

Conference Marks 50th Anniversary of Global CO₂ Record

The 50th anniversary of the global CO₂ record, begun by Charles David Keeling at the South Pole and in Hawaii in 1957, will be celebrated at a symposium in Kona, Hawaii, near the Mauna Loa Observatory, on 28-30 November 2007. During the International Geophysical Year (IGY;1957-58) Dr. Keeling began measuring atmospheric CO₂ at Mauna Loa, Hawaii, and South Pole, Antarctica. At the time of Dr. Keeling's initial efforts, little was known of CO₂ in the atmosphere and no reliable atmospheric record existed. Indeed, many were not certain that one could detect meaningful patterns such as seasonal changes, hemispheric differences, and fossil fuel emissions with measurements of such a low-concentration constituent of the atmosphere. The early measurements by Dr. Keeling began what was to become a coordinated global monitoring network involving scientists and agencies from countries around the world. Information derived from this network, which now includes many greenhouse gases, isotopes, and other tracers, has been crucial for informing national and international assessments of global climate change, not the least of which are the International Panel on Climate Change (IPCC) assessment reports.

This conference brings together leaders of business, government, and science to discuss the global CO₂ record, climate change, and what is needed from future CO₂ measurement systems to monitor the efficacy of mitigation efforts. The conference will include a keynote speech by U.S. National Academy of Sciences President Ralph Cicerone and presentations and panels focusing on a range of concerns. A session on what has been learned from the CO₂ measurement record will be chaired by Ralph Keeling of the

Scripps Institution of Oceanography and Pieter Tans of the U.S. National Oceanic and Atmospheric Administration's Earth System Research Laboratory. A panel addressing impacts and urgency includes Vice Admiral Paul Gaffney II, co-author of the Military Advisory Board's *National Security and the Threat of Climate Change*, and Richard Somerville, a coordinating lead author for the Intergovernmental Panel on Climate Change (IPCC) reports.

Among other conference highlights: IPCC Working Group I Co-Chair Susan Solomon will focus on the global climate-related problem of reducing emissions of ozone-depleting substances, noting how this effort underscores useful approaches for addressing CO₂ emissions; Robert Socolow of Princeton University, N.J., will chair a session on mitigation options; former California State Assembly Member Fran Pavley, co-author of California's AB 32 tailpipe emission reduction bill, will lead a session on regional efforts to reduce greenhouse gas emissions; and Michael Walsh, executive vice president of the Chicago Climate Exchange, will discuss economic tools and financial incentives to reduce emissions.

For more information, visit the Web site: <http://www.co2conference.org>.

James Butler and Melinda Marquis

NOAA Earth System Research Laboratory