



Geochemical Society

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FROM THE PRESIDENT



Rick Carlson

Geochemical Curiosity

This article is being written the week after NASA successfully landed the Mars Science Laboratory (MSL) in Gale Crater, with the first pictures now being “phoned home” by the Curiosity rover. Not too many years ago, “curiosity-based science” carried a negative connotation amongst some overseers of science funding. Seeking such basic knowledge was viewed as a frivolous pursuit, akin to a Da Vinci painting or a Beethoven symphony, and clearly

not worthy of government support. The only type of science deemed appropriate in this philosophy is that aimed directly at solving issues confronting humanity’s continued health and welfare. The problem with such societally relevant science, however, is that it occasionally provides answers that certain groups do not want to hear. The raging debate over global warming and the controversy over the potential for groundwater contamination from various enhanced petroleum recovery methods are just two examples where scientific data have run head on into conflicting economic or political sentiment.

Perhaps more than most sciences, geochemistry can, and should, address both societally relevant concerns and those that advance basic human understanding. The MSL is dominated by a variety of analytical chemistry instruments (well described in *Geochemical News*: www.geochemsoc.org/publications/geochemicalnews/gn145jun11/). Why? Because geochemical methods have become the de facto “gold standard” when seeking to provide answers to critical questions of planetary evolution, in this case whether the Gale Crater sediments were deposited under conditions conducive to life. In my own field, isotopic methods now allow temporal resolution of less than a million years on events occurring during Earth formation beginning 4.568 billion years ago. Related approaches have discovered mineral grains that we can hold in our hand (well, actually, on NanoSIMS sample mounts) and that may be direct condensates of the supernova that caused our Solar System to form. The origin of the Solar System, Earth, and life must be included on any list of fundamental science questions. Geochemical methods are at the forefront of the investigation of all three. On the more applied front, this issue of *Elements* makes it clear that as materials science finds applications that take advantage of the unique properties of the less abundant elements in the periodic table, geochemical methods are going to be the lead approach in finding these rare resources, in evaluating their terrestrial inventories and hence price, and in providing the measurements that will monitor and hopefully help minimize the environmental damage associated with their extraction.

Although it sounds trivial to say so, the Geochemical Society (GS) supports geochemistry, both applied and basic. Support in this case means serving as a proponent for geochemistry, helping to bring together the diverse geochemical community, providing a forum for information exchange, and working to convey the strength and importance of geochemistry in the investigation of a wide range of problems. Our efforts are closely aligned with those of other societies whose interests overlap ours. The GS was a founding member of the large consortium that now supports *Elements*. We alternate with the European Association of Geochemistry (EAG) in the organization of the annual Goldschmidt Conference. We cosponsor *Geochimica et Cosmochimica Acta* with the Meteoritical Society, *G-cubed* with the American Geophysical Union, and the Reviews in Mineralogy and Geochemistry book series with the Mineralogical Society of America. We publish the

weekly *Geochemical News*, which we hope the geochemistry community will use as a forum for exchanging breaking news, from meeting announcements to job and funding availability. We are working to build closer ties with other international geochemical organizations, such as the International Association of GeoChemistry, and with our long-time colleagues, the Geochemical Society of Japan, who will host the 2016 Goldschmidt Conference.

The membership of the GS spans from Argentina to Venezuela and about 60 countries alphabetically between these two. As reported in my message in the last issue of *Elements*, the GS leadership has taken steps to ensure that the governance of the Society better reflects its international membership. We have started, with EAG, outreach campaigns to bring geochemistry to people in countries that stand to benefit greatly from knowledge of, and access to, modern geochemical methods. Our new International Participation Program will sponsor membership in the GS for those to whom the minimal membership fee of the GS represents an economic hurdle. The success of this program will be aided greatly if members who can afford to do so offer a voluntary contribution when they renew their membership this year. Geochemistry has much to offer the world, both in practical matters that will improve the standard of living for all and by satisfying the curiosity of humans seeking to understand the universe around them. The Geochemical Society is working in support of both goals.

Rick Carlson (rcarlson@ciw.edu)
GS President

WELCOME GOLDSCHMIDT2012 MEMBERS

Delegates who paid the nonmember registration rate to attend the Goldschmidt 2012 conference in Montreal this past June are provided a two-year (2013 and 2014) membership in the Geochemical Society. As a special thank-you for their membership, they will also receive the October and December 2012 issues of *Elements* and access to the online *Elements* archive. For more information on GS member benefits, visit www.geochemsoc.org/society/benefitsofmembership.htm.

Additionally, the GS Board was very impressed with the initiative of the Student Program Committee in Montreal, and in appreciation of their effort will also be providing two-year memberships to the student committee members: Grant Cox, Stéphanie Desrochers, Nouha Dhahri, Nicole Hurtig, Mina Ibrahim, Julia King, Audrey Limoges, Marc-Antoine Longpré, Anja Moritz, Laurence Nuttin, André Pellerin, Dirk Schumann, and Geneviève Vautour.

ANNUAL MEMBERSHIP DRIVE

If you have not done so already, please take a moment to renew your membership in the Geochemical Society. Member dues for 2013 will increase by US\$5, but members joining or renewing by November 30 may do so at the 2012 rate (\$30 professional, \$10 student, and \$15 senior). You may renew online or download a membership form from our website at <http://www.geochemsoc.org/join>.

Please consider making a donation with your membership renewal. Donations are tax deductible where applicable. Remember to indicate how you would like your donation to be used.

And finally, word of mouth is a valuable part of our membership drive. If you know of a peer or student who isn’t a member, please encourage them to join.

GEOCHEMICAL SOCIETY CONTRIBUTIONS

Many members contribute to the Geochemical Society each year by including a donation with their dues. Between January 1, 2011, and April 15, 2012, 299 members made contributions totaling US\$9817.13. Of this amount, US\$230 were donated to the Organic Geochemistry Division, US\$3450 were for the Student Travel Grant Program, and US\$6137.13 went to the General Support Fund. **Thank you for your contributions!**

Everything we do at the Geochemical Society is made possible through the generosity of our members, volunteers, and contributors. If you would like to contribute to the Geochemical Society, please visit our website at www.geochemsoc.org or contact the business office.

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GS AT GSA-CHARLOTTE



Isabel Montanez, 2012 F. Earl Ingerson Lecturer

Dr. Isabel Montanez (University of California-Davis) will present the **2012 F. Earl Ingerson Lecture**. Her lecture, "Modern soil system constraints on reconstructing deep-time atmospheric CO₂," will be presented on Tuesday, 6 November 2012 at 9:50 am in Room 202AB of the Charlotte Convention Center. The Geochemical Society will again be sponsoring a ticketed reception with MSA and the GSA-MGPV Division, as well as welcoming attendees to our exhibit (Booth 806).

Geochemical Society Business Office
Seth Davis, Business Manager
Kathryn Hall, Administrative Assistant

Washington University in St. Louis
Earth and Planetary Sciences
One Brookings Drive, CB 1169
Saint Louis, MO 63130-4899, USA
E-mail: gsoffice@geochemsoc.org
Phone: 314-935-4131
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