Gregory F. Moore

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Education

Ph.D., Cornell University, 1977

M.A., The Johns Hopkins University, 1974

B.A., University of California, Santa Barbara, 1973

Professional Experience

Professor Emeritus, University of Hawai'i, Sept. 2020-present

Professor, University of Hawai'i, 1988-July 2020

Chair, Dept. Geology & Geophysics, 2010-2014

Assoc. Chair, Dept. Geology & Geophysics, 1996-1997, 2004-2005, 2014-2015

Chair, Marine Geophysics Division, HIG/SOEST, 1989-1994, 1997, 2017

Advisor to the Director General of CDEX/JAMSTEC, Jan., 2006-June, 2008

Visiting Professor, Atmosphere and Ocean Research Inst., Univ. Tokyo, Sept.-Nov., 2023

Visiting Research Scientist, JAMSTEC, 2008-present

Visiting Professor, GEOMAR, Kiel Germany, April-June, 2016

Visiting Professor, Earth Observatory of Singapore, August-November, 2015

Visiting Professor, Academia Sinica, Taipei, Taiwan, April-May, 2015

Visiting Professor, University of Tokyo, Ocean Research Institute, 2001

Visiting Professor, University of California, Santa Cruz, 1994

Associate Professor, University of Tulsa, 1983-1988

Research Geologist, Cities Service Research Lab, 1982-1983

Assistant Research Geologist, Scripps Institution of Oceanography, 1979-1982

Lecturer, Scripps Institution of Oceanography, 1980-1984

Postgraduate Research Geologist, Scripps Institution of Oceanography, 1978-1979

Postdoctoral Associate, Cornell University, 1977

Professional Recognition

US Science Support Program – 2023 Ocean Discovery Lecturer

Wing Ip Medal: "For unselfish cooperation/leadership in Geoscience in the Asia Oceania Region", Asia Oceania Geosciences Society, August, 2021

Excellence Professorship/Petersen Prize (€20,000), Kiel Univ., GEOMAR, April, 2016

Professional Organizations

Geological Society of America (Fellow)

American Geophysical Union

Society of Exploration Geophysicists

American Association of Petroleum Geologists

Geological Society of Japan

Myanmar Applied Earth Sci Assoc., Member of International Advisory Committee

Professional Activities since being awarded Emeritus Status

TEACHING/MENTORING

Graduate Student Degrees:

Ph.D.

Hannah Tilley, Dec. 2021 (Chair)

Raquel Felix, Nanyang Technological Univ. (Singapore), Member of Examining Committee, 2022-2023

Emily Schottenfels, Northern Arizona Univ. (Outside Committee Member), June, 2022

Grants Received

NSF OCE-2023186, <u>G.F. Moore</u>, 3D seismic investigation of upper plate deformation above a region of Slow Slip along the Hikurangi subduction margin of New Zealand, **\$280,844**, 09/01/2020-08/31/2024.

SERVICE

National/International

Participation in NSF/OCE/MGG Panel, Feb. 2021

Participation in 5-year Review of University of Tokyo Atmosphere and Ocean Research Institute, Mar. 2021

Reviews for NSF:

Earth Sciences Facilities, Apr. 2021

Mid-scale RI-1 Final proposal, May 2021

Review of Proposal for Deutsche Forshungsgemainschaft, Jan., 2022

Review of proposal for UK-NERC, Nov. 2020

Review of proposal for Helmholtz Young Investigator Groups, Aug. 2020

Review of proposal for Austrian Science Fund, Nov. 2022

Review of Dissertation, Earth Obs. Singapore, Sept. 2022

Reviews of two promotion files (Asst - Assoc Prof), National Taiwan University, Feb. 2023

Journal reviews

Chemical Geology – June 2021

Earth & Planetary Sci. Lett. - Aug., 2021

Earth, Planets, Space (2) - Sept., 2020, Oct., 2020

Frontiers in Earth Science (2) – Dec., 2020, Apr., 2021

G-cubed, (2) – Sept., 2020, Oct., 2020

Geology - Oct., 2020

Geol. Soc. Malaysia Bull., July, 2022

Geomorphology, Feb., 2022

Geophysical Res Lett (3) – Mar., 2021, Feb. 2022; Apr., 2022

Geosciences – Apr. 2021

Global and Planetary Change, Aug. 2022

Journal of Asian Earth Sciences, Aug. 2020

Journal of Geophysical Research, Solid Earth – Jan. 2023

Marine and Petroleum Geology (4), Feb., 2022; June, 2022; Oct., 2022; May, 2023

Marine Geology, Sept., 2021

Progress in Earth and Planetary Science, Oct. 2021, Jan. 2023

Sedimentary Geology, June, 2022

University

SOEST

Member of SOEST Research Council (GT rep for ERTH), AY 2021 Included participation in SOEST Proposal Writing Workshop (Apr. 2021)

ERTH Department

Department Committees/other

AY 2022-23

Chair, Search Committee for Isotope Geochemist (Dec. 2022- Feb. 2023)

Participated in Grad student yearly check-in (Feb. 2023)

ERTH 200 -- reviewed first essay (40 students)

Department TGIF seminar (October 7, 2022)

AY 2021-22

Department Personnel Committee (member)

Grad Studies Committee (Participated in Grad student Check-in, Mar. 2021)

Guest Lectures

ERTH Dept.

ERTH 711 (Prof. K. Rubin), Lecture and leader of discussion on "Development of faulting on Kilauea south flank", Oct. 2020

Invited Lectures

April, 2023 – "Recent Advances in Understanding Great Earthquakes and Tsunamis via Scientific Ocean Drilling and 3D Seismic Reflection Data at the Hikurangi Subduction Margin.

