



EMD Mission Statement: "To advance the science and technology of energy minerals in an environmentally safe manner."

Energy Minerals Division Newsletter

Summer, 2009

Greetings Fellow EMD Members!

As of July 1, a new fiscal year began for AAPG, and with it our leadership team changed. The new EMD Executive Committee consists of:

- 🌐 Frank Walles, EMD President (Frank.Walles@dvn.com)
- 🌐 Michael Campbell, EMD President-Elect (mdc@mdcampbell.com)
- 🌐 Fran Hein, EMD Vice-President (fran.hein@ercb.ca)
- 🌐 Amy Sullivan, EMD Secretary (amy.sullivan@shell.com)
- 🌐 Kent Bowker, EMD Treasurer (kabo@bowkerco.com)

Along with the EMD committee chairs and councilors, your Executive Committee is committed to making EMD the premier source for information and professional development in [twelve different commodity areas](#) to advance the science of economic geology and geophysics especially as it relates to common energy resources, such as *uranium* (nuclear minerals), *coal and lignite* (carbon minerals), *geothermal energy* (hot water), and to the unconventional hydrocarbons (including *coal-bed methane, gas hydrates, gas shales, gas (tight) sands, oil shale, and oil sands*), and renewable energy resources (*wind, solar, tidal, etc*), with contributions regarding energy economics and supporting tools such as *geospatial information* (remote sensing, and *GIS*).

The role of the EMD is to *monitor and advise AAPG members and others on the science and technology in the development of the subject energy resources*. To that end, EMD members actively participate in the society by helping to organize or supporting local society meetings, regional, national or international meetings, symposia, workshops, Short Courses, and Field Trips, and by publishing in the [AAPG Bulletin](#), the [AAPG EXPLORER](#), and in [EMD special publications](#). Technical information on the commodities can be accessed by all AAPG members at the [EMD website](#). As EMD members, you have access to detailed information by logging into this website using your AAPG member number and password.

2008-2009 Achievements

EMD's achievements this past year were numerous, including a strong program at the Denver convention and other AAPG meetings, substantial progress on numerous publications, sponsorship of an external mudrocks conference, and the addition of tight sand and renewable energy committees.



EMD Convention and Section Meetings

At the Denver Convention in June, EMD sponsored 18 Technical Sessions, 5 Field Trips, 5 Short Courses and a very popular Luncheon focused on extra-terrestrial sources of hydrocarbons. Laura Wray, EMD Vice-Chair for the convention, was the key person involved in the planning and execution of these events and did a fantastic job. A big push was also made to sign-up new student members through various activities, including an extremely popular “Young Professionals and Student Hub” which was the brainchild of Andrea Reynolds, last year’s EMD Vice-President. Through these activities targeted at students, we were able to add about 85 new student members at the Convention.

EMD was also well-represented at the Southwest Section Meeting in Midland in March where papers were presented on gas shales, oil shales, and geothermal energy. At the Pacific Section meeting in Ventura in May, we hosted a well-attended afternoon technical session on “Energy Minerals of the Pacific Region”. A presentation was also sponsored by the EMD for the Houston Geological Society’s Environmental and Engineering Dinner Meeting in January, 2009, on the role of nuclear power in the exploration and development of industrial and nuclear minerals off-world in the 21st Century and beyond.

EMD Publications

With regard to EMD sponsored, co-sponsored, or publications involving EMD members, several are underway:

- ④ A volume co-published with the Division of Environmental Geosciences (DEG) and edited by Matthias Grobe is entitled *Carbon Dioxide Sequestration in Geological Media – State of the Art*. This volume is nearing completion and should be out soon.
- ④ A volume submitted by editors Art Johnson and Tim Collett entitled *Gas Hydrates: Energy Resource Potential and Associated Geologic Hazards*. This volume is also nearing completion and should be out soon.
- ④ The second edition of the *Atlas of Coal Geology* by editor Alex Papp is moving forward
- ④ We have commenced editing and other activities associated with publishing the USGS Gulf Coast Coal Assessment, edited by EMD past-president Peter Warwick
- ④ The sum of \$10,000 was pledged by EMD to publish a volume on *Hydrocarbons from Shale* within the next year by editor John Breyer of Texas Christian University



🌐 The sum of \$10,000 was also pledged by EMD to publish a volume on *Energy Resources for Human Settlement in the Solar System and Earth's Future in Space* within the next 12-18 months by editors Bill Ambrose (a past-president of EMD) and Jim Reilly. Michael Campbell, also Chairman, of the Uranium (Nuclear Minerals) Committee and selected Committee members and associates have been asked to contribute a chapter to this publication.

