ENI PRIZE TO SHERWOOD LOLLAR

Barbara Sherwood Lollar is the recipient of the 2012 Eni Award in Protection of the Environment for her work on compound-specific isotope analysis of volatile organic contaminants in groundwater. This prestigious award is presented for outstanding research and innovation in areas concerning the environmental impact of human activities, specifically the protection and restoration of the environment, with a special focus on research and innovative technologies to eliminate pollutants and to improve environmental conditions. The award was presented at the Quirinale Palace in Rome on June 15, 2012, by the president of Italy. The recognition includes a gold medal and an award to the researcher of 200,000 euros.

Barbara Sherwood Lollar, FRSC, is a University Professor and Canada Research Chair in the Department of Earth Sciences, University of Toronto, and currently vice-president of the Geochemical Society. Her work on isotope geochemistry of fluids and gases has been featured twice on the cover of *Nature* and has been recognized by international awards, including the 2012 GSA Geobiology and Geomicrobiology Division Award, the National Ground Water Association’s Darcy Distinguished Lecture Series, the Canada Council Killam Fellowship, and the NSERC Steacie and Accelerator Awards. For her research on groundwater remediation, she was selected in 2000 by Time Magazine Canada for their feature “Leaders for the 21st Century.”

Eni, one of the world’s major multinational oil and gas companies, created the Eni Award in 1988 to develop better use of renewable energy, promote environmental research, and encourage new generations of researchers. The Eni Award, which is annual, highlights the critical importance given by Eni in recent years to scientific research and issues of sustainability. The award comprises several prizes: two New Frontiers of Hydrocarbons prizes, one Renewable Energy prize, one Protection of the Environment prize, two Debut in Research prizes, and three prizes for Eni employees. The deadline to submit an application for the 2013 edition of one of these prizes is October 26, 2012; go to www.eni.com/eni-award/eng/bandi.shtml for information and application forms.

PEOPLE IN THE NEWS

BRANTLEY, CARLSON, AND DOVE ELECTED TO THE NATIONAL ACADEMY OF SCIENCES

The U.S. National Academy of Sciences (NAS) elected 84 new members and 21 foreign associates from 15 countries in recognition of their distinguished and continuing achievements in original research. This brings the total number of active members to 2132 and the total number of foreign associates to 430. Established by President Abraham Lincoln in 1863, the NAS is a private, nonprofit, honorific society of distinguished scholars engaged in scientific and engineering research. Membership in the NAS is one of the highest honors given to a scientist in the United States. New members will be inducted into the Academy in April 2013 during its 150th annual meeting in Washington, D.C. Among these will be three prominent members of our community.

Susan L. Brantley, Distinguished Professor of Geosciences, Earth and Environmental Systems Institute, Pennsylvania State University, investigates the chemical, biological, and physical processes associated with the circulation of water in shallow geological settings. Currently she is investigating how microbes alter iron release and isotope fractionation in the weathering of shales, granites, and basalts and the coupling of weathering and erosion. Sue Brantley joined Penn State in 1986, became a full professor in 1997, and was named Distinguished Professor in 2008. She is a fellow of the American Geophysical Union, the Geological Society of America, the Geochemical Society, the European Association of Geochemistry, and the International Association of GeoChemistry. She received a bachelor’s degree in chemistry in 1980 and master’s and doctoral degrees in geological and geophysical sciences in 1983 and 1987, respectively, all from Princeton University. She has authored more than 160 peer-reviewed papers.

Richard W. Carlson, Department of Terrestrial Magnetism, Carnegie Institution of Washington, studies the chemical and physical processes that formed the terrestrial planets. Using the known decay rates of various radioactive isotopes, he investigates the chronology of early heat-intensive processes on small planetary objects and studies the chemical and physical aspects of old and young crust-forming processes on Earth. He received a BA in chemistry and Earth science from the University of California, San Diego, in 1976 and a PhD in Earth science from Scripps Institution of Oceanography in 1980. He has been a staff member at Carnegie since 1981. Carlson received the 2008 Norman L. Bowen Award from the American Geophysical Union. He is a member of the American Academy of Arts and Sciences, and a fellow of the American Geophysical Union, the Geochemical Society, and the European Association of Geochemistry. He is currently the president of the Geochemical Society.

Patricia M. Dove, C.P. Miles Professor of Science in the Department of Geosciences, Virginia Polytechnic Institute and State University, Blacksburg, has made major contributions to research in the biogeochemistry of Earth processes, the physical basis of biomineralization, and the geochemical controls on geophysical properties. Her publications have been cited more than 3000 times. She received the Geochemical Society’s Clarke Medal in 1996 and, on two occasions, the U.S. Department of Energy’s Best University Research Award. She is a fellow of the American Geophysical Union, the Geochemical Society, and the European Association of Geochemistry. Dove earned her bachelor’s and master’s degrees at Virginia Tech and her PhD at Princeton University. She was a faculty member at Georgia Tech for several years before joining the Virginia Tech faculty in 2000.
Late Svecofennian pegmatite dating in order to constrain the age for granitic magmatism, as well as the age of the late Svecofennian deformation events in southern Finland.

High density oxygen ion beam bombardment combined with optimized transmission result in precise and accurate U-Pb zircon age determination at a lateral resolution of 10-25 μm.

Concordia plots showing U-Pb isotopic data obtained in Västerviken pegmatite.
Age data plots in two groups. For the older group, ten analyses give an age of 1880 +/- 6 Ma, and 1907 ± 9 Ma for the two oldest cores.
The younger group ages were measured from U-rich rims and correspond to a concordia age of 1829 ± 5 Ma.


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- **SXFiveFE** Field Emission EPMA
- **LEAP 4000X** Atom Probe Tomography

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