

ACS DIVISION OF GEOCHEMISTRY

FALL 2001 NEWSLETTER

222nd NATIONAL ACS MEETING CHICAGO, IL

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Geochemistry Get-A-Member Campaign for 2002

Does \$50 for dues sound a bit steep? Would you like to cut that in half? Well, you can !!!

For 2002, the Executive Committee has authorized a special Two-for-One membership drive. Simply put, here is how it will work:

Any current paid Division member or affiliate can sign up a friend or colleague as a new division member, and the Division will honor both memberships for the price of one. Members can split the costs with the new member any way they choose. You can pay for you colleague or friend, split the dues with them or even have them pay for you! It is entirely between you and the person whom you are inviting to join the Division.

Details about this offer (for the 2002 ACS membership signup period) will be available on the Division website in November. Check out the website for more information (<http://membership.acs.org/G/GEOC/>).

As soon as ACS processes your 2002 renewal we will add the new member to our roster and they can start receiving the benefits of Geochemistry Division membership. The best part is that the Royal Society of Chemistry (who publishes Geochemical Transactions), have agreed to extend this offer to include individual subscription to Geochemical Transactions. That is, any member who includes an individual subscription to Geochemical Transactions with their membership can also sign up a new member, who will also receive a subscription to GT. That boils down to two memberships and two subscriptions for the equivalent of \$25 each! ***(Compare that to the cost of subscriptions to other geochemical journals!)***

This is a great way to introduce colleagues or students to the benefits of Geochemistry Division membership, including GT and to save a few dollars in the process.





**THE INTERNATIONAL
HUMIC SUBSTANCES SOCIETY
Twentieth-Anniversary Conference**

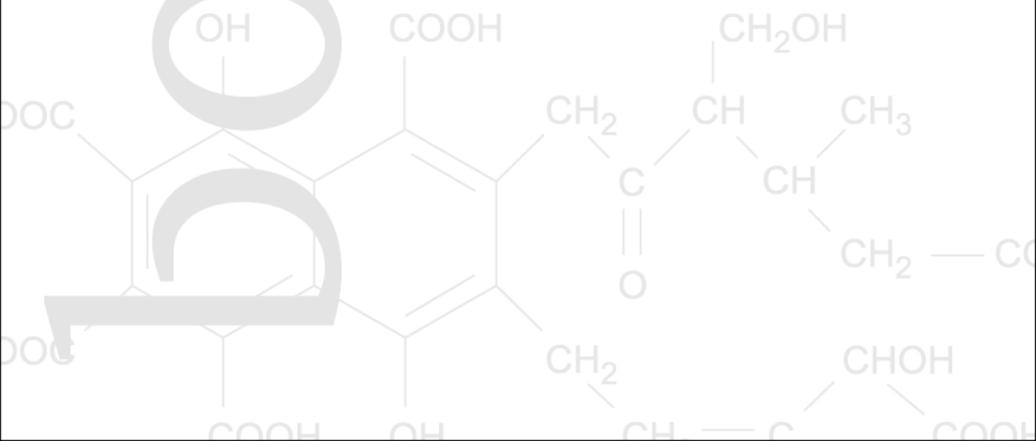
**Humic Substances:
Nature's Most Versatile Materials
July 21-26, 2002**

Northeastern University
Boston, Massachusetts
United States of America

Registration and advertising information at:
www.hagroup.neu.edu

E-mail: e.ghabbour@neu.edu
Phone: 617.373.7988

Boston



Division Members Receive Support for Symposia from the Petroleum Research Fund

One mechanism members can use to help us provide high-quality programming, while keeping dues low, is to apply for ACS PRF type SE (Scientific Education) grants when they organize symposia at major meetings. ACS PRF type SE grants are available to help defray the travel costs of invited foreign speakers at major symposia in North America. **The application is short, and the Division Treasurer takes care of much of the work!**

Over the past year, six division members have received support from PRF for their symposia. The total of this support exceeded \$10,000, allowing symposium organizers to attract internationally recognized scientists to Geochemistry Division Sponsored Symposia at ACS National Meetings. You can find out about ACS PRF type SE grants at the following website: <http://www.acs.org:80/prf/index.html>

Newsletter Changes and News from the Treasurer

The previous newsletter was the final one in which a paper copy was distributed to all members. By converting to an electronic format, the Division will save thousands of dollars each year in printing costs. These savings will allow us to redirect funds into supporting symposia and other activities. Starting with this newsletter, members will receive an email message with a link to the newsletter, which will be posted on the Division website (<http://membership.acs.org/G/GEOC/>). Clicking on the link will open a *.pdf file.

