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Geochemical Society

FROM THE PRESIDENT

The Present and Future of the Goldschmidt Conference



The 2008 Goldschmidt Conference in Vancouver, Canada, is now history. With a scientific program of exceptional breadth and high quality, a large number of registrants, and exciting social events, this conference was one of the best ever and continued the long-term systematic growth in size and scope of the North American and European Goldschmidt Conferences. This growth is gratifying. The success of each meeting is due in large part to the dedication

and hard work of a group of scientists who put the meeting together. The continued growth and impact of the Goldschmidt Conference is also a reflection of both its international impact and the vitality of the field of geochemistry. Innovative science is present in every session. Meeting participants realize that the key colleagues in their field are more likely than not to be present. The emphasis on student involvement always keeps the energy level high. A number of exhibitors find this meeting a great way to communicate with leaders in the field of geochemistry. Our ventures to meeting sites in Australia and Japan have yielded a positive impact in the form of increased scientific contributions to the meeting from these nations. The North American conference is also profiting from a new memorandum of understanding with the Mineralogical Society of America that recognizes MSA as an official sponsor. Overall, both the present and the future of the Goldschmidt Conference look bright.

With the growing success of the Goldschmidt Conference come some challenges. The increasing size is one of these. The number of participants and space requirements for oral and poster sessions, the space needed for exhibitors, and the realities of feeding and housing so many participants make the meeting a tight fit for the university campuses at which many of the previous meetings have been held. The complexity of the meetings means that, although we have had extremely competent and experienced commercial help in many aspects of the planning process, the workload of the local organizing committee is still very high. We also face a situation in which a new group of volunteers organizes each meeting. We suffer from a lack of continuity between meetings, so we tend to solve many of the same problems each time. For these reasons, the Geochemical Society is now considering giving an expanded role to a professional meeting organizer. Having a professional organizer would relieve the local committee of dealing with many of the non-science meeting details and allow more focus on the program. Part of this meeting-planning role might be to help select a suitable venue and deal with many of the on-site logistical details. Because the Goldschmidt Conference is such a key function of our Society, I intend to make easing the meeting-planning burdens on scientists one of the focuses of my presidency. If you have your own ideas as to how we can better plan future Goldschmidt Conferences, please let us know by sending your suggestions to our business manager, Seth Davis, at seth.davis@geochemsoc.org.

Marty Goldhaber
President

NOTES FROM ST. LOUIS

Goldschmidt 2008

Congratulations to Dominique Weis and her dedicated staff at the University of British Columbia and to Cambridge Publications for a great conference. Look for highlights from the 2008 Vancouver Goldschmidt in the December issue of *Elements*.

Goldschmidt 2009



June 21–26, 2009 – Davos, Switzerland
www.goldschmidt2009.org/

Organizers: Chris Ballentine (University of Manchester),
Philippe van Cappellen (Utrecht University), Janet Hering (EAWAG)

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"Challenges to Our Volatile Planet"

GS at the 2008 Joint Meeting

October 5–9 2008
– Houston, Texas, USA
www.acsmeetings.org/2008/

GS Exhibit

Booth 956, next to MSA and MAC

GS Events

MSA/GS Joint Reception
Tickets will be available at the door.
2008 F. Earl Ingerson Lecture
presented by Dr. John Morse
(see inset, page 273)

GS (co)sponsored sessions

T119 – The Science of Oil Shale –
Chairs: Alicia Sanchez, John
Kaszuba

T122 – Soil Geochemistry:
Databases and Applications at
Regional to Continental Scales
– Chairs: David B. Smith, Andrew
Rencz, Juan Carlos Salinas (Orals
& Posters)

T123 – Real-Time, In-Field
Geochemical Analysis: Current
Capabilities and Future Prospects
(Posters) – Chairs: Nancy J.
McMillan, Russel S. Harmon,
April L. Ulery

T124 – Roles of Speciation and
Molecular Structure in Soil
Processes – Chairs: Owen
Duckworth, Alan T. Stone

T127 – Geochemical Tracers of
Changes in Seawater Chemistry
– Chairs: E. Troy Rasbury, Franco
Marcantonio

T130 – Opportunities at the
Interface: Minerals, Bugs, and
Aqueous Solutions – Chairs:
Maria Dittrich, Andreas Lutttge

Call for 2009 Award Nominations

Once again it is time to ask for nominations for the Goldschmidt Medal, Clarke Medal, Patterson Medal, Treibs Medal, and GS/EAG Geochemical Fellows Awards. **November 15, 2008** is the deadline for nominations for these awards. For information on nomination requirements, visit the Geochemical Society website at www.geochemsoc.org/awards. Please take the time to highlight the accomplishments of your valued friends and colleagues by nominating them. With your help, we can ensure that all of geochemistry is recognized and all deserving geochemists are considered.

