

GEOCHEMISTRY NEWSLETTER

Fall 1999

AMERICAN CHEMICAL SOCIETY

DIVISION OF GEOCHEMISTRY

Report from the Chair

We have seen many important advances in the last few weeks. First, largely through the efforts of Ken Anderson, our former chair, the Division of

Geochemistry of the ACS is launching a new journal: Geochemical Transactions. The journal will be published in conjunction with the Royal Society of Chemistry and will be fully electronic.

One advantage of the journal is that we can now publish electronic figures and text that are not possible in traditional printed journals. The journal should be able to accommodate dancing molecules, blinking and annotated spectra and all sort of fancy graphics.

Good job Ken!

We are also exploring closer links to the Geochemical Society, such as co-sponsorship of meetings and events. In all likelihood the ACS Geochemistry Division will help to see that the Goldschmidt Conference is a roaring success. Similarly, the editorial board of the new journal will include an appointee from the Geochemical Society.

Bill Casey

Newsletter Advertising

Starting with this issue, the Geochemistry Newsletter will be accepting a limited amount of advertising from providers who offer geochemical analyses, supplies, or other services that may be of interest to division members. The Executive Committee decided that this might be an effective means to increase revenues to support division activities. Our first advertisement, which appears in this issue, is from **Isotech Laboratories**. If you are aware of companies that might want to advertise with us, please forward their names to John Schaumloffel at schaumlo@mail.wsu.edu.

Award Nominations

Ken Anderson, Past Chair and Awards Chair, will be seeking nominations for our two Geochemistry Division awards for 1999. These will be from the Anaheim and New Orleans meetings. Awards are given for the Best Symposium and the Best Student Presentation. When you attend an outstanding symposium or see a student give a great talk, don't forget to contact Ken with nominations.

Introducing *Geochemical Transactions* and more

Dear GEOC Division Member,

Over the past couple of years, the Executive Committee has been investigating mechanisms to:

Ensure that our division is adequately serving the current needs and interests of geochemists

Enhance and expand the services we offer to our members

Attract new members to the division

A number of projects aimed at achieving these goals are now coming to fruition and I would like to take a moment of your time to make you aware of these projects and how they can be of benefit to you.

Firstly, the Division of Geochemistry, in collaboration with the Royal Society of Chemistry, is launching a new journal:
Geochemical Transactions

This is by far the most significant new service we are able to offer to our members. ***Geochemical Transactions*** will be published by the Royal Society of Chemistry

(RSC)^{*}. It will be a fully electronic journal, (the first geochemical journal designed from inception to take full advantage of the potential of electronic publishing) and will therefore be able to offer numerous types of functionality not available in print journals. These include: hyper-linked text, figures and references, full color figures, (with zoom-in/zoom out capability), animations/movies, 3D figures, and others. A full announcement has been posted on our division website (which is now located at its permanent home) at: <http://membership.acs.org/g/geoc/> Included with the announcement are links to existing RSC publications (not geochemistry related) which include examples of the kinds of functionality available to which are available to authors.

Please visit our site and experiment with the options available. (Please note: access some functions may require that you install an appropriate plug-in on your web browser. These are available free through links are available on the RSC server - follow the links from our site. This need only be done once, is easy, and believe me, it is well worth it!)

Beginning in January 2000, subscription to the journal will be offered as an option with division membership. Subscription rates are not yet finalized but provisionally, will be of the order of \$35-40 for an individual subscription with division membership/affiliation.

The journal will begin accepting manuscripts around September this year with first publications due to appear in January 2000. This is a major step forward for the division and I hope that you will consider both subscribing and contributing.

You will receive more information regarding subscription etc. later in the year when details are finalized.

Geochemistry Division Medal

Also, over the last several years, the executive committee, at the suggestion of Dr. Robert Byrne, (GEOC Chair, 1995) began to explore the possibility of establishing a medal to recognize and honor outstanding accomplishments in geochemistry. Currently, neither the ACS nor the division has such an award. We have received a small (ACS) Presidential start-up grant to enable us to launch the award, and we are currently exploring ways to fund the award in the medium and long terms.

The award will consist of a medallion, \$2000, and support for travel and expenses to the meeting at which the award is presented. Initially, the award will be presented biennially, but this may be increased later if sufficient support can be found to sustain an annual award.

