

# THE COAL GEOLOGIST

THE NEWSLETTER OF THE COAL GEOLOGY DIVISION, GEOLOGICAL SOCIETY OF AMERICA

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## Chair's Message

Dear Coal Geology Division Members:

There are two important changes this year for GSA's Coal Geology Division. The first change affects all of you. On Saturday, February 23, 2001, I attended the GSA Division Chair Meeting at GSA Headquarters in Boulder, CO. There was much discussion about the "smaller" Divisions (and ours is one), and a recommendation was made for us to change our name. The suggestion came up because we have had our largest audiences (by far) at technical sessions that encompassed the geology of all fossil fuels. I have spoken to the Division officers, and we believe that a name change to the "Energy Geology Division" will increase interest in the Division and expand our membership, which is continuing to erode. I would like to hear from all of you about this change. We will be finalizing the change at the Division's business lunch at the 2001 Annual Meeting in Boston, and you are invited to attend.

The second change involves an expansion of the Antoinette Lierman Medlin Scholarship Award. Peter Warwick (2001 Coal Geology Division 1st Vice-Chair) and I recently talked to Jack Medlin about expanding the scope of the Medlin Award. We are proposing that the Medlin scholarships, which currently provide monetary support and recognition to deserving undergraduate and graduate students involved in coal science research, be expanded to support students to attend Coal Geology Division-sponsored field trips and short courses held at GSA Annual Meetings. We hope to have the application process in place by June, 2001, in time for the Division Field Trip and Short Course planned for the Boston Annual Meeting. Watch for future announcements and e-mail regarding the application process for these student sponsorships.

The Summit 2000 GSA Annual Meeting in Reno was a great success. The two Coal Geology Division-sponsored topical sessions, "Environmental Aspects of Fossil Fuel Use" and "The Impact of Mercury on the Global Environment," were very well attended. Joe Meyer, US Bureau of Land Management, won the Coal Geology Division's Best Paper Award for his talk entitled "Groundwater Level Changes Associated with Coal Mining and Coal Bed Methane Development in the Eastern Powder River Basin of Wyoming." Congratulations, Joe, you had some very tough competition.

The 2001 GSA Annual Meeting & Exposition will be held in Boston, Massachusetts, on November 1-10, 2001. The Division is sponsoring a half-day, pre-meeting short course, "Mobilization of Metals from Fossil Fuels: Impacts to the Environment and Human Health," taught by Robert Finkelman and Allan Kolker of the U.S. Geological Survey.

An afternoon field trip on Tuesday, Nov. 6, is planned to visit the Salem Harbor coal-fired power plant in nearby Salem, Massachusetts (but unfortunately, it was not included in the April, 2001 *GSA Today* announcement!) In addition to the Coal Geology Division technical session, the Division plans to sponsor two highly relevant topical sessions. The first of these, "Fossil Fuel on Federal Lands," will review current estimates of fossil-fuel resources (coal, oil shale, hydrates, natural gas and oil) available on Federal and Province lands in the U.S., Canada, and Mexico. The second, "Coal Systems Analysis," will define a single, unified approach to integrating concepts of coal formation, coal quality, environmental parameters, and coal as a source rock for hydrocarbons into a single Coal Systems model. Check *GSA Today* for detailed descriptions, and please consider submitting abstracts to these sessions. Abstract deadlines are July 17 (paper) and July 24 (electronic). Visit [www.geosociety.org](http://www.geosociety.org), write to [meetings@geosociety.org](mailto:meetings@geosociety.org), or call the GSA meetings department at (303) 447-2020 or (800) 472-1988 for more information.

It is looking to be a great year. If you have concerns or suggestions about how to strengthen the Division, please contact me directly at [lruppert@usgs.gov](mailto:lruppert@usgs.gov). I look forward to working for all of you.