Presented at: Notre Dame Univ., Appalachian State Univ., Old Dominion Univ., Cornell Univ., Univ. Massachusetts at Amherst

- 12 October 2021 "Development of the Kumano Forearc Basin, Nankai Trough Subduction Zone"; Geol. Soc. Amer. National meeting.
- 3 August 2021 "Complex Thrust Deformation at the Toe of the Nankai Accretionary Prism Due to Subducting Basement Topography"; AOGS Win Ip Medal Lecture
- 5 Mar 2021 "Modern submarine landslides in the Nankai Trough: Re-sedimentation on an active accretionary prism", Tokai University (Japan) workshop "Challenges of Marine Observations and Development of International Collaboration"
- 2 Dec 2020 "Why and Where Do Large Earthquakes Occur in Japan and Chile"; University of Atacama, Chile

Other Presentations

- Xx December 2023 "High quality seismic images confirm Ruatoria MTD at IODP Site 1520, N. Hikurangi margin", Am Geophys. Union annual meeting
- 16 December 2021 "Complex Stratigraphy on the Incoming Plate at the N. Hikurangi Margin From 3D Seismic Data", 2021 Am. Geophys. Union annual meeting, abstract T42A-02.

BIBLIOGRAPHY since beginning Emeritus status

Citations of Published Papers (From Google Scholar, July 6, 2023)

Citations 10,630 h-index 62 i10-index 136

(* = Student or Post-doc First Author)

- 172. Bangs, N.LB, ... <u>Moore, G.F.</u>, et al., 2023, Slow slip along the Hikurangi margin linked to fluid-rich sediments trailing subducting seamounts: Nature GeoSci., v. 16, p.505-512, doi: https://doi.org/10.1038/s41561-023-01186-3
- 171. Wang, M., Barnes, P.M., Morgan, J.K., Bell, R.E., Moore, G.F., et al., 2023, Compactive deformation of incoming calcareous pelagic sediments, northern Hikurangi subduction margin, New Zealand: Implications for subduction processes:, Earth Planet. Sci. Lett., v. 605, 118022, doi:10.1016/j.epsl.2023.118022
- 170. Bassett, D., Arnulf, A., Kodaira, S., Nakanishi, A., Harding, A., Moore, G.F., 2022, Crustal structure of the Nankai subduction zone revealed by two decades of onshore-offshore and ocean-bottom seismic data: Implications for the dimensions and slip behavior of the seismogenic zone: *Jour. Geophys. Res.*, v.127, e2022JB024992; doi: 10.1029/2022JB024992.
- 169. *Cornard, P. H., Moernaut, J., **Moore, G. F.**, Kioka, A., Kopf, A., dos Santos Ferreira, C., and Strasser, M., 2022, Sequence stratigraphic evolution of the Kumano forearc basin during the last deglaciation: Influence of eustatic and tectonically-controlled shelf morphology on deep-marine sediment dynamics. *Sedimentary Geology*, 106100. doi:https://doi.org/10.1016/j.sedgeo.2022.106100
- 168. Hashimoto, Y., Sato, S., Kimura, G., Kinoshita, M., Miyakawa, A., **Moore, G. F.**, Nakano, M., Shiraishi, K., and Yamada, Y., 2022, Décollement geometry controls on shallow very low frequency earthquakes. *Scientific Reports*, v. 12(1), 2677. doi:10.1038/s41598-022-06645-2
- 167. Arnulf, A., Bassett, D., Harding, A., Kodaira, S., Nakanishi, A., and **Moore, G.F.**, 2022, Upper-plate controls on subduction zone geometry, hydration and earthquake behaviour, *Nature Geoscience*, v. 15, No. 2
- 166. *Tilley, H.L., **Moore, G.F.**, Underwood, M.B., Hernandez-Molina, J., Yamashita, M., Kodaira, S., and Nakanishi, A., 2021, Heterogeneous sediment input at the Nankai Trough subduction zone: Implications for shallow slow earthquake localization: *Geochem.*, *Geophys.*, *Geosyst.*, v. 22, e2021GC009965. https://doi.org/10.1029/2021GC009965.
- 165. Maunde, A., Alves, T.M., and <u>Moore, G.F., 2021</u>, Shallow fault systems of thrust anticlines responding to changes in accretionary prism lithology (Nankai, SE Japan): *Tectonophysics*, v. 812, 228888, https://doi.org/10.1016/j.tecto.2021.228888

- 164. Umino, S., Moore, G. F., Boston, B., Coggon, R., Crispini, L., D'Hondt, S., . . . Inagaki, F., 2021, Workshop report: Exploring deep oceanic crust off Hawai'i: *Sci. Dril.*, 29, 69-82. doi:10.5194/sd-29-69-2021
- 163. *Tilley, H.L., <u>Moore, G.F.</u>, Yamashita, M., and Kodaira, S., 2021, Along-strike variations in protothrust zone characteristics at the Nankai Trough subduction margin: *Geosphere*, v. 17, No.2, doi:10.1130/GES02305.1
- 162. Asada, M., <u>Moore, G.F.</u>, Kawamura, K., Noguchi, T., 2021, A mud volcano located at a fault zone possibly linked to seismogenic faults in the Kumano Basin, Nankai Trough, Japan: Marine Geophysical Research, v. 42:4, doi: 10.1007/s11001-020-09425-7.
- 161. Ito, G. and <u>Moore, G.F.</u>, 2021, Widths of imbricate thrust blocks and the strength of the front of accretionary wedges and fold-and-thrust belts: Tectonophysics, v. 799, p. 228704.

-----Emeritus Status September, 2020-----