Our goal is to keep members email addresses confidential, and we only use them for Division business. Currently, our email address database is 93% complete. In addition to filling out your current or future address on your ACS Dues form, members can send their new or updated addresses to Ken Anderson (kbanderson@anl.gov). Members who, for whatever reason, require a paper copy of the newsletter be sent to them still have this option. About a month or so before the ACS National Meetings, just send an email to John Schaumloffel (jschaumloff@umassd.edu) and a paper copy will be mailed, at no cost, just as soon as the newsletter is complete.

For the convenience of our members, the Division now setup to accept credit cards (MasterCard and Visa) for a variety of products and services. More than forty of the attendees at the Division Dinner in San Diego paid for their dinners via credit cards. At future National Meetings, we plan to have this payment option setup at the Divisions table so that current or new members can pay for GT subscriptions and other products.

New Geochemistry Division Dues Structure for 2002

Geochemistry division membership dues for 2002 are unchanged from dues in 2001. However, dues for 2002 and beyond will be structured slightly differently than they have been in the past, due to the introduction of the Division's electronic Journal, [Geochemical Transactions](#). For 2002 dues and beyond, default dues will include an individual subscription to Geochemical Transactions, and hence will appear to have increased.

2002 Dues Structure

Membership Level	Division Dues	GT Subscription*	Renewal Amount
Member	\$10	\$40	\$50
Affiliate	\$12	\$40	\$52
Student	\$7	\$40	\$47

**Optional*

Obviously, we hope that you will choose to subscribe and support the Division's new journal, which we have introduced as a service to you, the members. We understand however, that for a variety of reasons, some members may not wish to subscribe. Therefore, those members who do not wish to receive Geochemical Transactions can "Opt Out" which will unsubscribe the member from receiving the journal. Once you subscribe to this option, your future bills will continue to reflect this choice until you choose to change it (which we hope will be soon!). To "Opt Out", just cross out the Renewal Amount and the old Total on your bill, and write in only the Division Dues (\$10, \$12 or \$7) and then correct the old Total.

This system is the result of an arrangement between the Division and ACS' Member and Subscriber Services, which allows us to optionally offer a subscription to Geochemical Transactions with Division membership and to collect subscriptions with the annual dues renewal process.

We will send several more mailings regarding this new dues structure during the remainder of the year, but we wanted to alert you as early as possible to this new structure to minimize confusion during the renewal cycle. If you have any questions regarding GEOC dues, please do not hesitate to contact one of the Division Officers ([click here to go to a list of officers](#)).

ACS Salary Comparator

Are YOU being paid what you are worth?

Recently, the ACS introduced a new member service on the new ACS web site (www.acs.org) - the ACS Salary Comparator. This free online service allows chemists to compare their salaries with those of their peers, based on experience, qualifications and geographic location. This tool:

- Allows members to evaluate their current situations realistically based on statistically significant data
- Allows members to evaluate job offers that they might be considering in a new geographic area
- Enables members to evaluate the likely compensation consequences of obtaining additional qualifications or changing duties
- Enables employers to ensure that the salaries they offer employees are competitive with those of other chemical employers.

The data on which the salary comparisons are based is taken from ChemCensus 2000, the ACS' survey of over 50,000 ACS members.

Logo Contest!

The Division of Geochemistry (GEOC) lacks a logo! And it has been suggested that as graphic artists, the members of the executive committee make excellent geochemists! So it has been decided to seek out those among us who aspire to the heights of artistic creativity.

Send us your ideas! Sketch it out, even roughly and send it to our Secretary, Dr Virender Sharma at the address given below. The executive committee will evaluate submissions at successive national meetings until a winner is found. The creator of the winning logo will win a free registration to an ACS national meeting of their choice.

Don't be shy. Let your imagination and creative free spirit run free! And see the fruits of your imagination BECOME the sign seal and symbol of the your Division. Keep in mind that it needs to be distinctive and clear when printed at no larger than ~1.25 X1.25 inches.

