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# Mineralogical Society of America

# EARLIEST LIFE AND NEW ENERGY SOURCES IN MAY/JUNE AMERICAN MINERALOGIST

The May/June 2006 issue of *American Mineralogist* features "The structure and distribution of carbon in 3.5 Ga Apex chert: Implications for the biogenicity of Earth's oldest putative microfossils," by Bradley T. De Gregorio and Thomas G. Sharp, and "Stabilizing of methane hydrate and transition to a new high-pressure structure at 40 GPa," by Hisako Hirai, Shinichi Machida, Taro Kawamura, Yoshitaka Yamamoto, and Takehiko Yagi, as well as our usual mix of current research on Earth and planetary materials.

If the carbonaceous, microbe-like features preserved within a single chert unit of the 3.5 Ga Apex Basalt are biogenic, then they represent some of the earliest known life on this planet. Until recently, these microbe-like features (along with a few others) have been generally accepted as strong evidence for 3.5 Ga life on Earth. However other researchers have proposed that an as-yet-unidentified organic Fischer-Tropsch-type (FTT) synthesis reaction could have produced the carbon in the microbe-like features abiotically. To shine light on this topic, De Gregorio and Sharp used TEM imaging, diffraction, and EELS to characterize the distribution, structure, and bonding of carbonaceous material in samples of Apex chert to constrain its possible origins.

Meanwhile Hirai et al. are studying the creation and structure of a possible new energy source. As they explain, knowledge of the stability and structural changes of methane hydrate under a wide range of pressure–temperature conditions is required to overcome humankind's urgent problems of dwindling energy resources and global warming, as well as to answer fundamental questions about the internal structure and evolution of icy planetary bodies. Methane hydrate, called fiery ice, is expected to be a clean and productive energy resource, while methane is a greenhouse gas even more potent than carbon dioxide.

Readers can click on "View Future Titles" on the GeoScienceWorld (GSW) site (http://ammin.geoscienceworld.org). Nonsubscribers can view all tables of contents and abstracts and then ask their libraries to join! As the Future Titles list is generated from data the authors input when submitting their material (http://minsocam.allentrack.org), please be aware that the simple html code used doesn't show any special characters and that titles and even authors, or the order of authors, may certainly have changed by the time the final version of the article is published.

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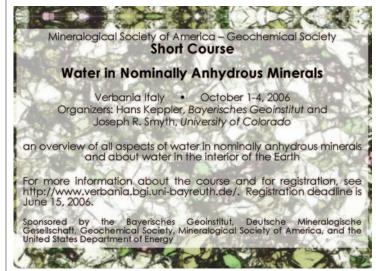


#### **NOTES FROM CHANTILLY**

- MSA will have electronic balloting for the 2006 election of 2007 MSA officers and councilors. The candidates are: Barb Dutrow for president; Jonathan Stebbins and Peter Heaney for vice president; John M. Hughes for treasurer, and Jay Bass, Klaus Mezger, Jean Morrison, and John Parise for the two councilor positions. Also on the ballot will be the addition of Sustaining Member and Sustaining Fellow Member as new member types. These are open to any new or continuing member or fellow. The cost of a sustaining membership will be the cost of member dues plus an additional amount, to be determined by MSA Council. The additional amount will be a gift to the Society and will be placed in the Society's Endowment Fund.
- MSA members will receive a message containing voting instructions at their current email addresses in May. Make sure MSA has your most recent e-mail address! Those who do not wish to vote online can request a paper ballot from the MSA business office. As always, the voting deadline is August 1.

- The individuals elected to office decide on the direction of the Society. Voting is an important job for all MSA members.
- On February 9-12, 2006, the MSA had a booth at the Tucson Gem and Mineral Show, Tucson, AZ. MSA also exhibited at the joint assembly with AGU, Baltimore, MD, on May 24-26, 2006. MSA will have a booth at the GSA meeting, in Philadelphia, PA, on October 22-25, 2006. During that week, MSA will hold its awards lunch, the MSA Presidential Address, a joint MSA-GS reception, its annual business meeting, a council meeting, and breakfasts for the past presidents and associate editors of American Mineralogist. This will be the second year that the Roebling Medalist and the MSA Awardee give a lecture at the GSA meeting. This year's Roebling Medalist is Gary Ernst and the MSA Awardee is Daniel Frost. More information is available through the MSA

