

JOHN A. STAMATAKOS

Assistant Director

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Ph.D., Geology, Lehigh University, 1990
M.S., Geology, Lehigh University, 1988
B.S., Geology, Franklin and Marshall College, 1981

Dr. Stamatakos is a structural geologist and geophysicist with international research experience in regional and global tectonics. Dr. Stamatakos has conducted research on a range of topics including paleomagnetism, paleogeography, exploration geophysics, neotectonics, and earthquake seismology. His work includes investigations of seismic sources in earthquake hazard studies; kinematics of fault block rotations in strike-slip, normal, and thrust fault systems; effects of internal strain on the magnetic properties of deformed rocks; evolution of curvature in arcuate mountain belts; and age and sequence of deformation in folded and faulted mountain belts. This research focused on the Basin and Range in the western United States, the northern and central Appalachians in the eastern United States and Canada, the Hercynian mountains in Germany and northern Spain, and the northern Cordilleran Mountains in Alaska. Other strengths include numerical modeling of deformation, magnetostratigraphy, rock magnetism, and exploration geophysics.

As assistant director, Dr. Stamatakos administers the Washington Technical Support Office as an offsite facility of the division, with the preponderance of its functions and uses being on behalf of Center for Nuclear Waste Regulatory Analyses (CNWRA). Dr. Stamatakos manages and provides day-to-day interfaces with the U.S. Nuclear Regulatory Commission (NRC) on CNWRA projects. In addition, Dr. Stamatakos provides technical support to tectonics research at CNWRA, including geologic and geophysical analyses of the tectonic elements of the Basin and Range province in southwestern United States, evaluation of seismic hazards at nuclear facilities, and development of tectonic models for the region surrounding the potential high-level nuclear waste repository at Yucca Mountain, Nevada. These NRC-sponsored investigations support evaluations of earthquake and volcanic risks at Yucca Mountain. In addition to work at Yucca Mountain, Dr. Stamatakos has provided technical reviews on seismic hazard and seismic design for a number of other NRC-licensed facilities in Utah, Idaho, California, Ohio, Kentucky, and South Carolina. Dr. Stamatakos has also provided expert testimony on seismic issues on behalf of the NRC staff before the Atomic Safety Licensing Board.

Before CNWRA, Dr. Stamatakos held positions of visiting faculty at the University of Michigan and postdoctoral fellow at the Eidgenössische Technische Hochschule in Zurich, Switzerland. At the University of Michigan, Dr. Stamatakos taught courses in field mapping, structural geology, geophysics, and tectonics.

Dr. Stamatakos has written or collaborated on more than 60 papers and reports on structural geology, tectonics, and geophysics. He has made presentations at international conferences in the United States, Canada, and Europe and has won an outstanding paper award from the American Geophysical Union. Dr. Stamatakos is associate editor of the Geological Society of America Bulletin, Geomagnetism and has served as a regular reviewer of papers for the Journal of Geophysical Research, Earth and Planetary Science Letters, Reviews of Geophysics, Journal of Structural Geology, Physics of the Earth and Planetary Sciences, and Geophysical Research Letters, as well as for grant proposals for the National Science Foundation.

PROFESSIONAL CHRONOLOGY: Analex Geosciences: petroleum geologist, 1981–3; Lehigh University: research and teaching assistant, 1984–90; Eidgenössische Technische Hochschule, Switzerland: research fellow, 1990–2; University of Michigan: visiting assistant professor, 1992–5; Southwest Research Institute: 1995–[research scientist, 1995–7; senior research scientist, 1997–2002; principal scientist, 2002–5; manager, 2005–7; assistant director; 2007–present].

MEMBERSHIPS: Seismological Society of America, Geological Society of America, American Geophysical Union.

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