

William Menke , Professor of Earth and Environmental Sciences

Professional Preparation

Massachusetts Inst. of Technology Earth and Planetary Science BS, MS 1976

Columbia University Geological Sciences M.Phil 1978, PhD 1982

Appointments

Chair Dept of Earth & Env. Sci. 2002-2004

Professor Columbia University 1992-

Associate Director Lamont-Doherty Earth Obs. 1989-1992

Associate Professor Columbia University 1986-1992

Assistant Professor Oregon St. University 1982-1986

Relevant Publications

Menke, W., Case studies of seismic tomography and earthquake location in a regional context, in *Seismic Earth: Array Analysis of Broadband Seismograms*, Alan Levander and Guust Nolet, Eds., Geophysical Monograph Series 157. American Geophysical Union, 7-36, 2005.

Menke, W. and V. Levin, The Cross-Convolution Method for Interpreting SKS Splitting Observations, with Application to One and Two Layer Anisotropic Earth Models, *Geophys. J. Int.* 154, 379-392, 2003.

Menke, W. and V. Levin, Anomalous seaward dip of the lithosphere-asthenosphere boundary beneath northeastern US detected using differential-array measurements of Rayleigh waves, *Geophys. J. Int.* 149, 413-421, 2002.

Menke, W., V. Levin and R. Sethi, Seismic attenuation in the crust at the mid-Atlantic plate boundary in south-west Iceland, *Geophys. J. Int.* 122, 175-182, 1995.

Dubendorff, B. and Menke, W., Physical modeling observations of wave velocity and apparent attenuation in isotropic and anisotropic two phase media, *Pure and Applied Geophysics* 132, 363-400, 1990.

Other Publications

Menke, W., *Geophysical Data Analysis: Discrete Inverse Theory*, Revised Edition (textbook), Academic Press, Inc., New York, 1989.

Menke, W. and D. Abbott, *Geophysical Theory* (Textbook), Columbia University Press, 458p, 1989.

Levin, V., W. Menke, J. Park, No regional anisotropic domains in the northerneastern U.S. Appalachians *J. Geophys. Res.* Vol. 105 , No. B8 , p. 19,029, 2000.

Menke, W., M. West and M. Tolstoy, Shallow crustal magma chamber beneath the axial high of the Coaxial Segment of Juan de Fuca Ridge at the "Source Site" of the 1993 eruption, *Geology* 30, 359-362, 2002.

Synergistic Activities

Seismological Field Experiments: SIST (Iceland), ONYNEX (NY-New England), Katla Undershooting (Iceland), FIRE (Iceland), Baradalur '96 (Iceland), Axial Volcano (Juan de Fuca Ridge).

Development of 3-semester "The Earth System" undergraduate course at Columbia University, 1994-1996.

Ridge Multibeam Synthesis Project and associated database, 1995.

Collaborators: B. Brandsdottir (U. Iceland), V. Levin (Rutgers U.)

Graduate Advisors A. Brecher (Undergraduate), P. Molnar (Masters), P. Richards (PhD)

Advisor and Sponsor V. Levin (Yale), M. West (LDEO), K. Rodriguez Czuchlewski (LDEO).

Total: 8.