

SUSAN SOLOMON ON *TIME* MAGAZINE'S 2008 LIST OF WORLD'S 100 MOST INFLUENTIAL PEOPLE



Time magazine has named Susan Solomon to its fifth annual list of the world's most influential people. In the *Time* piece describing Solomon, Rajendra Pachauri, chair of the Intergovernmental Panel on Climate Change, wrote, "All scientists like to believe they will leave the world better than they found it. Susan Solomon of the National Oceanic and Atmospheric Administration surely will. Having helped save the Earth's atmosphere

already, she is now playing a role in doing it again. An atmospheric chemist, Solomon was one of the first to be stirred into action by reports in the 1980s of deterioration of the planet's ozone layer. In 1986 and 1987, she led expeditions to Antarctica, working through the darkness of the polar winter and bringing back confirmation that there was indeed a growing ozone hole and that chemicals known as chlorofluorocarbons (CFCs) were causing it. Those conclusions helped lead to a global ban on CFCs.

Last year she tackled an even bigger job. As a co-chair with Dr. Qin Dahe of Working Group 1 of the U.N.'s Intergovernmental Panel on Climate Change (IPCC), she played a key role in producing the report that has helped the world understand the severity of global warming. Certainly Solomon was not alone. Three working groups drafted the report, and when the IPCC and former Vice President Al Gore were awarded the 2007 Nobel Peace Prize, it was an acknowledgment of the work of many. Still, it's hard to overlook Solomon among the many, both for what she has achieved in the past and for the achievements sure to come."

She has received many distinctions, including the National Medal of Science in 1999, the Blue Planet Prize in 2004, the V.M. Goldschmidt Medal in 2006, and the Lowell Thomas Award in 2007. A glacier in Antarctica is named after her.

LOWELL THOMAS AWARD TO W. BERRY LYONS



W. Berry Lyons, Director of the Byrd Polar Research Center at Ohio State University and the lead principal investigator for the McMurdo Long-Term Ecological Research Project in Antarctica, was one of the eight recipients of a prestigious Lowell Thomas Award for 2007. Berry was cited for his studies on the geochemistry of global climate change. Since 1980, the New

York-based Explorers Club presents the Lowell Thomas award to "honor men and women who have distinguished themselves in the field of exploration." The awards are presented at a yearly dinner to a select group of people having made particular contributions in the specific area chosen to be that year's focus. This year's focus was "Exploring Climate Change." The award is named for 53-year club member Lowell Thomas (1892–1981), the American writer, explorer, and broadcaster who accompanied T.E. Lawrence during the Arab revolts and made "Lawrence of Arabia" famous. Previous recipients have included Isaac Asimov, Sylvia Earle, Carl Sagan, Buzz Aldrin, Kathryn D. Sullivan, Sir Edmund Hillary, and Wade Davis.

PEACOCK MEDAL TO KELLY RUSSELL



Martin A. Peacock

The Peacock Medal, formerly the Past Presidents Medal, is the highest award bestowed by the Mineralogical Association of Canada. It is named after Martin A. Peacock (1898–1950), a distinguished scientist who is considered by many to be the father of modern mineralogy in Canada. Educated at the University of Glasgow, Martin A. Peacock joined the Department of Mineralogy at the University of Toronto in 1937. Recognizing the essential role X-ray diffraction (XRD) would play in the identification and structural understanding of minerals, he arranged for the construction in the University of Toronto machine shop of the first (crude) XRD generator and X-ray powder cameras of any geology

department in Canada, years before such equipment could be bought commercially. He and several of his PhD students applied these XRD methods to the characterization and clarification of numerous ore minerals. In 1942 he took on the editorship of the only mineralogical journal in Canada, *Contributions to Canadian Mineralogy*. He personally arranged for its continuing publication through some difficult times until his death in 1950. *Contributions* was the precursor to *The Canadian Mineralogist*, which began publication under its current name in 1957.



Kelly Russell

The recipient of the inaugural Peacock Medal is **KELLY RUSSELL** of the Department of Earth and Ocean Sciences of the University of British Columbia. Kelly Russell has made a significant impact on our understanding of igneous processes, including melt generation, crystallization, and mode of emplacement of magmas. The studies Kelly has designed, organized, and directed have addressed numerous fundamental issues. He expanded the theory and application of Pearce element ratios, used to quantify the chemical processes involved in magma evolution, and he modeled chemical

interactions in magmas by analyzing mass and energy transfer. This work necessitated integration of detailed field observations, chemical data, and rigorous mathematics. An outgrowth of this work was the first documentation of the timescales of magmatic assimilation and inversion of petrological data to determine the geotherm of the lithospheric mantle, with implications for the diamond fields of northern Canada. His quantification of the viscosity of silicate melts is one of the most significant advances in igneous petrology during the past 50 years. He has also generated a wealth of new information on Canadian kimberlites, which is providing insight into the origin and emplacement of these magmas, and the factors controlling diamond grades.

He is well known for his infectious enthusiasm, intellectual capacity, and creativity in the classroom, field, and laboratory. Kelly has been an inspiration and mentor to many students, several of whom have moved into faculty positions around the world. In addition, Kelly has selflessly served the academic community, acting as an editor of many special volumes, presenting topical short courses, serving in a variety of roles on geoscience associations, and acting as associate editor of *Geochimica et Cosmochimica Acta*.