

MRU eNews

Newsletter for UC Multicampus Research Units and Programs

University of California Office of Research

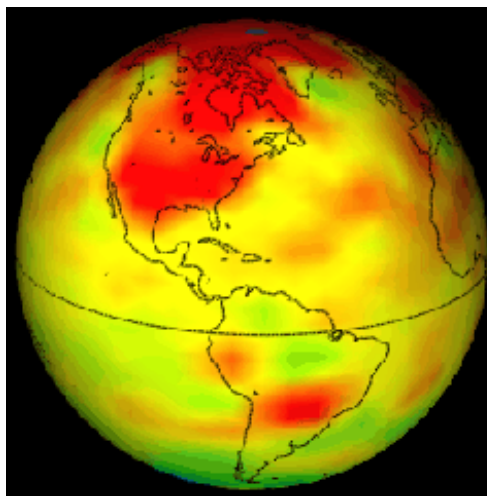


MRUs Look to Renewable Energy and Cleaner Air

The development of renewable energy sources, the reduction of greenhouse gases, and the launching of smarter transportation systems—all interrelated concerns facing California and the world—are now major research priorities at several UC MRUs. When Governor Davis signed AB 1493 this summer setting tighter restrictions on greenhouse gases, Vice Provost for Research Lawrence Coleman and **California Space Institute** Director Wolf Berger were there. This groundbreaking bill requires the Air Resource Board to establish guidelines by January 2005 to reduce the emission of greenhouse gases by motor vehicles, specifically passenger automobiles, for model year 2009 and beyond.

Professor Berger points out, "California's action is an important first step in the right direction and will get this vital process started in a serious manner. Automobiles produce more than half of the state's carbon dioxide emissions. Once California requires that emissions be cut, other states will (hopefully) follow the lead. In addition, a focus on the question of what tail-pipe emissions do to the environment is a very healthy thing. We can hope that the efficiency of power generation will be further increased across the board and that alternative energy sources, such as a combination of solar power and the use of hydrogen, will become more important. For this to happen, we need public support. A concerted effort on the part of UC, of industry, and of the State government will help to lessen our dependence on fossil

carbon fuels and will emphasize California's leadership role in attacking one of the most important environmental problems of our new century."



Among the MRUs heavily involved in energy research are the **UC Energy Institute (UCEI)**, based at the Berkeley campus, and the **California Institute for Energy Efficiency (CIEE)**, a branch of UCEI administered from UCOP. UCEI has an in-house research program now conducted within the newly established Center for the Study of Energy Markets. Both UCEI and CIEE offer grants

Interest Energy Research Program, or PIER. Three solicitations for work to be funded by CEC are expected: exploratory research for the PIER Environmental Program, energy efficiency in the food processing industry and global climate change. CIEE has also signed a \$3 million contract with the CEC to conduct research on demand-response enabling technologies at Berkeley.

The **White Mountain Research Station (WMRS)**, located near Bishop, CA and headquartered at UCSD, held an energy retreat in late June to discuss renewable energy. WMRS is exploring the use of a combination of wind, solar, and hydrogen as the energy source to supply their four stations: Owens Valley Laboratory (4,200'); the Crooked Creek facility (10,150') in the Ancient Bristlecone Pine Forest; the Barcroft facility (12,470') on a unique Alpine steppe; and the summit facility on White Mountain Peak (14,246'), the highest research facility in North America. Leaders in the renewable and hydrogen energy fields, investment banking advisors, UC faculty and representatives from three other MRUs (CalSpace, the UC Energy Institute and the **Institute of Nuclear and Particle Astrophysics and Cosmology**), gathered to brainstorm about ways to ensure a long term, stable, environmentally clean, and economically efficient power source for WMRS. The three-day retreat culminated with leaders from industry, government and universities

pledging support for a proposal to use the facilities as a test and demonstration site for hydrogen as well as other varieties of renewable energy. In a panel discussion, the

head of the California Air Resources Board, a California Energy Commissioner, and a senior energy advisor to California Governor Gray Davis agreed that the WMRS proposal was an extremely important undertaking.

