

## **Dr. John Melack Biography**

### *Mono Lake Limnology Monitoring Program Director*

Dr. John Melack a Distinguished Emeritus Professor at University of California, Santa Barbara, where he holds appointments in the Bren School of Environmental Science and Management, the Department of Ecology, Evolution, and Marine Biology, and the Earth Research Institute. A leading limnologist and aquatic ecologist, Dr. Melack has spent more than four decades advancing the scientific understanding of lakes, wetlands, and inland aquatic ecosystems around the world. He earned his undergraduate degree from Cornell University and his Ph.D. from Duke University, where his doctoral research focused on saline and freshwater lakes in eastern Africa. After joining the UC Santa Barbara faculty in 1977 following a postdoctoral fellowship at the University of Michigan, he helped establish and develop the Bren School into one of the nation's leading environmental science and management programs.

Since 1979, Dr. Melack, his graduate students, and collaborators have conducted extensive research on the ecology and limnology of Mono Lake. His work has examined the lake's physical, chemical, and biological dynamics and has contributed substantially to scientific understanding of saline lake ecosystems. He co-authored the National Academy of Sciences report on Mono Lake and testified as an expert witness before the State Water Resources Control Board during the 1994 Mono Lake hearings regarding the lake's limnology and ecological condition. Beyond Mono Lake, his research has spanned high-elevation lakes in the Sierra Nevada and floodplain ecosystems of the Amazon Basin, where he pioneered the use of remote sensing technologies to study hydrology, nutrient cycling, carbon fluxes, and methane emissions across vast aquatic landscapes. His work has contributed to broader understanding of the role inland waters play in the global carbon cycle and climate system.

Dr. Melack has authored more than 400 peer-reviewed publications, including approximately 50 focused on saline lakes, along with seven books and dozens of technical reports. He is an elected Fellow of both the American Association for the Advancement of Science and the American Geophysical Union and served as President of the International Society of Salt Lake Research. In recognition of his scientific contributions, he received the prestigious Naumann-Thienemann Medal, the highest honor awarded by the International Society of Limnology. Throughout his career, Dr. Melack has combined scientific excellence with mentorship and public service, supervising 33 Ph.D. students, advising the Sierra Nevada Aquatic Research Laboratory for more than 40 years, and helping provide the scientific foundation for environmental management and policy decisions affecting aquatic ecosystems worldwide.