# SUSAN E. HOUGH

#### **EDUCATION**

University of California at Berkeley, Berkeley, California | A.B. with honors, Geophysics, 1982

Scripps Institution of Oceanography, La Jolla, California | Ph.D., Earth Sciences, 1987

# **EXPERIENCE**

2018 – present: President-Elect, Seismological Society of America 2017 – present: Southern California Earthquake Response Coordinator

3/2009 – present: Geophysicist, Ground Motions Task Leader, U.S. Geological Survey

9/2010 – 10/2010: Embassy Science Fellow, Port-au-Prince Haiti

2009 – present: Fellow, American Geophysical Union

7/2006 – 2009: Scientist-in-Charge, Pasadena office, U.S. Geological Survey

1992 – 7/2006: Geophysicist, U.S. Geological Survey, Pasadena, CA

1988 – 1992: Associate Research Scientist, Lamont-Doherty Geological Observatory

1987 – 1988: Postdoctoral Researcher, Scripps Institution of Oceanography

### **SELECTED RECENT PEER-REVIEWED PUBLICATIONS (From total of over 130)**

Szeliga, W., S.E. Hough, S. Martin, and R. Bilham (2010). Intensity, magnitude, location, and attenuation in India for felt earthquakes since 1762, Bull. Seism. Soc. Am. 100, 570-584.

Hough, S.E., Altidor, J.R., Anglade, D., Benz, H., Ellsworth, W, Given, D., Hardebeck, J., Janvier, M.G., Maharrey, J.Z., Mazabraud, Y., McNamara, D., de Lepinay, B.M., Meremonte, M., Mildor, B.S-L., Prepetit, C., and Yong, A. (2010). Localized damage associated with topographic amplification during the 12 January 2010 M7.0 Haiti earthquake, Nature Geoscience 3, 778-782.

Hough, S.E. and M. Page (2011). Towards a consistent model for strain rate accrual and release for the New Madrid Seismic Zone, J. Geophys. Res. 116, B03311, 17 PP, doi:10.1029/2010JB007783.

Yong, A., S.E. Hough, J. Iwahashi, and A. Braverman (2011) A terrain-based site characterization map of California with Implications for the contiguous United States, , Bull. Seism. Soc. Am. 102, 114-128.

Hough, S.E., Yong, A., Altidor, J.R., Anglade, D., Given, D., Z. Maharrey, B.M., Meremonte, M., Mildor, S-L. (2011). Site characterization and site response in Port-au-Prince, Haiti, Earthquake Spectra, S137-S155.

Hough, S.E. (2013). Intraplate seismic hazard: evidence for distributed strain and implications for seismic hazard, Intraplate Earthquakes, Cambridge University Press, P. Talwani, ed., 303-327. (Invited contribution).

Page, M. and S.E. Hough (2013). The New Madrid Seismic Zone: Not Dead Yet, Science, 343, 762-764, doi:10.1126/science.1248215.

Hough, S.E.(2014). Shaking from injection-induced earthquakes in the central and eastern United States, Bull. Seism. of Am. 104, pp 2619-2626.

Hough, S.E. and M. Page (2015). A century of induced earthquakes in Oklahoma? Bull. Seism. Soc. Am. 105:6, 2863-2870.

Dixit, A.M., Ringler, A., Sumy, D.S., Cochran, E.S., Hough, S.E., Martin, S.S., Gibbons, S., Luetgert, J.H., Galetzka, J., Shreshtha, S.N., Rajaure, S., and McNamara, D. (2015). Strong Motion Observations of the M7.8 Gorkha, Nepal earthquake sequence from low-cost, Quake Catcher Network accelerometers, Seism. Res. Lett. 86:6, 1533-1539.

Martin, S.S., S.E. Hough, and C. Hung (2015). Ground motions from the 2015 M7.8 Gorkha, Nepal, earthquake constrained by a detailed assessment of macroseismic data, Seism. Res. Lett. 86:6, 1524-1532.

Rajaure, S., D. Asimaki, E. Thompson, S. Hough, P. Ampuero, S.S. Martin, A. Inbal, and M. Dhital (2016). Strong motion observations of the Kathmandu valley response during the M7.8 Gorkha earthquake sequence, in print, Tectonophysics.

Hough, S.E. and M. Page (2016) Potentially induced earthquakes during the early twentieth century in the Los Angeles Basin, Bull. Seism. Soc. Am. 106:6, doi:10.1785/0120160157.

Hough, S.E., S.S. Martin, V. Gahalaut, A. Joshi, M. Landes, and R. Bossu (2016). A comparison of observed and predicted ground motions from the 2015 Mw7.8 Gorkha, Nepal, earthquake, Natural Hazards, 84:3, 1661-1684.

Hrin Nei Thiam, Yin Myo Min Htwe, Tun Lin Kyaw, Pa Pa Tun, Zaw Min, Su Hninn Htwe, Tin Myo Aung, Kyaw Kyaw Lin, Myat Min Aung, Jason de Cristofaro, M. Franke, S. Radman, E. Lepiten, Emily Wolin, and Susan E. Hough (2016). A Report on Upgraded Seismic Monitoring Stations in Myanmar: Station Performance and Site Response, Seism. Res. Lett. 88:2.

Adhikari, S.R., G. Baysal, A. Dixit, S.S. Martin, M. Landes, R. Bossu, and S.E. Hough, Towards a unified near-field intensity map of the 2015 Gorkha, Nepal, earthquake, in press, Earthquake Spectra.

#### **SELECT GENERAL INTEREST PUBLICATIONS**

Understanding earthquakes makes for messy science, Los Angeles Times Op-ed, May 13, 1994.

Still shocked by what comes after, Los Angeles Times Op-ed, May 4, 1997

Even Scientists don't know when to fold 'em, Los Angeles Times Op-ed, March 30, 1998

The Aftershocks that Weren't, feature article, Natural History Magazine, March, 2001.

Hough, S.E. and R. Bilham. Shaken to the core, Natural History, 42-48, February, 2003.

The Really Big One, West (Sunday magazine, LA Times), Jan. 7, 2007

Confusing patterns with coincidences, New York Times op-ed (invited), Apr. 12, 2009.

Haiti is a reminder of how we can help other quake-prone areas, Los Angeles Times op-ed, Feb. 8, 2010

Five Myths about earthquakes, Washington Post (Reprinted in The Japan Times), Aug. 31, 2011.

### BOOKS

Earthshaking Science: What we Know (and don't know) about Earthquakes, Princeton University Press, 272 pp, 2002.

Finding Fault in California: An Earthquake Tourist's Guide, Mountain Press Publishers, 268 pp, 2004.

After the Earth Quakes: Elastic Rebound on an Urban Planet, (Susan Hough and Roger Bilham), Oxford Press, 2005.

Richter's Scale: Measure of an Earthquake, Measure of a Man, Princeton University Press, 1/2007.

*Predicting the Unpredictable: The Tumultuous Science of Earthquake Prediction*, Princeton University Press, 2009.