Yours truly,

## Coal Geology Division Management Board

**Chair:** Leslie Ruppert, United States Geological Survey, Reston, VA

E-mail: [lruppert@usgs.gov](mailto:lruppert@usgs.gov)

**First Vice-Chair:** Peter Warwick, United States Geological Survey, Reston, VA

E-mail: [pwarwick@usgs.gov](mailto:pwarwick@usgs.gov)

**Second Vice-Chair:** Steven Greb, Kentucky Geological Survey, Lexington, KY

E-mail: [greb@fido.mm.uky.edu](mailto:greb@fido.mm.uky.edu)

**Past Chair:** Charles Barker, United States Geological Survey, Denver, CO

E-mail: [barker@usgs.gov](mailto:barker@usgs.gov)

**Secretary-Treasurer:** Thomas Demchuk, Conoco Inc., Houston, TX

E-mail: [thomas.d.demchuk@usa.conoco.com](mailto:thomas.d.demchuk@usa.conoco.com)

**Member-at-Large:** Russell Jacobson, Illinois State Geological Survey, Champaign, IL

E-mail: [jacobson@geoserv.isgs.uiuc.edu](mailto:jacobson@geoserv.isgs.uiuc.edu)

## Russell R. Dutcher

### Year 2000 Recipient of the Gilbert H. Cady Award

Russell R. Dutcher received his B.A. from the University of Connecticut in 1951 and his M.S. from the University of Massachusetts in 1953. He received his Ph.D. from The Pennsylvania State University in 1960 and concurrently became assistant director of the Coal Research Section at Penn State. During the next 10 years, he worked closely with William Spackman, and in 1963 he became a faculty member in the Department of Geology and Geophysics at Penn State.

From 1955-1970, he published pioneering work on coal composition as related to carbonization and in 1960 was co-recipient of the Outstanding Research Paper of the Year Award from the American Iron and Steel Institute. During this time, he also conducted research on coal metamorphism and the impact of igneous activity on coal seams, the use of the electron microprobe on coal and mineral matter, and innovative studies on the micro-hardness of macerals, mine drainage, sulfur distribution in coals, use of the laser-mass spectrometer for coal analysis, and experimental studies of anthracite coals at high temperatures and pressures.

In 1970, he joined the faculty of Southern Illinois University Carbondale (SIUC) as chair of the Department of Geology. He established the Coal Characterization Laboratory in the department. With the Arab oil embargo and resulting federal initiatives in coal, he was appointed as the first director (1974-1976) of the Coal Extraction and Utilization Center at SIUC. One of his first activities was to prepare a proposal to locate a federally funded laboratory near SIUC. This was achieved when the U.S. Bureau of Mines opened the Carbondale Mining Technology Center (now the Illinois Clean Coal Institute). He was the principal investigator for the Gas Research Institute on a comprehensive study of the field acquisition, processing, storage, and monitoring of premium coal samples. From 1984 to his retirement from SIUC in 1993, Dutcher served as Dean of the College of Science. During this time, his research interests focused on coalbed methane.

In his career, he served a wide range of university, government, civic, and professional communities and organizations. In 1984, he was the first recipient of the Gordon H. Wood, Jr. Memorial Award of the Eastern Section of the American Association of Petroleum Geologists for outstanding contributions to the science of coal geology and in recognition of a long and distinguished teaching career. He received the Martin C. van Couvering Memorial Award in recognition of outstanding contributions to the American Institute of Professional Geologists. The Coal Geology Division of the Geological Society of America presented him with their Distinguished Service Award in 1994. In 1980, he became a charter member of the Editorial Board of the *International Journal of Coal Geology*. He was named to succeed William Spackman as editor-in-chief in March 1988 and became honorary editor January 1, 1999.

#### Citation

The Gilbert H. Cady Award is presented this year to Russell R. Dutcher to acknowledge his outstanding contributions to the field of coal geology. In a career spanning four decades, he has made significant contributions as a professor, researcher, university administrator and as an editor.

