

CURRICULUM VITA John M. Sinton

Present Position:

Emeritus Professor, Department of Earth Sciences
University of Hawai'i at Mānoa
Honolulu, Hawai'i 96822

Education:

A.B. Geology, University of California at Santa Barbara
M.S. Geology, University of Oregon, Eugene, Oregon
Ph.D. Geology, University of Otago, Dunedin, New Zealand

Professional Expertise

Igneous petrology, Volcanology, Hawaiian geology, Marine geology; Geochemistry of volcanic materials used in Polynesian tool making; Geochemical analysis using X-ray fluorescence.

Professional Appointments:

- Emeritus Professor, University of Hawai'i, Department of Geology and Geophysics, 1/2014
- Division Head, Department of Geology and Geophysics, Division of Volcanology, Petrology and Geochemistry, 2002-2006
- Chair, University of Hawai'i, Department of Geology and Geophysics, 1996-1999.
- Associate Chair, University of Hawai'i Department of Geology and Geophysics, 1990-1991, 1993-1996
- Chair, Hawai'i Institute of Geophysics, Division of Volcanology, Geochemistry and Petrology, 1987-1990
- Professor of Geology and Geophysics, University of Hawai'i, 7/87-present
- Associate Professor of Geology and Geophysics, University of Hawai'i, 7/81-6/87
- Assistant Professor of Geology and Geophysics, University of Hawai'i, 5/77-6/81
- Post-doctoral Fellow, Smithsonian Institution, Department of Mineral Sciences, 1/76-3/77
- Senior Assistant, Saskatchewan Dept. of Mineral Resources, 6/71-9/71
- Summer Field Geologist, Standard Oil Co. of California, 6/69-9/69

Field Experience

Geological field mapping in northern Saskatchewan, New Zealand, Hawai'i, and Iceland; archeological field work in Hawai'i, Eiao (Marquesas), Ra'iatea, Rurutu and Easter Island

Seagoing Research Projects:

25 sea-going research cruises, 1976-2018; Chief Scientist or Co-chief Scientist on 11 major expeditions; >20 dives using *Makali'i*, *Alvin*, *Mir2*, *Nautilie*, *Pisces4*, *Pisces5*, and *Shinkai 6500* submersibles

- Shipboard scientist, *D/V Glomar Challenger* Leg 51, Western Atlantic, 11/76-1/77
- Co-chief Scientist, *R/V Kana Keoki*, Cruise KK78-12, Leg 05, Galápagos Spreading Center propagating rift expedition, 1979
- Chief Scientist, *R/V Kana Keoki*, Cruise KK80-07, Musicians Seamounts, 1980
- Shipboard Scientist, *R/V Kana Keoki*, Cruise KK82-03, Melanesian Borderland, 1982
- Scientific observer, Research Submersible *Makali'i*, Dives 83-157 and 83-159, O'ahu, Hawai'i, 1983
- Shipboard scientist, *R/V Moana Wave*, Cruise MW85-01, Galápagos Spreading Center propagating rift, 1985

- Co-chief Scientist, *R/V Atlantis II*, Cruise 112, Leg 24; *DSRV Alvin* submersible diving, camera tows and dredging, Galápagos Spreading Center, 1985
- Shipboard Scientist, *R/V Moana Wave*, Cruise MW85-18, Legs 17 and 18, Manus Basin, 12/85-1/86
- Chief Scientist, *R/V Moana Wave*, Cruise MW87-12, The S&M cruise, East Pacific Rise, 13°-23° S, 1987
- Invited scientist, *R/V Akademik Mstislav Keldysh*, Cruise 21, *MIR* submersible diving, Manus Basin, 1990
- Chief Scientist, *R/V Melville*, GLORIA Leg 08, near-ridge seamounts, East Pacific Rise, 1993
- Co-chief scientist, *N/O Nadir*, the NAUDUR cruise, *Nautilie* submersible diving, East Pacific Rise, 17°-19°S, 1993
- Chief Scientist, *R/V Atlantis* Cruise AT3-31, the STOWA cruise, *Alvin* submersible diving and DSL 120 surveying, East Pacific Rise, 17°-19°S, 1999
- Chief Scientist, *R/V Maurice Ewing* EW00-04, the G-PRIME cruise, seismic surveying and sampling, Galápagos Spreading Center, 2000.
- Shipboard scientist, *R/V Kilo Moana* KM03-17, mapping and dredging off-shore Maui, Hawai'i
- Observer, *R/V Yokosuka* YK04-07, *Shinkai* submersible dives on off-axis lava flow fields, southern East Pacific Rise, 14°S, July, 2004.
- Chief Scientist, *R/V Kilo Moana*, KM06-02, Ka'ena Ridge dredging and surveying, January, 2006
- Chief Scientist, *R/V Atlantis* cruise AT15-63, submarine eruptions along the Galápagos Spreading Center, *Alvin* dives, AUV Sentry, and TowCam, March-April, 2010
- Co-chief scientist, *R/V Kilo Moana* Cruise KM11-16, Geology of Ka'ena Ridge, Hawai'i using ROV Jason 2, May-June, 2011
- Scientific observer, Pisces dive P4-275, Off-shore Wai'anae Volcano, O'ahu, Hawai'i, July, 2012
- Scientific observer, Pisces dive P5-831, Ko'olau shoreline, Hawai'i, September, 2013
- Principal Investigator, ROV Lu'ukai dive LK-28, Ka'ena Ridge, Hawai'i, January, 2014
- Scientific observer, Pisces dive P4-283, Ko'olau shoreline, Hawai'i, November, 2014
- Participating scientist, *R/V Kilo Moana* Cruise KM17-10, Pa'uwela Ridge, Hawai'i; dredging, July, 2017
- Participating scientist, *R/V Kilo Moana* Cruise KM18-10, Wai'alu Ridge, Hawai'i; dredging, July, 2018

