

UC SANTA BARBARA

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## **Visiting Professor Receives Prestigious German Award**

Frank Allgower, currently a visiting professor in the Department of Chemical Engineering at the University of California, Santa Barbara, has just been awarded the Gottfried-Wilhelm-Leibniz Prize by the German government.

The highly prestigious Leibniz Prize - often referred to as the "German Nobel Prize" - is valued at \$1.85 million dollars. It was established in 1906 to commemorate Gottfried Wilhelm Freiherr von Leibniz, the 17th-century German philosopher, scholar and statesman, to improve the working conditions of outstanding researchers, to broaden the scope of their activities, to relieve them of the burden of administration, and to make it easier for them to take on exceptionally well qualified young assistants.

"It is very rare for engineers to receive this award," said Allgower. "So I am very proud and very happy. It is not only nice for me but good for the field."

He went on to say that it is tremendously beneficial for him to be at UCSB currently, that it is very fruitful for his research and that he is very thankful to his UCSB colleagues.

Currently, Allgower is working closely with the faculty in the Center for Control Engineering and Computation (CCEC) and with the faculty in the newly formed Institute for Collaborative Biotechnologies (ICB). He will be at UCSB through March

2004 and is hosted by Frank Doyle, professor of chemical engineering and holder of the Duncan and Suzanne Mellichamp Chair in Process Control, and associate director of the ICB.

Doyle was hosted by Allgower during Doyle's sabbatical at the Institute for Systems Theory in Engineering at the University of Stuttgart during 2001-2002. They have ongoing collaborations in the area of nonlinear control, control of biomedical systems, and curricular developments in systems biology. "Frank's research work is helping to define the most promising future directions in systems engineering, and is a nice blend of elegant mathematical theory combined with complex interdisciplinary applications," said Doyle.

Allgower's research is characterized by an extraordinarily close link between fundamental research and practical solutions of technical problems. Allgower is pursuing what are considered promising new research areas of nanosystems technology and systems biology, a field that is emerging from a combination of modern molecular biology with systems sciences.

Allgower's main interests in research and teaching have been in the area of systems and control with emphasis on the development of new methods for the analysis of nonlinear systems, their identification (modeling) and control. He is involved with both theoretical work and the practical applications of those theories. Allgower's work spans the application spectrum ranging from chemical process control to mechatronic (electromechanical) systems control to atomic force microscope control to systems biology.

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## **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.