As a professor, he has been a gifted and inspiring teacher who demanded the best from his students. Under his guidance, seventeen students completed their M.Sc. Degrees, and three

completed their Ph.D. degrees in coal geology and coal petrology. As a researcher, he has made many contributions in the areas of applied coal petrology, coal metamorphism and coal bed methane. He has published nearly forty papers and edited four books including a GSA Special Paper and an ASTM Special Technical Publication.

As a university administrator, he helped lead the legendary Coal Research Section at the Pennsylvania State University. At Southern Illinois University, he developed the very successful and widely recognized coal research program in the Department of Geology, and he also established and initially led the multi-disciplinary Coal Research Center. He has been a great advocate of coal research and has been instrumental in obtaining millions of dollars in research funding.

As an editor, he took over the *International Journal of Coal Geology* after the retirement of William Spackman, the founder of the journal. He was an editor-in-chief of 29 volumes (64 issues) of the journal including 14 special issues covering a wide variety of topics in coal geology. He added a number of talented editors and reviewers, encouraged industrial contributions, and maintained the international nature of the journal. By virtue of his many accomplishments and his life-long commitment to the field of coal geology, he is a deserving recipient of the Gilbert H. Cady Award.

- Alex R. Cameron, James R. Staub, and John C. Crelling

### Antoinette Lierman Medlin Scholarship Year 2001 Winners

This year's winners of the Antoinette Lierman Medlin Scholarships are Mr. Jonson Miller of Virginia Polytechnic Institute and State University, and Mr. Michael Rygel of Dalhousie University. Mr. Miller will receive the research portion of the Medlin Scholarship, worth \$2000, and Mr. Rygel receives the field portion of the Scholarship, worth \$1500. Mr. Miller's proposal was entitled, "Changes in Late Pennsylvanian pedogenic environments in the central Appalachian basin and implications for climate control on sedimentation and coal formation." Mr. Rygel's proposal was entitled, "Channels and coal-floodplain dynamics of the Pennsylvanian Joggins Formation."

As well as the funds to conduct the various aspects of their research, both winners will be eligible to receive up to \$1000 to offset costs associated with travel to a future GSA Annual Meeting to present the results of their research at a Coal Geology Division-sponsored session.

Leslie (Jingle) Ruppert

### Gilbert H. Cady Award Year 2001 Winner

The recipient of this year's Gilbert H. Cady Award is Jack C. Crelling of Southern Illinois University. At the time of publishing this newsletter, no other details were available. Please look for more news concerning this year's Cady Award winner in future

### NEW COAL GEOLOGY DIVISION WEBSITE AND URL

Russell Jacobson has taken over duties as webmaster; subsequently, the CGD website has moved. Please bookmark the new home of the website, and note that the address is case-sensitive:

**<http://www.isgs.uiuc.edu/coalsec/GSA>**

## GSA 2001 A Geo-Odyssey November 4-7, 2001 Boston, MA



### Coal Geology Division-sponsored events include:

**Topical Session 66.** Coal Systems Analysis: A New Approach to the Understanding of Coal

Formation, Coal Quality and Environmental Considerations, and Coal as a Source Rock for Hydrocarbons. (Peter Warwick and Robert Milici)

**Topical Session 87.** Fossil Fuel on Federal Land. (Leslie Ruppert and Peter Warwick)

**Pre-meeting Short Course.** Mobilization of Metals from Fossil Fuels: Impacts to the Environment and Human Health. (R. Finkelman, A. Kolker and L. Ruppert)

**Field Trip.** Visit to the Salem Harbor coal-fired power plant Tuesday afternoon, Nov. 6 (details to be finalized)

Visit the Coal Geology Division website as events are finalized

(<http://www.isgs.uiuc.edu/coalsec/GSA>)

Check the June issue of *GSA Today*, or visit the main GSA homepage (<http://www.geosociety.org>).

The Fall issue of *The Coal Geologist* will highlight all finalized Coal Geology Division-sponsored events.

