

UC SANTA BARBARA

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## **UCSB FACULTY LISTED AMONG TOP EARTH SCIENTISTS IN THE WORLD**

Six UC Santa Barbara faculty members and one former graduate student are listed among the top Earth scientists in the world in a new reference book entitled "A to Z of Earth Scientists," part of a notable scientists series published by Facts On File, Inc.

A comprehensive biographical digest of more than 150 men and women scientists from the 18th century to the present, the book is designed for high school students, researchers, teachers, and general readers.

The UC Santa Barbara scientists included in the volume are described below. Tanya Atwater, a marine geophysicist, is one of only 26 women scientists named in the book.

A member of the UCSB faculty since 1980, Atwater is one of the foremost experts on the tectonics of the northeast Pacific Ocean as well as the mid-Atlantic Ridge in and near Iceland.

She was the first to determine the origin and evolution of California's San Andreas Fault, which she did early in her career.

Preston E. Cloud, a paleontologist who died in 1991, was one of the founders and leaders of the burgeoning field of Precambrian Earth history.

Cloud came to UCSB in 1968 to run a laboratory funded by the U.S. Geological Survey to study early organisms.

He is the author of many popular science books on the evolving Earth.

Edward A. Keller, a geomorphologist, has been a member of the UCSB faculty since 1976.

He is one of the foremost experts on tectonic geomorphology especially with regard to earthquake hazard reduction and prevention.

He is the author of what is described in the book as "the most successful environmental geology textbook ever written."

Environmental Geology is now in its eighth edition.

Richard H. Sibson, a structural geologist at UCSB from 1982 to 1990, is considered to be at the forefront of research on earthquake generation and faults that bridges the gap between structural geology and seismology.

Sibson integrates all of the standard studies - earthquake waves and surface features caused by faults - with the actual processes of faulting at the point where the earthquake is generated.

Arthur G. Sylvester, a structural geologist, has been on the faculty at UC Santa Barbara since 1968. His primary research interests are structural geology and neotectonics. One of the premier experts on strike-slip deformation in faults, Sylvester is also noted for his research on the volcanic history of parts of the North Atlantic, earthquakes in southern California, occurrences of rare fossils in eastern California, and the structure and tectonics of southern Italy.

(A photograph of Sylvester is featured on the book's cover.)

George R. Tilton, an isotope geochemist, joined the UCSB faculty in 1965

and retired to a professor emeritus position in 1991.

He remains active in research, and is described in the book as "one of the true pioneers in the science of analyzing radioactive isotopes to determine the ages of rocks."

Tilton developed new techniques to estimate the age of granites and granitic rocks using the mineral zircon.

One of Tilton's former graduate students is also named in the book.

Samuel B. Mukasa earned his doctoral degree in geochemistry at UCSB in 1984.

He is best known in his field for proving that Antarctica was an integral part of the formation of the supercontinent Pangea by determining the ages of the exposed and unexposed rocks there.

He is currently on the faculty at the University of

Michigan, Ann Arbor.

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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.