Send entries to:

Dr. Virender Sharma
College of Science and Liberal Arts
Chemistry Department
Florida Tech.
150 West University Blvd.
Melbourne, FL 32901

Call for Papers

RS•C
ROYAL SOCIETY OF CHEMISTRY

Registered Charity No. 207890

Geochemical Transactions, published by the Royal Society of Chemistry in collaboration with the Division of Geochemistry of the American Chemical Society, is an electronic journal for the rapid publication of high impact articles from all areas of geochemistry.

Making full use of the latest web-based technology, Geochemical Transactions enables you to publish '3D' interactive figures, movies, etc., as well as allowing unrestricted use of colour. Use of the electronic medium from start to finish also results in very rapid times to publication. The journal is fully archived.



Submissions for Geochemical Transactions are now being sought, for example, in the following areas:

- Organic geochemistry
- Inorganic geochemistry
- Aquatic geochemistry
- Marine chemistry and chemical oceanography
- Biogeochemical investigations of organic, inorganic and biogeochemical processes
- Molecular and isotopic analyses
- Chemical and elemental cycles
- Geochemical aspects of global change
- Instrumental or analytical techniques applying to the above
- Numeric or computational models of geochemical processes

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J Tossell *University of Maryland, USA*

Submissions can be sent via e-mail to the Managing Editor at geochem@rsc.org or via the web site at

www.rsc.org/geochem

The web site also contains further details, including instructions for authors, etc

CALL FOR PAPERS

**American Chemical Society
223rd National Meeting
Orlando FL, April 7-11, 2002
Electronic Abstract (OASYS) Deadline: November, 21, 2001**

Geochemistry Division Symposia

**Advances and Applications in Analytical Pyrolysis/Thermochemolysis
Cosponsored with Division of Fuel Chemistry**

Organizers:

David J. Clifford, The Pennsylvania State University, The Energy Institute, 209 Academic Projects, University Park, Pa 16802, (814) 865-3523, djc175@psu.edu

Colin E. Snape, University of Nottingham, School of Chemical, Environmental and Mineral Engineering, University Park, Nottingham NG7 2RD, UK, +44 115 951 4166, colin.snape@nottingham.ac.uk

Michael D. Lewan, U.S. Geological Survey, MS 977 Denver Federal Center, Denver, CO 80225, (303) 236-9391, email: mlewan@usgs.gov

Topics for technical papers include but are not limited to:

- advances in pyrolysis/thermochemolysis instrumentation and methodology
- hydrous pyrolysis, hydro pyrolysis, thermochemolysis
- characterization of recalcitrant geo-macromolecules
- simulating natural thermal maturation of organic matter
- determining petroleum generation kinetic parameters
- petroleum expulsion and charge methodologies
- utility of pyrolysis in oil-to-rock correlations

Complexity at the Water-Solid Interface: Mineral Surfaces and Nanoparticles

Organizers:

James D. Kubicki, Department of Geosciences, Pennsylvania State University, 308 Deike Bldg, University Park, PA 16802, Phone: 814-965-3951 (Fax 814-863-8724), kubicki@geosc.psu.edu

Michael L. Machesky, Illinois State Water Survey, 2204 Griffith Drive, Champaign, IL 61820-7495, Phone: 217-333-9322 (Fax 217-244-3054), machesky@sws.uiuc.edu

Paul Fenter, Environmental Research Division, Argonne National Laboratory, 9700 South Cass Avenue, Bldg. 203, Argonne, IL 60439, Phone: 630-252-7053 (Fax 630-252-7415), fenter@anl.gov

Ariel A. Chialvo, Chemical & Analytical Sciences Div, Oak Ridge National Laboratory, PO Box 2008 MS6110, Oak Ridge, TN 37831-6110, Phone: 865-574-1252 (Fax 865-574-4961), _2ac@ornl.gov

Contributions are invited concerning fundamental aspects of the interface of aqueous solutions with minerals, colloids, nanoparticles and other solids. Experimental (i.e. structure, speciation and sorption), as well as theoretical and modeling (including classical and ab initio) approaches are all encouraged, especially those studies that integrate or reconcile results over angstrom to micron length scales. Studies that deal with the unique properties and behavior of nanoparticles in natural environments are also welcome.

