IN MEMORIAM

Richard V. Fisher
Professor of Geology, Emeritus
Santa Barbara
1928 — 2002

Richard V. Fisher, renowned volcanologist and professor of geology at UC Santa Barbara for 47 years, passed away on June 8, 2002. A premier researcher, prolific writer, and highly respected teacher, his passing leaves a void in the Department of Geological Sciences and sadness among his faculty colleagues, former graduate students and postdoctoral researchers.

Dick, or "R.V." as he was affectionately known, was born on August 8, 1928, in Whittier, California. He joined the U.S. Army in 1946, was assigned to Los Alamos National Laboratory, New Mexico, then volunteered for duty at Bikini Atoll in the western Pacific. There he witnessed base surges generated by underwater nuclear explosions, making observations that would guide some of his pioneering research on pyroclastic density currents years later. Toward the end of military service in 1947 he married Beverly Taylor, his loving partner for the next 55 years. Four children stemmed from their marriage. Dick entered Occidental College in 1948, graduated with a B.S. in geology and went on to graduate work at the University of Washington in Seattle (Ph.D., 1957). His doctoral research on volcanic and sedimentary strata southwest of Mount Rainier unraveled the complex mid- Tertiary geologic history in that segment of the Cascade Mountains' volcanic arc and led to his lifelong interest in stratigraphy, pyroclastic volcanism, and volcaniclastic sedimentation. His papers from that period on the classification of pyroclastic and volcaniclastic deposits and rocks helped create and define a rational volcanic terminology still with us today.

In 1955, Dick Fisher accepted a faculty position in geology at the newly established Santa Barbara campus of the University of California. His teaching and research there during 1955-1969, when he rose to full professor, spanned the turbulent period when UCSB evolved from a small liberal arts college to a research university and major campus in the UC system. The doctoral program in geology established at UCSB in 1964 has since produced many well- known volcanologists (and other geologists), many of them mentored by Dick Fisher.

At UCSB Dick began work on ignimbrites of the John Day Formation in eastern Oregon, laying groundwork for his later insightful studies on pyroclastic density currents. The mid-1960s saw the beginning of his work (with Aaron Waters) on tuff rings at maar- type volcanoes, first in eastern Oregon and then in the Azores and other localities worldwide. NASA supported this work because some lunar craters resembled maar volcanoes, whose creation on the Moon would imply the presence of water. It was learned during the Apollo program that the lunar craters were of meteorite- impact (not hydrovolcanic) origin, but the maar research led to early ideas about terrestrial explosive hydrovolcanism by "R.V.," his students and colleagues. Volcanic "base surges" arising from large- scale explosive eruptions where rising hot magma interacted with water or wet sediments — much like base surges produced by the underwater nuclear explosions witnessed by Dick at Bikini in 1946 — were shown to be responsible. Those ideas, in turn, led to his research into all types of pyroclastic density currents (PDCs), many associated with caldera- forming pyroclastic flows. His research on the May 18, 1980 blast deposits at Mount St. Helens and elsewhere helped to resolve controversy regarding dense- flow versus dilute, turbulent- flow models for PDCs. His field studies in the United States, Italy, Germany, France, Argentina, Portugal, Spain, Mexico, and China, including team efforts with his graduate

students and other colleagues, have addressed and clarified those and other important problems of explosive volcanism.

Dick Fisher enjoyed writing, and his professional output was enormous. This includes more than 80 articles in professional journals and related scientific publications. His first book, Pyroclastic Rocks (Fisher & Schmincke, 1984) was and remains the definitive work on that topic. His next two books, Volcanoes - Crucibles of Change (Fisher, Heiken, & Hulin, 1997) and his autobiography Out of the Crater - Chronicles of a Volcanologist (Princeton University Press, 1999), both directed toward educating the public, have enjoyed great success.

Dick was also a distinguished teacher, especially of graduate students, and he launched many successful careers. He was a strong advocate for the proposition that the best research scholars make the best teachers and he lived up to that standard. He had the uncanny ability to challenge students and get them enthused, yet doing so in an easy, friendly, laid- back way. More than most, he inspired long- lasting loyalties.

Administratively, Dick Fisher served UCSB well. Three times he chaired the Department of Geological Sciences (1969-73, 1979-80, and 1983-84) and he served several times as its graduate advisor and as director of the Geological Summer Field Camp. He served also as assistant to the chancellor for Academic Planning (1972-73). Outside the University he was a consultant to NASA and a member of many national and international scientific boards.

Important honors came his way. He received Senior Scientist Awards (1980-81, 1988-89) from the Alexander von Humboldt Foundation of Germany, a prestigious scientific recognition. For research achievements he won the N.L. Bowen Award of the American Geophysical Union (1985), their highest award for research in volcanology. This was followed (1997) by the Thorarinsson Medal, the highest honor of the International Association of Volcanologists (IAVCEI).

R.V. Fisher's qualities are nicely summed up by another famous volcanologist, Professor Stephen Sparks of Cambridge and Bristol Universities in Great Britain: “Dick was a person of great stature as a scientist and with great qualities as an individual. I remember him [also] for his fine sense of humor and his support and encouragement of younger scientists.” He will be greatly missed.

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