Isotope Geochemistry (AIG-6)

Prague, the City of a Hundred Spires and the capital of the Czech Republic, will be hosting the AIG-6 symposium between September 11 and 16, 2005. The preparations are in full swing. Although the date for submission of abstracts may have passed by the time you read this, the meeting will be well worth attending. The meeting will take place in the sumptuous Stately Rooms of Strahov Abbey, only 15 minutes from the Prague Castle, the historical residence of Bohemian kings. The 10<sup>th</sup>-century abbey is the oldest in the country, and AIG-6 technical sessions will be held precisely where the Austrian Empress Maria Theresa and her consort Franz von Lotringen were welcomed by the friars as distinguished guests in the mid-18<sup>th</sup>

Poster sessions will be organized in the cloisters amidst a gallery of old canvases. As of mid-March, about 120 abstracts covering all fields of isotope geochemistry have been accepted for presentation at the meeting. High- and low-temperature geochemistry are equally represented. The non-traditional isotopes of elements such as Cd, Ni, Cu, Ca, Zn, Cr,

Fe, Si, Cl, and Br will be the focus of some of the oral presentations. Other topical themes include mass-independent fractionation of nitrate oxygen isotopes, isotopes of dissolved oxygen in aquatic systems, oxygen isotopes in phosphates, carbon-14 dating of groundwater, radon daughters lead-214 and bismuth-214 in natural waters, and cosmogenic isotopes of Be, Al, and S. Advances in more traditional fields of isotope research, such as methane emissions; forest respiration; dissolved organic carbon, lead, sulfur, and strontium in the environment, will be also covered. One trend clearly seen from the submitted papers is the increasing use of an isotopemultitracer approach to study systems such as tree rings, dispersion of industrial pollutants around landfills, and geothermal fluids. Methodological studies, employing multi-collector ICP-MS, TIMS, and IRMS techiques, will also be reported.

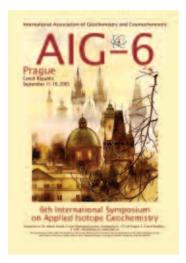
Symposium participants will be coming from over 20 countries on five continents. The symposium organizers will continue to accept abstracts from new symposium attendees until late June 2005. The abstract submission procedure is detailed on the symposium website www.aig6.cz. Part of the symposium package is a visit to the famed Carlsbad spa

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and two sightseeing tours of historical Prague, a city which in the 12<sup>th</sup> century was the third largest in Europe (after Paris and Rome) and which at present is the fourth largest tourist destination on the Old Continent (following Paris, London, and Rome). While millions of tourists visit Prague every summer, AIG-6 organizers will make every effort to ensure that the symposium participants have the quiet Brevnov monastery gardens exclusively for themselves, to enjoy strolls and scientific discussions.

#### Martin Novak

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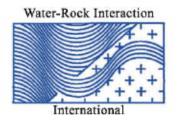


# FEATURE: WATER-ROCK INTERACTION WORKING GROUP\*

More than 30 years ago, the First International Symposium on Water-Rock Interaction (WRI-1) was convened (9–14 September 1974) in Prague (Czech Republic), with Dr. Tomas Paces as Secretary General. Nearly 150 participants from 21 countries, including many students, attended the four days of technical sessions; close to 100 of them also visited thermal and mineral springs on a three-day field trip to northwestern Bohemia. The combination of excellent technical sessions, printed proceedings, and interesting and well-organized field trips lasting several days, together with enjoyable social and cultural programs for the scientists and the accompanying members created an atmosphere of informality and easy communication. As pointed out by Brian Hitchon (WRI Working Group Chairman, 1974-1986), the "spirit of WRI"—encouraging scientific communication and human interaction among the international participants—"was born in Prague and has ensured the continuation and expansion of WRI" (Hitchon 1989).

The last symposium, WRI-11, was held June 27 to July 2, 2004 in the historic resort city of Saratoga Springs, New York, USA. WRI-11, ably led by its Secretary General (Prof. Susan Brantley of Penn State University), attracted 324 of the leading geochemists, hydrol-

\* A full presentation of this article can be found in the IAGC Newsletter #42, due out in April 2005.





Current WRI Chairman Yousif Kharaka

ogists, and geologists from 34 countries, and 17 registered accompanying members. At registration, participants received two hard-cover proceedings volumes, with 334 papers and a record total of 1684 pages.

### WRI-1 through WRI-11

The WRI symposia are generally held in different countries and are cosponsored by various national Earth science associations, universities, academies of sciences, private and governmental agencies, as well as the IAGC, the parent organization that is affiliated with the International Union of Geological Sciences (IUGS). The symposia are organized by national WRI organizing committees, headed by the secretary general, who is nominated by the working group, but selected by the vote of all the members present at the general business meeting of WRI. The secretary generals for the past symposia, venues, etc., are listed in TABLE 1. These scientists, together with Prof. Yanxing Wang (China University of Geosciences, Wuhan, China), comprise the current executive members of the working group on WRI, with the author as the present chairman. For more details about our working group, please visit the WRI web site at:

wwwrcamnl.wr.usgs.gov/wri/index.html.

# WRI-12 and Beyond

During the General Assembly of WRI-11, attendees voted to hold WRI-12 in beautiful Kunming

(The Spring City), Yunnan Province, China, in the summer of 2007, with Prof. Yanxing Wang as the secretary general. The final plans for WRI-12 are being prepared and will be announced in the first circular in the near future. Beyond WRI-12, possible future venues include Israel, which was a strong contender to host WRI-11; however, security issues arising from serious conflicts in the region persuaded us to move to Saratoga Springs (USA). Strong future contenders now include Switzerland, Mexico, Germany, Norway, and ultimately South America and North Africa.

#### REFERENCE

Hitchon B (1989) The spirit of WRI. Episodes 12: 101-103

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TABLE 1 DATA ON PAST WRI SYMPOSIA

Symposium	Year	Participants	Venue	Secretary General
WRI-1	1974	148	Prague (Czechoslovakia)	Tomas Paces
WRI-2	1977	236	Strasbourg (France)	Yves Tardy
WRI-3	1980	145	Edmonton (Canada)	Brian Hitchon
WRI-4	1983	210	Misasa (Japan)	Hitoshi Sakai
WRI-5	1986	250	Reykjavik (Iceland)	Halldor Armannsson
WRI-6	1989	350	Malvern (United Kingdom)	Mike Edmunds
WRI-7	1992	576	Park City (USA)	Yousif Kharaka
WRI-8	1995	260	Vladivostock (Russia)	Oleg Chudaev
WRI-9	1998	287	Taupo (New Zealand)	Brian Robinson
WRI-10	2001	480	Cagliari, Sardinia (Italy)	Luca Fanfani
WRI-11	2004	341	Saratoga Springs (USA)	Susan Brantley



So many secretary generals at WRI-10! Photo taken on 15 July 2001 at Tanka Village, Sardinia, Italy. From left to right, Robinson, Tardy, Armannsson, Brantley, Paces,

Fanfani, Kharaka (working group chairman), Edmunds, and Chudaev. Missing are Hitchon and Sakai, who did not attend WRI-10, and Wang who had not yet been elected.

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