Other Professional Activities:

- JOIDES Lithosphere Advisory Panel to the Ocean Drilling Project, 1983-1987
- JOIDES Central and Eastern Pacific Advisory Panel to the Ocean Drilling Project, 1984-1986
- State of Hawai'i Geothermal Resources Technical Advisory Committee, 1984; 1991-1997
- Invited participant, National Academy of Sciences NRC Workshop on Mid-Oceanic Ridges, 1987
- Convener, IUGG InterUnion Symposium on Mid-Oceanic Ridges, IUGG General Assembly, Vancouver B.C., Canada, 1987
- Member, RIDGE Mapping and Sampling Working Group, 1988
- International Lithosphere Program Working Group 4, Nature and Evolution of the Oceanic Lithosphere, 1988-1992
- Steering Committee for JOI-USSAC-sponsored Workshop on Drilling Lower Oceanic Crust, 1988-1989
- NSF-RIDGE Working Group on Key Variables in Crustal Accretion, 1989
- NSF-RIDGE Steering Committee, 1992-1995
- Convener, NSF-RIDGE Workshop on Processes and fluxes on a superfast spreading ridge, Monterey, CA, January, 1996

- Invited participant, NSF Workshop, The Future of Marine Geosciences, December, 1996
- Invited lecturer, NordVulc Summer School on Tectonics and Volcanism at Diverging Plate Boundaries, Húsavík, Iceland, August, 1995
- Invited lecturer, NordVulc/European Summer School on Ocean Crust and Ophiolites, Kirkjubæjarklaustur, Iceland, August, 1996
- Convener, NSF-RIDGE/NordVulc Summer School on Active Processes at Mid-Ocean Ridges, Mývatn, Iceland, August, 1997
- Member, State of Hawai‘i Earthquake Advisory Board, 1998-2001
- Convener, NSF-sponsored Field Demonstration of Icelandic Rift Zones for U.S. Mid-Ocean Ridge Scientists, August, 1999.
- Member, United States Science Advisory Committee (USSAC), 2000-2002
- Convener, NSF-RIDGE/NordVulc Summer School on Plume-Ridge Interactions, Mývatn, Iceland, August, 2000
- Field Trip leader, IAVCEI General Assembly, Reykjavík, Iceland, August, 2008
- Member, American Geophysical Union Committee on Meetings, 2008-2012
- Commissioner, State of Hawai‘i Natural Area Reserves System, 2009 – 2012
- Invited lecturer, AGU Chapman Conference on the Galápagos as a Laboratory for the Earth Sciences, Puerto Ayora, Galápagos, July, 2011
- Chair, State of Hawai‘i Natural Area Reserves System Commission, 2012 – 2017
- Field Trip Leader, AGU Chapman Conference on Hawaiian Volcanoes from Source to Surface, Waikoloa, Hawai‘i, August, 2012
- Commissioner, State of Hawai‘i Legacy Land Conservation Program, 2013 – 2017

Mentoring:

Principal advisor for 10 completed Master’s theses and 6 PhD dissertations, in addition to undergraduate theses and post-doctoral supervision

Societies:

American Geophysical Union
 Geological Society of America
 International Association of Volcanology and Chemistry of Earth’s Interior

Awards and Honors

- University of Hawai‘i Presidential Citation for Meritorious Teaching (1991)
- University of California at Santa Barbara, Dept. of Geological Sciences Distinguished Alumnus (2002)
- Fellow, Geological Society of America (2012)

Publications

See http://www.soest.hawaii.edu/GG/FACULTY/SINTON/publications/sinton_pubs.pdf for complete listing

Editor or co-editor of 6 books

Author or co-author of >105 peer-reviewed publications in high-quality scientific journals