AGU Style Curriculum Vitae
Keith D. Koper
18 May 2026

(1) Name
Keith D. Koper

(2) Employer
University of Utah

(3) City, state, and country
Salt Lake City, Utah, USA

(4) History of Employment
Professor, Dept. of Geology & Geophysics, Univ. of Utah, 2015–present
Director, Univ. of Utah Seismograph Stations, 2010–present
Assoc. Professor, Dept. of Geology & Geophysics, Univ. of Utah, 2010–2015
Assoc. Professor, Dept. of Earth & Atmos. Sciences, Saint Louis University, 2006–2010
Asst. Professor, Dept. of Earth & Atmos. Sciences, Saint Louis University, 2001–2006
Post-doc, Dept. of Geosciences, University of Arizona, 1998–2001

(5) Degrees
PhD (Geophysics), Washinton University, 1998
BA (Math, Geology, ISP), Northwestern University, 1993

(6) Narrative of Research Experience
I am interested in the following topics: the structure and dynamics of Earth's deep interior—especially the core; array seismology; Earth's ambient seismic noise field; forensic seismology and exotic sources; seismicity and tectonics of the intermountain West; and mining induced earthquakes.

(7) Short List of Key Publications

Vidale, J. E., W. Wang, R. Wang, G. Pang, and K. D. Koper (2025). Annual-scale variability in both the rotation rate and near-surface of Earth's inner core, *Nat. Geosci.*, *18*, 267–272.

Wang, W., J. E. Vidale, G. Pang, K. D. Koper, and R. Wang (2024). Inner core backtracking by seismic waveform change reversals, *Nature*, *631*, 340–343.

Pang, G., K. D. Koper, S.-M. Wu, W. Wang, M. Lasbleis, and G. Euler (2023). Enhanced inner core fine-scale heterogeneity toward the Earth's center, *Nature*, *620*, 570–575.

Wu, S.-M., G. Pang, and K. D. Koper (2022). A search for large-scale variations in the fine-scale structure of Earth's inner core, *J. Geophys. Res.*, *127*, e2022JB024420.

Pang, G., and K. D. Koper (2022). Excitation of Earth's inner core rotational oscillation

during 2001–2003 captured by earthquake doublets, *Earth Planet. Sci. Lett.*, *584*, 117504, doi:10.1016/j.epsl.2022.117504.
Zou, Z., K. D. Koper, and V. F. Cormier (2008), The structure of the base of the outer core inferred from seismic waves diffracted around the inner core, *J. Geophys. Res., 113*, B05314, doi:10.1029/2007JB005316.
Peng, Z., K. D. Koper, J. E. Vidale, F. Leyton, and P. Shearer (2008), Inner-core fine-scale structure from scattered waves recorded by LASA, *J. Geophys. Res., 113*, B0931, doi:10.1029/2007JB005412.
Zou, Z., F. Leyton, and K. D. Koper (2007), Partial melt in the lowermost mantle near the base of a plume, *Geophys. J. Int., 168*, 809–817.
Leyton, F., and K. D. Koper (2007), Using PKiKP coda to determine inner core structure: 1. Synthesis of coda envelopes using single-scattering theories, *J. Geophys. Res., 112*, B05316, doi:10.1029/2006JB004369.
Leyton, F., and K. D. Koper (2007), Using PKiKP coda to determine inner core structure: 2. Determination of Q_C, *J. Geophys. Res., 112*, B05317, doi:10.1029/2006JB004370.
Koper, K. D., and M. Dombrovskaya (2005), Seismic properties of the inner core boundary from PKiKP/P amplitude ratios, *Earth Planet. Sci. Lett., 237*, 680–694.
Koper, K. D., J. M. Franks, and M. Dombrovskaya (2004), Evidence for small-scale heterogeneity in Earth's inner core from a global study of PKiKP coda waves, *Earth Planet. Sci. Lett., 228*, 227–241.
Koper, K. D., M. L. Pyle, and J. M. Franks (2003), Constraints on aspherical core structure from PKiKP-PcP differential travel times, *J. Geophys. Res., 108* (B3), 2168, doi:10.1029/2002JB001995.

(8) Honors

Celebrate U Honoree, Univ. Utah, 2016
Certificate of excellence in reviewing, *Earth Planet. Sci. Lett.,* 2012
Doornbos Prize, IUGG-SEDI, 2006
Citation from Saint Louis University for excellence in research, 2003
Tolman Geoscience Fellowship, Washington University, 1993–1995

(9) Professional Society Memberships

AGU, SSA