In the short term, we are looking for a corporate or individual sponsor who is willing to support the award. We are also seeking sponsors willing to contribute to the medal endowment, which will, we hope, be the basis for the long-term viability of the award. Ultimately though, the long term success, stability, and prestigiousness of the award depends on your support.

We are currently investigating the possibility of including an option to voluntarily contribute to the award fund with your membership renewal next year. We hope you will seriously consider choosing this option in whatever amount you are able to afford. You can also help by providing information concerning your own organizations policies regarding supporting activities such as this. Can you provide us with information/contacts/pointers to those parts of your organization who may be willing to contribute? Does your organization have a corporate matching gift program? (You may be surprised, many organizations are willing to

match employee contributions to programs such as this as a way of supporting the professional activities of their employees). If so, let us know and/or send us the appropriate forms/web addresses and we will contact them and arrange for the matching gift. **All contributions to the award will be acknowledged and are fully tax deductible.**

All of you are aware that much of the best work in our discipline is at least the equal of the best work done in other areas of chemistry. Yet recognition of this fact, especially within the ACS, has in many ways been lacking in the past. The purpose of this award is to recognize, and publicly acknowledge those geochemists whose work truly stands out as being of the highest caliber. The ACS is the largest organization of chemists and the largest scientific society in the world. Therefore, it is very important that excellence in geochemistry be recognized within the ACS, alongside excellence in other areas of chemistry. Please help us to achieve this goal, either by directly supporting the award, or by helping us to identify others who may be willing and able to contribute.

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The Geochemistry Division Website now has a permanent home at <http://membership.acs.org/G/GEOC>

UPCOMING SYMPOSIA

Submit abstracts online via the ACS website by October 31st 1999 or submit four printed copies of 150-word abstract (original on ACS Abstract Form) to symposium organizer by October 15th, 1999. Please notify the appropriate symposium organizer when an abstract is submitted electronically.

Geochemistry and the Origin of Life

Organizers: P. Maurice, Dept. of Geology, Kent State University, Kent, OH 44242, email: pmaurice@kent.edu; D. Deamer, Department of Chemistry, University of California, Santa Cruz, Santa Cruz, CA 95064, email: deamer@hydrogen.ucsc.edu.

Characterization of High Maturity Fluids

Organizers: J. M. Moldowan, Dept of Geological and Environmental Sciences, Stanford University, Stanford, CA 94305-2115, email: moldowan@pangea.stanford.edu; J. Dahl, Dept of Geological and Environmental Sciences, Stanford University, Stanford, CA 94305-2115, email: dahl@pangea.stanford.edu.

Geochemistry and Deepwater Petroleum Exploration

Organizers: A. N. Bishop, Texaco UTD, 3901 Briarpark, Houston, TX 77042, email: bishoan@texaco.com; Paul Taylor, Unocal, 14141 Southwest Freeway, SugarLand, TX 77478, email: paul.taylor@unocal.com.

The Integration of Organic Geochemistry and PVT Studies in Petroleum Exploration and Production

Organizers: G. Macleod, Shell E&P tech Co., 3737 Bellaire Blvd., Houston, TX, 77025, email: gmac@shellus.com; P. Meulbroek, Woods Hole Oceanographic Institute, 360 Woods Hole Rd. MS#4, Woods Hole, MA 02543, email: pmeulbroek@whoi.edu.

New Insights into the Petroleum Geochemistry of NSO Compounds

Organizers: H. Wilkes, Institute for Petroleum and Organic Geochemistry (ICG-4), Research Center Jülich, D52425 Jülich, Germany, email: h.wilkes@fz-juelich.de; P. Taylor, Unocal, 14141 Southwest Freeway, SugarLand, TX 77478, email: paul.taylor@unocal.com.

Organic Solids in Petroleum Production

Organizers: B. A. Stankiewicz, Shell E&P Tech Co., 3737 Bellaire Blvd., Houston, TX 77025, email: artur@shellus.com; E. Tegelaar, Baseline Resolution, Inc., Suite 810, 2000 Avenue G, Plano, TX 75074, email: ETegelaar@brilabs.com.

