UC SANTA BARBARA

THE Current

November 29, 2005
Paul Desruisseaux

# UCSB Awarded $1.5-Million for Research and Training Partnership with China

UC Santa Barbara has been awarded $1.5-million by the National Science Foundation (NSF) to establish a pioneering research and education partnership with China in chemistry, physics, materials science, and chemical engineering.

The NSF funds will support the first three years of a planned five-year program. The grant comes from a new program to encourage the establishment of partnerships with foreign institutions for multidisciplinary graduate training. The UCSB project was one of only 12 proposals to win NSF support of more than 170 reviewed in all areas of science and engineering.

It also is the only U.S.-China partnership to be funded by the agency.

"This is a very exciting an innovative project," said UCSB Chancellor Henry T. Yang. "I am extremely proud of our creative colleagues who had the vision to develop this program, and I am also very grateful to the National Science Foundation for recognizing it with this pioneering grant."

According to the National Science Foundation, its Partnerships for International Research and Education program seeks to create new international collaborations through long-term, large-scale projects that contribute to the development of a

diverse, globally educated U.S. science and engineering workforce.

"China has become a major international player in science and technology, and it is only natural for two such innovative nations as the U.S. and China to wish to create partnerships in areas of mutual interest and mutual strength," said Martin Moskovits, a professor of physical chemistry and the Bruce and Susan Worster Dean of Science at UC Santa Barbara. "There is so much that we can learn from each other."

The UCSB project is formally called the Partnership for International Research and Education in Electron Chemistry and Catalysis at Interfaces, or PIRE-ECCI. It will bring together seven top UCSB scientists with seven of their counterparts from a leading institution in the People's Republic of China to jointly mentor a select group of Ph.D. students at UCSB. The Chinese partner, the Dalian Institute of Chemical Physics of the Chinese Academy of Sciences, is considered China's top institution for the study of catalysis and chemical reaction dynamics.

"Students will emerge from the program with technical skills and the ability to think and work independently in the field," said Alec Wodtke, professor and chair of the Department of Chemistry and Biochemistry at UCSB and director of the program. "They also will have developed personal and professional networks overseas and experience in technology transfer. We firmly believe that the people emerging from this program will be future leaders in academe and in industry."

A major part of the research and education plan involves support for graduate students and postdoctoral fellows at UCSB and the Dalian Institute to pursue collaborative research in chemistry. Faculty members of the team represent diverse scientific viewpoints, from surface chemical dynamics, to theoretical simulations of surface chemistry, to engineering applications of catalysis.

UCSB students in the program will go to China in one or more different ways: extended research stays in Dalian lasting three to six months, twice yearly workshops where students will present their research, and special technology-transfer study tours of China. On those 7 to 10 day study tours, students will visit corporate research facilities in China and become acquainted with the business environment there. The extended research visits will include Chinese language and cultural sensitivity training for UCSB participants, with similar reciprocal support given to Chinese participants coming to UCSB. Student participation in the program will be on a competitive basis. The program will grow over the first two years until at

least six UCSB graduate students are taking part. It is expected that China will sponsor an equal number of its students to participate in extended research visits to UC Santa Barbara.

In addition to the director, Wodtke, the program's leadership includes Susannah Scott, a professor of chemistry and chemical engineering at UCSB, and Xueming Yang, a professor of chemistry at the University for Science and Technology of China and assistant director of basic research at the Dalian Institute. Xueming Yang earned his Ph.D. in chemistry from UCSB in 1991.

To launch the new program, UCSB will present a workshop on Thursday, Dec. 8, designed to introduce the campus and the community to PIRE-ECCI and begin to explore some of the scientific frontiers at which participants in the program will work. Speakers will include leading scientists and university officials from China as well as UCSB.

"In addition to introducing this important new initiative to the UCSB community, a major purpose of this workshop is to continue the process of Pacific Rim cross-fertilization between the Dalian Institute and UCSB scientists," said Wodtke, "and to begin to expose our graduate students to the opportunities available through this exciting new program."

Related Links

PIRE-ECCI Homepage

---

## About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.