The V.M. Goldschmidt Medal

is awarded for major achievements in geochemistry or cosmochemistry, consisting of either a single outstanding contribution or a series of publications that have had great influence on the field.

The F.W. Clarke Medal is awarded to an early-career scientist for a single outstanding contribution to geochemistry or cosmochemistry, published either as a single paper or a series of papers on a single topic.

The C.C. Patterson Medal is awarded for a recent innovative breakthrough in environmental geochemistry of fundamental significance, published in a peer-reviewed journal.

The Alfred Treibs Medal is awarded by the Organic Geochemistry Division for major achievements, over a period of years, in organic geochemistry.

The GS/EAG Geochemical Fellows Award is bestowed upon outstanding scientists who have, over some years, made a major contribution to the field of geochemistry.

Time to Renew?

It is not too early to start thinking about renewing your membership for 2009. Go ahead and get it out of the way by renewing online at www.geochemsoc.org. And remember, if you enjoy *Elements*, your conference discounts, and/or your publication discounts, please encourage your students or colleagues to join and to help make a difference in geochemistry globally.

How Are We Doing?

As always, we at GS want to hear from you about our programs and services. Send comments and/or suggestions to Seth Davis at the contact information below.

Seth Davis
GS Business Manager
(seth.davis@geochemsoc.org)

2008 F. EARL INGERSON LECTURE



Session T130 - 2008 Joint Meeting in Houston, TX

Nanoscale Insights into the Mechanisms Responsible for the Strange Kinetics and Solubility Behavior of Aragonite in Seawater

Dr. John Morse (Texas A&M University)
PHOTO COURTESY TEXAS A&M

For close to 50 years the precipitation kinetics and solubility behavior of aragonite in seawater have been observed to be unusual. Examples include precipitation on ooids where "resting periods" are needed between periods of growth, "kinetic solubilities," aragonite mud porewaters and inner Great Bahama Bank waters all yielding an IAP about twice the thermodynamic solubility of aragonite, and the observation that for experimental time periods less than months the apparent equilibrium IAP is strongly time dependent. This behavior clearly points to complex reaction processes occurring on and near the aragonite-seawater interface.

In this study, single aragonite crystals were exposed to seawater for time periods ranging from hours to months. The morphologies of the surface precipitates were studied using SEM and the overgrowths were analyzed using a variety of TEM techniques, which provided very detailed information on growth patterns, structure, and composition. For normal seawater (~4x supersaturated), the initial precipitate consisted of widely scattered submicron individual spherulitic crystals. With time their density increased to multiple layers composed of submicron crystals. After ten days, and increasingly to 50 days, compact fibrous arrays of crystals started to appear, which probably were composed of aragonite. TEM studies of the early-formed material indicated that it had an amorphous calcium carbonate near-surface region about 80 nm in thickness underlain by aragonite that was crystallographically contiguous with the host aragonite crystal. Both contained Mg, which was absent from the substrate. These observations demonstrate the complexity of the reactions taking place between aragonite and supersaturated seawater.

THANK YOU VOLUNTEERS!

What we do at GS day after day to impact the direction of geochemistry at a global level is only possible through the herculean efforts of our volunteers. Thank you!

Johnson Haas and Carla Koretsky of Western Michigan University have decided to step down from the helm of *Geochemical News* after eight years of service. Their perennial talent and dedication to the Society is greatly appreciated.

* Indicates the committee chair.
Terms ending this year are in blue.

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- Kerry Russel (University of British Columbia)
- Alison Shaw (Woods Hole Oceanographic Institute)

GOLDSCHMIDT2008

Many people put in hours upon hours of work to make this year's meeting in Vancouver a success.

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