### WORLD COAL QUALITY INVENTORY (WoCQI) COAL QUALITY: GLOBAL PRIORITIES

Conference—Workshop—Short Courses

September 24-26, 2001

U.S. Geological Survey, 12201 Sunrise Valley Drive, Reston VA

The USGS will host a conference, workshop and short courses to identify key coal quality issues and to seek solutions. Plenary speakers will address issues such as: coal quality concerns of exporting countries; coal quality concerns of importing countries; mining and combustion issues, etc. Break-out sessions will address: Development of coal quality databases and visualization of data and products; Coal resource and reserve assessment factors; Utilization issues related to coal quality and coal preparation; Water quality issues related to mining and utilization; Air quality issues such as PM, SO<sub>x</sub>, NO<sub>x</sub>, mercury, and CO<sub>2</sub>; Human health issues. There will be poster displays and computer demonstrations of current activities and coal quality characterization in major coal-producing regions. Proposed short courses are: Coal quality characterization; The use of ASTM standards; Modes of occurrence of trace elements in coal; Human health issues related to coal and coal use.

Registration: \$150 prior to August 15, 2001, \$200 thereafter. Registration includes a dinner, snacks, fieldtrip, short courses, and CD-Rom with the proceedings.

If interested, please respond to [kdennen@usgs.gov](mailto:kdennen@usgs.gov), phone (703) 648-6487

### THE SOCIETY FOR ORGANIC PETROLOGY ANNUAL MEETING

September 23-26 Houston, TX

Information:

Dr. Coleman Robison

Texaco Group Inc., E&P Technology Division

3901 Briarpark Drive, Houston, TX 77042

Ph. (713) 954-6094 Fax. (713) 838-4628

[robiscr@texaco.com](mailto:robiscr@texaco.com) <http://www.tsop.org>

"Geochemistry of the  
Deep-Water Gulf of Mexico"

Co-sponsored by the  
Houston Geochemical Society

### Reprints

(For anyone interested, please feel free to contact John directly.)

I have considerable numbers of reprints, classed into generic categories, dealing with organic petrology, the nature of coal, maceral features and so forth. Some are quite old.

Rather than throw these away over time, I am looking for ideas or recipient-individuals with the view of passing them on anywhere they might be appreciated. If you are interested in this field, then send me your snail mail address and a broad outline of your interests. I will respond prior to commencing to send you material by mail (to confirm I am not sending you grossly the wrong thing).

Reprints will be mailed snail mail in medium envelope-full batches.

John G. Byrnes, Geologist

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## EARTH SYSTEM PROCESSES



THE GEOLOGICAL SOCIETY OF AMERICA  
IN CONJUNCTION WITH  
THE GEOLOGICAL SOCIETY OF LONDON  
EDINBURGH, SCOTLAND JUNE 24-28, 2001



The Geological Society of America and The Geological Society of London, two of the oldest and largest organizations of earth scientists, are combining their resources to co-convene a broad interdisciplinary meeting to discuss the present state of knowledge of Earth System Processes.

The conference will follow the linked themes of Earth System Processes and Earth System Evolution through its four days. The conference venue is designed to have large integrated spaces to enable the display of a large number of poster presentations adjacent to large auditoria. There will be only four parallel oral sessions, and oral presentations will be restricted to a few of the submitted abstracts of widest interest together with some invited keynote presentations.

Edinburgh is a city that rewards every visitor, not least the geologist. All year round, millions are drawn to Edinburgh for remarkable social and scientific events. Medieval buildings share the pavement with striking modern structures built on ice-sculpted volcanic landforms, centuries-old craftsmanship rubs shoulders with cutting-edge fashion, and the peoples of the world mingle in the city's original pubs and contemporary restaurants to create a truly dynamic capital city.

For information and registration, see  
[www.geosociety.org](http://www.geosociety.org) or [www.geolsoc.org.uk](http://www.geolsoc.org.uk)

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