

## BROECKER AWARDED 2006 CRAFTOORD PRIZE IN GEOSCIENCES



Wallace Broecker, a geochemist at Columbia University's Lamont-Doherty Earth Observatory and the Newberry Professor of Earth and Environmental Sciences at Columbia, was awarded the Crafoord Prize in Geosciences by the Royal Swedish Academy of Sciences. The prize is widely regarded as the geoscience equivalent of the Nobel Prize. In its citation the Academy noted Broecker's "innovative and pioneering research on the operation of the global carbon cycle within the ocean-atmosphere-biosphere system, and its interaction with climate."

Born in Chicago, Broecker received his undergraduate degree in physics at Columbia College in 1953 and his PhD in geology from Columbia University in 1958. He joined the Columbia faculty in 1959 and has remained there to this day.

As a young graduate student at Lamont-Doherty, Broecker was inspired by the late Maurice W. Ewing, the founding director of the Observatory. He began his scientific career with a study of the geological and oceanographic applications of radioactive carbon-14. This was the beginning of a long path of research along which he has made many pioneering discoveries that have had a profound impact on our understanding of the ocean, and its role in global climate change. His research has been instrumental in developing the use of a wide range of geochemical tracers to describe the basic biological, chemical, and physical processes that govern the behavior of carbon dioxide in the oceans and its interactions with the atmosphere.

In the early 1970s, his chemical model of the ocean unleashed a tide of progress in oceanography. Next he was a core contributor to our knowledge of the global carbon cycle and the central role of the ocean in that cycle. When the polar ice cores were analyzed in the early 1980s, Broecker was a key figure in showing the links between carbon, climate, and ice ages. Starting in the mid-1980s, he warned about the possibility of rapid climate change due to shifts in the "conveyor belt" of ocean currents carrying heat around the globe.

Broecker has played an active role in the environmental policy debate. He has been a leading voice warning of the potential danger of increased greenhouse gases in Earth's atmosphere. He has written articles for the popular press, testified before Congressional committees, and briefed officials at the highest levels of government in an effort to bring scientific insights to bear on policy issues.

A prolific researcher, teacher, and author, Broecker has published more than 400 scientific articles and is the author or coauthor of several textbooks. Among his many awards and citations, Broecker was elected to the National Academy of Sciences in 1979. He is also a member of the American Academy of Arts and Sciences and a Fellow of both the American and European Geophysical Unions. In 1996, he was presented with the National Medal of Science by President Bill Clinton.

For more information about the prize and Broecker's pioneering research, visit [www.crafoordprize.se](http://www.crafoordprize.se)

Adapted from press release at [www.columbia.edu/cu/news/07/01/crafoord.html](http://www.columbia.edu/cu/news/07/01/crafoord.html)

## 2007 MSA DISTINGUISHED PUBLIC SERVICE MEDAL TO HUIZING

The 2007 MSA Distinguished Public Service Medalist is Marie Huizing, managing editor of *Rocks & Minerals*. The award was presented at the 2007 awards banquet of the Tucson Gem and Mineral Society in Tucson, AZ, in February 2007. MSA member John Rakovan read the citation and MSA president Barb Dutrow presented the award in front of an audience of over 300 people.



FROM LEFT TO RIGHT: John Rakovan, Marie Huizing, and Barb Dutrow

The MSA Council awards the Distinguished Public Service Medal to individuals who have made important contributions to furthering the vitality of the geological sciences, especially in the fields of mineralogy, geochemistry, petrology, and crystallography. *Rocks & Minerals* is published by Heldref Publications, but its content and much of the financial support for its production and marketing comes from the mineral-enthusiast community. Of all the individuals who contribute hard work and support, Marie Huizing stands out for extraordinary and tireless effort. Since joining *Rocks & Minerals* in 1979, Marie has made major changes and additions to the magazine, which have increased its scientific and educational quality and strengthened its mission of teaching and outreach. Her efforts extend beyond the journal. She travels to many national and international mineral shows each year to promote the magazine and a wide range of other mineral publications, events, and organizations. This is a wonderful honor for Marie, in recognition of her contribution to the effort that has made *Rocks & Minerals* what it is today.

## NEW AGU FELLOWS

The number of new American Geophysical Union fellows elected in any year is limited to 0.1% of the total membership. From the nominations submitted to the Volcanology, Geochemistry and Petrology Division Fellows Committee by AGU, eight were approved by the Union Fellows Committee for 2007:

- Susan Brantley, Pennsylvania State University
- Rodney C. Ewing, University of Michigan, Ann Arbor
- Tom H. Heaton, California Institute of Technology
- Bernard Marty, CRPG Nancy, France
- David D. Pollard, Stanford University
- Joseph R. Smyth, University of Colorado, Boulder
- Frank S. Spear, Rensselaer Polytechnic Institute
- John W. Valley, University of Wisconsin-Madison