🌐 Michael Campbell and oldest son, M. David Campbell and others, are also preparing the publication: *"Nuclear Energy and the Environment, for the American Geological Institute's Natural Resource Series"* due to be completed in 2009.

Mudrocks Conference

In February, a mudrocks conference was held that was co-sponsored by EMD and the Houston Geological Society. Frank Walles was instrumental in securing EMD's role as a co-sponsor for this conference and coordinating its planning and execution. Approximately 400 people attended resulting in a profit to EMD of about \$78,000. A similar conference is being planned for February, 2010.

Renewables and Tight Gas Sands Committees

At the Denver Convention, EMD members approved a Bylaws change adding two new technical committees. The first is a Renewables Committee that will be staffed jointly with DEG members. The purpose is to provide AAPG members with information about wind, solar, biofuels, hydropower, and related energy sources.

The second is a Tight Gas Sand Committee that was added to compliment the existing Gas Shales and Coalbed Methane Committees. Tight gas sand accumulations are considered to be unconventional gas resources, and many are found interbedded with shales and coals. Therefore, it makes good sense to add this for the benefit of EMD members.

2009-2010 Challenges and Changes

Addition of a Full-time Administrator

EMD activity has increased substantially over the past 5 years as we have added councilors for each of the regions, enlarged our role at multiple AAPG meetings, expanded our website offerings, and begun to sponsor external conferences. The EMD Executive Committee has responded by initiating monthly conference calls this past year to more effectively coordinate the business of the Division. However, to get things done more efficiently, additional administrative assistance is needed in Tulsa.



In response, EMD has proposed adding a full-time administrator. This represents a significant change over the current structure whereby a single administrator is responsible for all three Divisions (EMD, DEG, and DPA). We believe this will help us to be much more effective as we further expand our activities to include participation in Geoscience Technology Workshops (GTW's), external events with affiliated, sister, and associated societies (such as SEG and SPE), and Region activities that are tied to the global expansion of AAPG.

EMD currently has a healthy bank balance (\$270,000) that can be used in the short-term to fund the proposed position. In the long-term, the intention is for this position to become self-funded through the profits generated from various EMD-sponsored events. This is necessary because EMD's other income (from dues, publications, and bank interest) does not fully support our anticipated needs.

Increasing Membership

At the end of the fiscal year, EMD had approximately 1,366 members which represent less than 5% of the AAPG membership. This number has remained fairly constant over the past 5 years despite the booming industry activity in unconventional gas. Over 90% of the wells being drilled in North America today are completed in unconventional reservoirs, which means there should be tens of thousands of EMD members!

A key question then is why hasn't this happened? One factor is that many of the benefits EMD offers, such as networking and publication discounts, are offered to all other AAPG members as well. This leaves non-EMD members asking "what do I get for paying an extra \$20 to join EMD?" And it leaves EMD's leadership in a position where time and energy must be spent persuading new members to join.

Another factor is EMD's name recognition. The Division started back in the 1970's with a focus on uranium and coal, but has evolved into focusing on unconvensionals. As a result, many AAPG members don't realize that the EMD is the home of those working unconvensionals, and, for example, potential members doing web searches on unconvensionals are not directed to EMD's web pages.

Various ways to overcome these hurdles to growth are being explored including dropping the \$20 dues requirement and/or changing the name of EMD to better reflect its emphasis on unconventional energy sources. In the long-term, it might also be advantageous for EMD to merge with the DEG given that so many energy minerals activities are closely-tied to environmental issues.



Our Overriding Goal Remains the Same

AAPG is currently addressing the issue of how to create a new global structure—one that will allow AAPG to grow and serve its members better. EMD needs to address this to, and we welcome input from our members on this issue. Regardless of how the structure of EMD changes, the overall goal will remain the same--to become an indispensable source of information to AAPG members about energy types other than conventional oil and gas. EMD is fully-committed to working the other Divisions, AAPG, and especially its members to achieve this goal.

Would You Like to Help Us Grow?

EMD provides many opportunities for you to grow as a professional. These include serving as a councilor in our sections and regions, or serving on one of our technical committees. Commodity Chairs are actively searching for representatives of industry, academia, and government to serve on each of our 12 technical committees. If you have any interest at all, please drop an Email to one or more of the above Executive Committee members or to the particular Commodity Chairs.

We would also invite you to help us show our appreciation to those who have served EMD so well by nominating them for **Honors and Awards**. You can do this by downloading a [form](#)* from our “EMD Members Only” web pages and making your nominations.

We hope you enjoyed this summer newsletter and we look forward to updating you again this fall!

Best regards,

Your EMD Executive Committee

**To access form, copy and paste hyperlink into address bar after signing into the AAPG-EMD web site.*