Geochemical Analysis in the New Millennium

Organizers: L. W. Elrod, Geotechnology Research Inst., Houston Advanced Research Ctr., 4800 Research Forest Dr., The Woodlands, TX 77381, email:

lwe@gtri.harc.edu; M. A. Engel, University of Oklahoma, School of Geology & Geophysics, 100 East Boyd St., Norman, OK 73019, email: ab1635@ou.edu.

The Geochemistry Division Website now has a permanent home at <http://membership.acs.org/G/GEOC>

ORGANIZING A SYMPOSIUM

Organizing a symposium is one of the easiest things to do. One of the best advantages of a close-knit division like ours is that our members can plan symposia of interest to them and their colleagues without years of extensive preparation. The Executive Committee is ready to help you plan a symposium around your area of interest. Contact the Program Chair for details.

Geochemistry Division Chair-Elect / Program Chair:
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Co-Sponsored Symposia

At the ACS National Meeting in San Francisco, Geochemistry Division member Steve Cabaniss of Kent State is organizing that is co-sponsored with Environmental Chemistry Division entitled: 'Computation Methods in Environmental Chemistry'.

Online Abstract Submittal System - OASYS

ACS is now using an online abstract submittal system (OASYS). This system came in to operation in time for the New Orleans National Meeting abstract submission. Despite some teething problems, over 5000 abstracts were submitted via the web interface for this meeting. We would welcome any comments been set a little earlier than usual to enable all the scheduling to be completed on time. When the site opens, authors will be able to submit, review, and modify their own papers up through the 31st October. Submission requires the use of a newer browser, such as Netscape Navigator 3.0 or above, or Microsoft Internet Explorer 3.0 or above. Further details may be found at the ACS National Meetings web page: <http://www.acs.org/meetings/abstract/abinfo.html>.

Andy Bishop
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YCC Turns Silver!

In celebration of the YCC's (Younger Chemists Committee) 25th Anniversary, special programming and events designed to highlight the achievements of younger chemists will be sponsored at ACS events

throughout 1999. In addition to commemorative 25th Anniversary pins, YCC ribbons will be placed on posters contributed by younger chemists at the SciMix events in both Anaheim and New Orleans. YCC is striving to co-sponsor symposia with all of the ACS technical divisions including a special Biotechnology Symposia at the New Orleans meeting. Also in New Orleans, there will be a special reception entitled "*Looking Back to the Future.*" This reception will include

a short program where speakers will give perspectives on the past, present and future of the YCC. Visit the YCC web site for more information on these special 25th Anniversary events as the meetings draw nearer, <http://www.chem.hawaii.edu/ycc>. Help make the YCC's 25th Anniversary celebration a big success by planning to attend these special events!

The Geochemistry Division Website now has a permanent home at <http://membership.acs.org/G/GEOC>

Geochemistry and Deepwater Petroleum Exploration

At the 219th National ACS Meeting in San Francisco, CA
Spring 2000

The aim of this symposium is to provide a forum for the exchange of experiences in applying geochemistry in frontier, deepwater exploration. Topics of interest include (but not restricted to) such areas as:

- Geochemistry of source rocks deposited in deep water environments
- Delineation of source rocks in the absence of direct samples
- Uses and abuses of surface geochemical data
- Maturity assessments and modeling
- Use of geochemistry in predicting challenges to production, such as asphaltene, wax and hydrate deposition.

Organizers:

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Geochemistry and the Origin of Life

At the 219th National ACS Meeting in San Francisco, CA
Spring 2000

The question of the Origin of Life remains one of science's great frontiers, requiring interdisciplinary research for which the field of Geochemistry is a core element. Further progress toward understanding the Origin of Life will require broad knowledge of the geochemical environment ~4 billion years ago. The inventory of organic and inorganic compounds necessary for the origin of life was linked at the global scale to atmospheric photochemistry, temperature ranges and the geochemical processing of extraterrestrial infall. At the local scale, the redox chemistry of hydrothermal regions, the solution chemistry of phosphate, and the catalytic properties of mineral surfaces would also have played important roles. This special session will explore how self-assembly mechanisms can produce supramolecular systems of organic molecules with the properties of the living state, and how such processes were linked to the geochemical environment. In addition to invited presentations, we are soliciting contributed papers from a broad range of topics related to the Origin of Life

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