

**GEOCHEMISTRY NEWSLETTER**

**Fall 1998**

**AMERICAN CHEMICAL SOCIETY**

**DIVISION OF GEOCHEMISTRY**

### Report from the Chairperson

Greetings Everyone,

Well, Dallas is behind us and we are busily working towards Boston, and beyond. Dallas was a very successful meeting for the Division. We hosted three symposia (a little less than usual), but all three were very successful. In some sessions, we had over one hundred people in the audience, and in one case we even had to swap rooms because the allocated room was not big enough to hold the audience! It's great to have problems like that!

The program for Boston is smaller, but no less appealing to those interested in the three symposia which we are hosting. Looking further ahead, Anaheim, New Orleans, and San Francisco are all shaping up to be excellent meetings. There is still ample time to plan symposia, especially for New Orleans, San Francisco and beyond so if you feel that there is an area which we are overlooking, or a hot topic which could really use a focused symposium, make the suggestion! We are always willing to help.

The Division's *big news*, announced at the general business meeting in Dallas, is that the executive committee has voted to try and establish a divisional award, currently known as the Geochemistry Division Medal, to recognize

outstanding achievements in geochemistry. Bob Byrne (past Division chair), has

volunteered to help raise the necessary funds to get things started, (Thanks Bob!) and we are working hard to get things off the ground. We do not have a date for the first award yet, but much of the behind-the-scenes work has been completed and we are actively soliciting the funds we will need to make this a reality. This is a big step for the division which we hope will help to keep the division growing and raise its stature in the geochemical community. Keep watching the newsletters and coming to the meetings, we will keep you posted as we progress.

Finally, I know that this has been said before, but it is certainly worth repeating: The Geochemistry Division exists to serve the interests and needs of our members, but we cannot accomplish that objective without your help. Programming within the Division is NOT decided by the executive committee, programming comes from the members up to us. If you feel that there is an area of geochemistry which we are overlooking, or a hot topic that really needs a symposium to get everyone together to thrash out the issues..... Tell us about it! Suggest a symposium topic or better yet volunteer to organize the symposium! We would love to help, and we structure our programming in such a way as to make putting a symposium together as easy as possible for the organizer. We leave the science up to you and we

take care of the organizational details for you. As one who has organized a symposium I can also tell you that it can be a very interesting and satisfying experience (and it really isn't all that much work!) So talk to us. The Division's programming is only as relevant as YOU make it.

See you in Boston!

Ken Anderson

## **ACS ABSTRACT FORMS ARE AVAILABLE ON THE WEB!**

Abstract forms can be downloaded from the ACS website (<http://www.acs.org>; look under ACS programs, then meetings, then abstract info), or obtained from the ACS by e-mail ([abstract@acs.org](mailto:abstract@acs.org)). Please give your name, address and number of the number of forms you need. The electronic version is a MSWord template. I'd also remind you to be cautious as the text of the abstract can be automatically truncated by macros in the template.

## **DIVISION E-MAIL LIST**

We would like to ask that all Geochemistry Division members send an e-mail note to our Division secretary, Michaela Kashgarian, so that she can download your e-mail addresses easily. Her e-mail address is kashgarian@lnl.gov. Many thanks.

### **Award Nominations**

George Luther, awards committee chair, will soon be seeking nominations for Geochemistry Division awards from the 1998 national meetings. Contact him with nominations.

### **ACS Science Policy Fellowship**

#### **Apply Now**

The Fellowship offers a unique opportunity for a scientist or engineer to join ACS and

- gain first-hand knowledge of the operation of the legislative and executive branches of the federal government,
- develop nonpartisan Capitol Hill briefings and assist ACS committees in their work,
- complete a special science policy project for presentation.

The Fellowship is for one or two years. The Fellow receives an annual salary in the low \$40Ks with an ACS benefits package, as well as a relocation allowance. ACS members at any point in their careers may apply. A Ph.D. is not a requirement.

Applications are due **January 8, 1999**.