**Microbially Mediated Redox Process at the Solid-Water Interface
Cosponsored with Division of Environmental Chemistry**

Organizer:

Scott E. Fendorf, Geological and Environmental Sciences, Stanford University, GES-Braun Hall, Palo Alto, CA 94305, Phone: 650-723-5238 (Fax 650-725-2199), fendorf@stanford.edu

**Nonlinear Chemical Dynamics of Nucleation, Growth, and
Dissolution at Mineral-Fluid Interfaces**

Organizers:

Carrick M. Eggleston, Department of Geology and Geophysics, University of Wyoming, Laramie, WY 82072-3006, Phone: 307-766-6769 (Fax 307-766-6679), carrick@uwyo.edu

Steven R. Higgins, Department of Geology and Geophysics, University of Wyoming, Laramie, WY 82071, Phone: 307-766-3318 (Fax 307-766-6679), shiggins@uwyo.edu

Andreas Luttge, Department of Earth Sciences, Rice University, Houston, TX 77005, Phone: 713-348-6304, aluttge@rice.edu

Stable Isotope Signatures for Establishing Paleoenvironmental Change

Organizers:

Kliti Grice, School of Applied Chemistry, Curtin University of Technology, GPO Box U1987, Perth W.A. 6845, Australia, TEL +61 (0)8 92662474, rgricek@alpha1.curtin.edu.au

Roger E. Summons, Australian Geological Survey Organisation, GPO Box 378, Canberra ACT 2601, Australia, TEL +61(0)2 62499515, Roger.Summons@agso.gov.au

Topics for papers include but are not limited to application of stable isotope ratios of carbon, hydrogen, nitrogen, oxygen and sulfur preserved in the rock record for:

- Environmental change over short and long timescales
- Global isotope excursions in the geological record (e.g. Permian/Triassic, Cenomanian/Turonian etc.)
- Multi-element (i.e. C, H, N, S, O) stable isotope studies of organisms, bulk organic matter and individual compounds
- Applications to evaluation of petroleum source rocks, meteorites etc.

CALL FOR PAPERS

223rd American Chemical Society National Meeting,
Orlando, USA, April 7-11, 2002

Radioanalytical Methods at the Frontier of interdisciplinary sciences Trends and Recent Achievements

The Division of Nuclear Chemistry and Technology, the Division of Industrial and Engineering Chemistry, represented by the Separation Science and Technology subdivision, and the Division of Geochemistry, plan to generate a special symposium to highlight the recent advances and achievements in the broad field of radio-analytical chemistry and its related subjects. The goals of this symposium are to foster an effective communication between scientists in the increasingly interdisciplinary field, and to attract young scientists by presenting and openly discussing our exciting and cutting-edge research. Main Areas of programming are:

- Radio-Analytical method development
 - Nuclear analytical methods (NAA, PAA, IBA, RBS/EBS, ERDA, NRA, and PIXE)
 - Radiography techniques
 - Detection technologies
 - Age dating techniques
 - Separation techniques and agents
 - etc.
- Applications of radioanalytical chemistry to problems in:
 - Environmental remediation and nuclear waste
 - Human health (radiopharmacy and bioassay)
 - Migration of radionuclides
 - Biogeochemical processes
 - Nuclear power generation
 - Nuclear treaty monitoring and verification
 - Method development to characterize transactinide elements

Prospective authors are asked to voice their intent to the organizers (Carola A Laue [laue1@lnl.gov, (925) 422-3192] and Kenneth L. Nash [klash@anl.gov, (630) 252-3581]) as soon as possible so that we can arrange for keynote speakers in areas of concentrated interest. The submission of abstracts online via www.acs.org will be requested later this year, with a deadline of approximately early November, 2001.

ACS Chicago National Meeting: Advanced Photon Source Tour

Argonne National Laboratory
Tuesday, August 28, 2001

The Advanced Photon Source is a third generation, synchrotron radiation, user facility operated by the Department of Energy for fundamental scientific research. Synchrotron radiation is utilized in a wide range of chemical research including the behavior of metal contaminants in natural systems, surface reactivity and catalysis, and structures of complex solids. This walking tour, providing an introduction to the operation and use of a synchrotron, and will visit the facility overlook, the control room and an experimental beam line. The tour will be followed by a social hour at the facility.

Bus will depart from the Convention Center at 2:30 pm and return ~7:00 pm. Please contact Martine Duff (martine.duff@srs.gov; 803-725-5276) to reserve your seat!

All non-US citizens who wish to participate in the tour should contact Dixie Franklin (franklin@cars.uchicago.edu) immediately for instructions on security clearance procedures at ANL.

Chicago National Meeting Abstracts

Clicking here will take you to a *.pdf file containing ALL of the abstracts for the Chicago National Meeting.