DAVID K. KEEFER
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ACADEMIC DEGREES

Stanford University	Geology	1966-71	B.S. 1971; M.S. 1971
University of Illinois, Urbana	Civil Engineering	1971-74	M.S. 1973
Stanford University	Applied Earth Sciences	1974-77	Ph.D. 1977

PRIMARY PROFESSIONAL SPECIALIZATIONS AND AREAS OF RESEARCH
Geoarchaeology
Landslides and Stability of Slopes (Especially as related to seismic conditions)
Engineering Geology
Geomorphology

PROFESSIONAL EXPERIENCE
2008-Present
Adjunct Research Professor, Climate Change Institute, University of Maine, Orono, Maine, USA
Scientist Emeritus, United States Geological Survey, Menlo Park, California, USA
Independent Consultant

1974-2008
Research Geologist and Research Group Leader (1986-1990), United States Geological Survey, Menlo Park, California, USA

Major Research Projects

- Defined seismic and geologic parameters controlling occurrence, regional distribution, and character of earthquake-induced landslides, including those caused by soil liquefaction, through synthesis of data base on landslides in historical earthquakes worldwide
- Dated and characterized physical effects and cultural consequences of prehistoric floods and debris flows caused by combinations of earthquakes and El Niño activity in Peru
- Developed multi-stage models to analyze coupled effects of earthquake-induced landslides and other mass-wasting and sediment-transport processes on long-term erosion and hazards
- Conducted more than 20 post-earthquake field investigations of landslides throughout the US, Japan, China, Argentina. Costa Rica, Mexico, and Peru
- Developed new techniques for mapping of seismic ground-failure hazards, especially in urban areas
- Conducted studies of landslides in the San Francisco Bay region, which led to creation of real-time landslide warning system
- Determined environmental, slope-stability, groundwater, and other environmental conditions associated with construction of Romano-British villa in southern England during the First Century CE
- Conceived and supervised study using large landslides in New Madrid seismic zone as paleoseismic indicators
- Developed models to explain mobilization and movement characteristics of earth flow-type landslides

1973
Geotechnical Engineer, Harza Engineering, Chicago, Illinois, USA
Conducted rock-mechanics testing program in exploratory adit; mapped and evaluated proposed reservoir site.

PUBLICATIONS

- Authored, co-authored, or edited 140 monographs, articles, book chapters, maps, and reports.

INVITED LECTURES, PAPERS PRESENTED AT SCIENTIFIC CONFERENCES, ACADEMIC SERVICE, AND REVIEW ACTIVITIES

In addition to publications noted above, authored or co-authored 80 papers presented orally at national and international scientific conferences. Presented more than 40 invited lectures at universities, professional societies, and governmental agencies throughout the US and abroad.

Served on numerous M.S. and Ph.D. examining committees, review panels for the USGS, other federal agencies, universities, state and local agencies, and professional societies. Perform peer review of an average of 12 manuscripts and research proposals per year for journals, USGS publications, and granting agencies.

Served as Associate Editor for Geological Society of America journal, *Geology*, 1995-1997. Serve on Editorial Board of European Geosciences Union journal, *Natural Hazards and Earth Systems Science*, 2010-present

AWARDS

U.S. Geological Survey Sustained Special Achievement Award, 1985
U.S. Geological Survey Branch Best Paper Award (USGS Special Achievement Award) for 1987 article in *Science* describing the landslide warning system, 1989
U.S. Geological Survey Special Achievement Award for Loma Prieta earthquake investigations, 1990
U.S. Department of the Interior Superior Service Award, 1995
U.S. Geological Survey STAR Award for seismic hazard mapping of Oakland, 1998
European Geosciences Union Sergey Soloviev Medal of the Natural Hazards Division, 2010