For more information and instructions on how to apply, please contact Deitra L. Jackson (202) 452-8917, e-mail: , or write ACS Office of Legislative and Government Affairs, 1155 Sixteenth Street, N.W., Washington, D.C. 20036.

### **PACIFICHEM 2000**

In December of 2000, The ACS and its counterparts in many of the Pacific Rim nations, are sponsoring the next Pacificchem International Chemical Conference. In addition to acting as 1998 Chairperson for the Division, I am also acting as the Division Liaison for the Pacificchem meeting. These meetings have been very successful in the past and

Pacificchem 2000 also promises to be an excellent meeting. Because these meetings involve many different chemical societies, which are not always organized in the same way as the ACS, programming for the Pacificchem conferences cannot be organized along division lines. Rather, programming is organized along thematic lines. As the Geochemistry Liaison, I am responsible for helping to coordinate organization of symposia

which would be of interest to geochemists, marine chemists, and other chemical sub-disciplines related to the Earth Sciences, and I am currently seeking proposals for geochemical symposia. If you would like take advantage of this opportunity participate in an international meeting, please contact me and I will be happy to help make sure that geochemistry, in the broadest possible sense, is well represented at this important meeting.

Ken Anderson  
kbanderson@anl.gov

## **NEWSLETTER CONTRIBUTIONS**

Feel free to send copies of newsworthy items for inclusion into our newsletter. If you are organizing a symposium, we can easily include an expanded call for papers or other information. Send submissions to: John C. Schaumlöffel, Washington State University, Department of Chemistry, PO Box 644630, Pullman, WA 99164-4630, or e-mail them to him at [schaumlo@mail.wsu.edu](mailto:schaumlo@mail.wsu.edu)

## **GeoCHEMISTRY DIVISION MEMBERSHIP BENEFITS**

### **Meetings:**

Programming at national meetings

### **Publications:**

Geochemistry Newsletter, including  
abstracts that are mailed prior to national meetings.

Discounts on ACS meeting abstract books.

Discount coupons on books from ACS Symposium Series.

**AWARDS:**

Best Paper by a Young Scientist

Best Geochemistry Division Symposia

## **1997 Division Awards**

Best Symposium for 1997 is from the San Francisco meeting:

### ***Kinetics and Mechanisms of Reactions at the Mineral-Water Interface***

the co-organizers were Dr. Donald L. Sparks of the University of Delaware, Dept. Of Plant and Soil Science, Newark, DE 19717 and Dr. Timothy Grundl of the Dept. of Geosciences, Univ. of Wisconsin, Milwaukee, WI 53201.

Best student presentation for 1997 is by:

**Peter Blokker** for "Structure and Stable Carbon Isotope Composition of Algaenan from Fresh Water Algae" in the symposium on the Biogeochemistry of Algae from the San Francisco meeting. Peter is a

student of Jaap S. Sinninghe Damste at the Netherlands Institute of Sea Research, PO Box 59, 1790 AB Den Burg, Texel, The Netherlands.

## **DIVISION WEBPAGE**

Currently, we are in the process of redesigning the Geochemistry Division Webpage. We would appreciate your suggestions, particularly lists of links to sites you think are relevant to members of the division. If you have any suggestions or comments, please email them to John C. Schaumloffel at [schaumlo@mail.wsu.edu](mailto:schaumlo@mail.wsu.edu)

The webpage will be moving to <http://www.aer.wsu.edu> sometime later this summer. Many thanks go to Tim Eglinton for maintaining the webpage at Woods Hole for all these years!

## **CALL FOR PAPERS/UPCOMING SYMPOSIA**

Four copies (one on the original ACS form) of a 150 word abstract should be submitted to

the symposium organizer. Abstracts for general papers should be submitted to the program chair. Deadlines for 1999 symposia will appear in *C&E News* later this year. Contact the Program Chair for contact information regarding specific symposia.