IGCC Wins Major Grant to Establish Nuclear Policy Training Program

The UC San Diego-based **Institute on Global Conflict and Cooperation (IGCC)** recently won a National Science Foundation IGERT (Integrative Graduate Education and Research Traineeship Program) grant to establish a six-year graduate program at UC. The goal is to attract and train the next generation of strategic thinkers to address tomorrow's public policy matters concerning nuclear weapons. During the Cold War, nuclear threats drove investments and keen young minds into the study of nuclear weapons issues. Today, the incentive is much reduced, even though the threat has by no means disappeared. IGCC will recruit at least twenty UC doctoral students in a statewide competitive process, and will support each of these students for five years. Students will receive their fundamental Ph.D education at their home campus, but will be required to complete a rigorous series of IGERT training activities conducted by major scholars at UC and the UC-managed national labs. Subjects will include historical and current security implications of nuclear weapons, arms control, and nonproliferation. For more information, see the IGCC website at www-igcc.ucsd.edu.

Visit our website at:
www.ucop.edu/research/



Shared-use zero emission vehicles, part of ITS Irvine's ZEVNET project.

Wind power generators at the Altamont Pass, near Livermore, California.



to UC researchers. CIEE director Jim Cole has just retired and Carl Blumstein has been named the new director. In late August CIEE signed a 5-year \$20 million agreement with the California Energy Commission to conduct energy efficiency research at all UC campuses for the CEC's Public

Office of Research

Lawrence B. Coleman, Vice Provost

University of California Office of the President
1111 Franklin St., 11th Floor
Oakland, CA 94607
fax: 510/987-9456



Carol McClain

Director, Multicampus Research
telephone: 510/987-9473

Dante Noto, Coordinator
Humanities, Arts and Social Science Research
510/987-9446; dante.noto@ucop.edu

Cathie Magowan, Coordinator
Science and Technology Research
510/987-0377; cathie.magowan@ucop.edu

Martin Backstrom, Coordinator
MRU Relations & Pacific Rim Research Program
510/987-0658; martin.backstrom@ucop.edu

Ann Gilbert, Grants Administrator
CCEQI, Humanities Fellowships
510/987-9472; ann.gilbert@ucop.edu

Florence Mou, Program Officer
Pacific Rim Research Program
510/987-9910; florence.mou@ucop.edu

Karina Robinson, Program Officer
MRUs and MRPs
510/987-0493; karina.robinson@ucop.edu

Profile: Longtime UC Staff Member Sally Olsen Retires



Sally Olsen, Administrative Assistant for Multicampus Research Units and Programs at UCOP, retired on August 30 after a long career at Berkeley and the Office of the President. Born in China, Sally attended high school and college in California where she earned a BA in East Asian Studies from UC Berkeley. She worked for many years on the Berkeley campus, first for Professor Harold Johnston (1997 recipient of the National Medal of Science) and later for Professor Brad Moore (now Vice President for Research at Ohio State University). Since 1999 she has worked at UCOP. We all wish Sally the best in her retirement!

Upcoming Events *meetings and conferences*

California and the World Ocean, 2002. UC Santa Barbara, October 27-30. Co-sponsored by the California Sea Grant College, with special sessions on Sea Grant and UC Marine Council-supported research. For information, see http://resources.ca.gov/ocean/CWO_02/Call_index.html. Also see below.

All Campus Consortium on Research for Diversity (UC ACCORD) Fall 2002 Research Conference. Lake Arrowhead Conference Center, November 17-19. For more information, contact UC ACCORD at (310) 206-8725.

Thinking/Building/Living: The Infrastructure of Digital Design. Digital Cultures Project Graduate Student Conference, UC San Diego, January 17-19, 2003. For more information see <http://dc-mrg.english.ucsb.edu/gradconf.html>.