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#### **IN MEMORIAM**

**Eugene C. Robertson** (Life Fellow - 1947) **G. D. Robinson** (Life Fellow - 1944)

ELEMENTS JUNE 2006

#### ABOUT COPYRIGHT

Authors who publish in Mineralogical Society of America (MSA) publications are asked to assign the copyright to MSA. This applies to American Mineralogist, the Reviews in Mineralogy and Geochemistry, and, because MSA has the legal responsibility for this magazine at the moment, *Elements*. This requirement appears in the MSA bylaws approved by vote of the membership in 1972. According to notes by H.S. Yoder, the provision was modeled after the American Chemical Society bylaws. However, MSA authors have the right to make a nonprofit or noncommercial use of their work provided they indicate where the writing was first published. Authors who wish to make a profit or authorize for-profit or commercial use of their writing must first obtain the written consent of the Society. Works by government employees done as part of their job cannot be copyrighted.

The most obvious reason for obtaining copyright is so MSA can publish the articles not only immediately, but also in the future in new ways not yet imagined. Because of this ownership, MSA was able to post back issues of American Mineralogist on its website. If MSA had not owned the copyright, it would have had to seek permission for every article from its authors. Aside from the large clerical task of such an undertaking, it is certain that a percentage of the authors could no longer have been located. This means those articles could not have been made available. Additionally some authors would have passed away. MSA would have had the legal challenge of locating the heirs now owning the copyright, many of whom would know little about scientific publishing. They would either deny permission outright because they would not understand what was being asked, or expect lucrative payments. In effect, those publications would be lost to science until the

copyright protection expired. The end result would be gaps in the electronic availability of the journal online. In addition, rather than being free as at present, MSA would need to charge for access to back issues in order to recoup the costs of all the clerical and legal work.

The other reason MSA seeks to own the copyright is as a service to the science. Anyone seeking permission to reproduce an article, figure, table, etc. from MSA publications can simply ask MSA, and we are easy to locate. You can even ask permission online (the "Copyright Permission" link on the MSA homepage). When MSA receives a request, we look to see if the use is reasonable and if MSA actually does own the copyright. In a few cases MSA publishes material from other publications and, while we would have obtained permission to publish the material in question, such permission would not extend to others to do so as well. Once we are satisfied as to the request, we send a letter that the author can provide to his new publisher.

For authors of textbooks or reference works using large amounts of material from MSA publications, MSA's copyright policy makes their work of getting permission much easier. For example, a major amount of material from MSA publications was reproduced in each volume of the new editions of Deer, Howie, and Zussman. It is difficult to imagine the challenge it would have been to locate and correspond with all those authors whose material was used. If authors retained copyright, the obtention of permission to reproduce work for textbooks would have necessitated locating the authors or their heirs. There would certainly be some instances where this would not be possible. This would leave the alternatives of publishing without permission or not using the material at all. The material would be largely lost to science until the copyright expired.

> Lately there has been talk of not copyrighting scientific papers at all. The imprudence of this approach would become immediately apparent once someone other than the author makes financially profitable use of the articles, or the article is used in a way the author would not want.

> > J. Alex Speer

#### FIFTY- AND TWENTY-FIVE-YEAR **MSA MEMBERS**

Many MSA members will reach 50 or 25 years of continuous membership in the Society during 2006. Their long support of the Society is appreciated. The members whose names are listed below are recognized and received their 25- or 50-year pins mailed in early January. If you should be on this list and are not, or have not received your pin, please contact the MSA Business Office.

### 50-year members

Dr. Paul B. Barton

Dr. Werner H. Baur

Dr. Bruce H. Bryant

Prof. Carlo Maria Gramaccioli

Dr. Daniel J. Milton

Dr. Ernest H. Nickel

Dr. Hugo Steinfink

Dr. Ichiro Sunagawa

Dr. Priestley Toulmin

Dr. Karl Hans Wedepohl

Dr. Gunther A. Wolff

#### 25-year members

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Dr./Prof. Makoto Arima

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Mr. John P. Clinkenbeard

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Dr. Helge Stanjek

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## Why Does MSA Require the Copyright of an Article?

## Medical Mineralogy and Geochemistry **MSA/GS Short Course** December 8-10, 2006

Organizers- Dr. Nita Sahai, University of Wisconsin-Madison, Dr. Martin Schoonen, Stony Brook University.

Menlo Park, California

Sponsors-Mineralogical Society of American, Geochemical Society, US Geological Society, National Science Foundation, and US Department of Energy.

More information: www.minsocam.org/MSA/SC