**Anaheim, Spring 1999**  
**Abstract Deadline 20-November-1998**

Thermodynamics and Kinetics in Natural Waters:  
A Symposium to Honor Frank Millero  
Organized by Virender K. Sharma

Applications of Geochemical Techniques to the Detection of Extraterrestrial Life  
Organizer: Gene McDonald (Gene.D.McDonald@jpl.nasa.gov)

Chemical Structure and Preservation Processes of Organic  
Matter in Soils and Sediments  
Organizers: Sylvie Derenne (sderenne@ext.jussieu.fr) and  
Heike Knicker (knicker@pollux.edv.agrar.tu-muenchen.de)

**New Orleans, Summer 1999**

Application of NMR to Complex Systems  
Organizer: Dr. R.E. Botto (robert\_botto@gmgate.anl.gov)

It is anticipated that this symposium will be quite robust and will tentatively consist of four 1/2 day sessions devoted to individual topics, each with their own convener.

The Origin of Elements in the Solar System  
Organizer: Oliver Manual  
Cosponsored with Nuclear Chemistry Division

Geochemistry and Bioavailability of Nitrogen and Phosphorus in  
Dissolved Organic Compounds  
Organizer: William Landing (wlanding@mailier.fsu.edu)

**Tentative Symposia for San Francisco, Spring 2000**

High-Maturity Crude Oils: Organizer, M. Moldowan

NSO compounds: Organizers, Wilkes and Taylor



Analytical Techniques in Organic Geochemistry: Organizer, L. Elrod  $\nabla$

## ***Amber, Resinite, and Fossil Resins***

*Edited by Ken B. Anderson, John C. Crelling*

(ACS SYMPOSIUM SERIES No. 617)

I wish to take advantage of the special divisional discount offer for the above book. I understand this book retails for **\$79.95** but is available to me for **\$47.97**. I also understand there is a one-copy limit and that orders must include my personal check made out to ACS or my credit card number.

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## ***Molecular Markers in Environmental Geochemistry***

*Edited by R.P. Eganhouse*

(ACS SYMPOSIUM SERIES No. 671)

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### **Reactivity and Dynamics of Mineral Surfaces**

**217th Annual ACS National Meeting, Anaheim, CA**

**Mar. 21-25, 1999.**

**Abstracts Due by November 20, 1998.**

Organizers: Steven R. Higgins and Carrick Eggleston, Geology Dept. University of

Wyoming, Laramie, WY 82071-3006

Reactions at mineral surfaces are ubiquitous, and are key to the understanding the chemistry of natural systems at or near the Earth's surface. With this symposium, we seek to bring together researchers studying the structure and reactivity of mineral surfaces. General subject areas include: atomic and microtopographic structure of mineral surfaces; structure and reactivity of surface complexes; nature of interactions between adsorbates on mineral surfaces (e.g., electrostatic, hydrophobic, etc.); mechanisms of dissolution and precipitation, including microtopographic kinematics; catalysis by mineral surfaces and proposed mechanisms; electron transfer across the mineral-solution interface; biochemistry of microbial interaction with mineral surfaces as sources of nutrients and as electron donors or acceptors. These subject areas are examples; we are not necessarily restricting the scope of the symposium to these areas only.

## **Geochemistry and Bioavailability of Nitrogen and Phosphorus in Dissolved Organic Compounds**

**at the Summer 1999 New Orleans ACS Meeting**

Organizer: William M. Landing, Ph.D. Department of Oceanography, Florida State University, Tallahassee, FL 32306-4320. 850-644-6037. FAX 850-644-2581  
wlanding@mailier.fsu.edu

Recent advances in ultrafiltration, chromatographic separations, and analytical methods have improved our understanding of nitrogen and phosphorus interactions with natural dissolved organic compounds. The association of these nutrient elements with low, medium, and high molecular weight compounds dramatically alters their geochemical reactivity and bioavailability. These compounds play a critical role in nutrient loading and eutrophication in aqueous environments, and need to be considered for environmental protection and remediation projects. This symposium is intended to bring together those scientists studying the environmental behavior of these compounds in soils, groundwater, lakes, rivers, estuaries, and oceans.

### **DIVISION OFFICERS**

#### **Chairperson**

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