5th Bi-Annual Conference on Shifting Frontiers in Late Antiquity: Violence, Victims and Vindication in Late Antiquity. UC Santa Barbara, March 20-23, 2003. Call for papers and further information available at the History and Culture of Late Antiquity website: www.humnet.ucla.edu/lateantique/.

NOW ONLINE! THE 2002-03 UPDATE OF THE
GUIDE TO UC MULTICAMPUS RESEARCH UNITS
AT: [HTTP://WWW.UCOP.EDU/RESEARCH/MRU.PDF](http://www.ucop.edu/research/mru.pdf)

Multicampus Research Unit News

CCEQI RESEARCHERS TO PRESENT FINDINGS AT THE "CALIFORNIA AND THE WORLD OCEAN '02 CONFERENCE"

On October 27-30 of this year, the *California and the World Ocean '02 Conference*, organized by the California Resources Agency, the California Environmental Protection Agency, and the Coastal Zone Foundation, will be held in Santa Barbara. A primary goal is to explore innovative direc-

tions for protecting and managing our ocean and coastal resources. Several UC marine scientists—both graduate students and faculty—

whose research proposals were funded by the **UC Marine Council** through the California Coastal Environmental Quality Initiative (CCEQI), will present their research findings. They include:

Dr. Cope Willis, recent UCSC graduate;
Dr. Lou Zeidberg, UCLA graduate student;
Dr. John Largier, Scripps Institution and Professor Margaret McManus, UCSC, Co-PIs;
Professor Mary Silver, UCSC;
Mr. Jeff Riffell, UCLA graduate student ;
Professor Libe Washburn, UCSB.

NEW IGPP BRANCH DIRECTORS

Several branches of the **Institute for Geophysics and Planetary Physics** have recently appointed new directors. The Los Alamos branch is now headed by Dr. Gerald L. Geernaert, a UCD alumnus who most recently held a directorship at the Environmental Research Institute of Denmark. An expert in meteorology, Dr. Geernaert has authored over 80 scientific publications and four books. On July 1, Dr. John P. Bradley assumed responsibility for directing the IGPP Livermore branch. In recent years Dr. Bradley worked in the private sector and was also Adjunct Professor at the Georgia Institute of Technology. He has significant expertise in the detection and analysis of interplanetary dust particles and specializes in electron microscopy. IGPP Irvine, established in 2001, is directed by Dr. Susan Trombore, Professor in the Department of Earth System Science. A geochemist, Dr. Trombore received her Ph.D from Columbia University and has earned numerous awards and commendations, including an NSF Young Investigator Award (1993-98). In addition to these permanent appointments, Dr. John Vidale, Professor of Earth and Space Sciences at UCLA, has been named Acting Director of IGPP Los Angeles for 2002-03 while Dr. Ghil is on leave at the Ecole Normale Supérieure in Paris.

Renewable Energy, con't.

The **Institute for Transportation Studies (ITS)** also funds research on renewable energy. The ITS Davis branch is co-sponsoring a two-day tutorial workshop on fuel cell vehicles during the Transportation Research Board Annual Meeting, January 12-16, 2003. This will be an independent, non-commercial short course on fuel cell vehicle (FCV) technology and policy, to provide government officials, environmental organizations, transportation researchers, industry and other stakeholders with a basic understanding of FCV technology, fuels, markets, and environmental impacts.

At **ITS Irvine**, a new shared-use station-car project launched on April 18 will help researchers at the Institute study the feasibility of shared-use and station-car programs and measure how they can change commuters' travel habits. A key question is whether shared-use station cars, which are based at transit hubs and participating businesses, can induce drivers to switch from private cars to public transit for most of their daily commute, using shared vehicles for travel only at trip ends. The project, called ZEVNET (short for Zero Emission Vehicle Network Enabled Transport) has 50 vehicles, the nation's largest fleet.