

Sonjia M. Leyva

EDUCATION

- Master of Science, Geology (2002) - [California State University, Los Angeles](#)
- Bachelor of Science, Geology (1995) - [California State University, Los Angeles](#)

EMPLOYMENT HISTORY

- **Adjunct Faculty:** [Pasadena City College, Natural Sciences](#) (6/06 – Present)
Responsibilities include teaching the undergraduate lecture sections of Oceanography courses. Other duties include preparing lectures and laboratory activities, assessing student progress (grading, required record keeping, etc), and participating in departmental functions.
- **Lecturer A:** [CSU Los Angeles, Department of Geological Sciences](#) (1/03 – Present)
Responsibilities include teaching the undergraduate lecture and laboratory sections of Introductory Geology, Earth Science for Teachers, and Oceanography in addition to the upper division Urban Geology and Environmental Geology of Developing Nations courses. Other duties include preparing lectures and laboratory activities, assessing student progress (grading, required recordkeeping, etc), and participating in departmental functions.
- **Associate Geologist: Pacific Soils Engineering** – Cypress, California (1/98 – 9/00)
Responsibilities included: geologic investigations for residential and commercial developments; fault studies and assessment of geologic hazards; geologic mapping and site reconnaissance; detailed logging of test borings and trenches; analyzation aerial photographs; preparation of geotechnical reports; and in-grading inspections and geologic mapping.
- **Geologist: Hatch-Mott MacDonald** – North Hollywood, California (2/96 – 1/98)
Responsible for mapping, groundwater monitoring and initial geologic assessment during the construction of the Metro Red Line Segment 3. Created and maintained a database containing groundwater flow rates over time and ground quality and conditions. Information obtained helped determine the stability of the surrounding bedrock during tunnel construction and identify and abate potentially dangerous conditions.
- **Technician 1: Black and Veatch** – Highland, California (3/95- 2/96)
Responsible for testing samples from various zones during the construction of the Seven Oaks Dam in San Bernardino, CA. Tests performed include: gradations, 4 and 5 foot water ring replacement, 6 and 12 inch sand cones, and Atterberg limits. Results of these tests determined if the material was within ASTM and COE specs. Assisted Army Corps of Engineers as a grout inspector and assistant geologist. Supervised drilling of: grout holes, water pressure tests, grouting, backfilling of grout holes, and exploration holes (including logging core and pressure testing).

- **Field Geologist: U. S. Borax Inc.** – Valencia, California (6/94 – 12/94)
Responsible for assisting four exploration geologists and providing field support at exploration drill sites in Death Valley (borates), Minnesota (kaolin) and Georgia (kaolin). Supervised drillers while on drill sites, identified cuttings, logged the cores, and determined which samples to analyze. Evaluation of mineral quality determined the mining potential and economic value of the site.
- **Laboratory Technician: U. S. Borax Inc.** – Valencia, California (6/93 – 6/94)
Analyzed, interpreted and provided identification of mineral phases using an x-ray diffractometer and a scanning electron microscope. Compiled, organized and wrote five Quality Assurance Procedures for the Wilmington plant. Adoption and implementation of these procedures assisted in obtaining ISO 9000 certification for U.S. Borax.
- **Geophysical Technician: Unocal** – Los Angeles, California (2/89 to 6/92)
Responsible for managing all gravity and magnetic data for the Potential Fields Group. Created, updated and managed a database using dBASE IV to record all available data for each country. Drafted maps of various scales using gravity, magnetic and elevation data within given deadlines. Production of these maps aided in the assessment of the exploration potential of a prospective site.

EDUCATIONAL ACTIVITIES

- Designed and developed a website for my courses at [CSU Los Angeles](#) and [Pasadena City College](#) (www.geophile.net/College)
- Updated the CSULA Department of Geological Science's Oceanography lab manual
- Designed and developed a Landslide Hazard Activity for use in a publication.
- Helped to develop the lesson plan for "The Founding of America: A Standards-based Lesson Plan for Eleventh Grade United States History " for special education students. Created a web site for the lesson plan (<http://home.earthlink.net/~mmslugg/Salt2000/>).

COMMUNITY SERVICE

- Delta Zeta Sorority, [Pasadena Foothill Alumnae](#): President (2001 - 2006), Webmistress (2002 - present), Vice President (1993-1994), Newsletter Editor (1990 -1997)
- [Delta Zeta Sorority Lamplighters of Southern California](#): co-chair of the 1998 Flame Fantasy benefit for the House Ear Institute
- [Delta Zeta Sorority, Great Western Region](#): Great Western Region State Membership Chair, Southern California –1 area (Pasadena-Foothill, San Fernando Valley, South Bay, and Westchester)
- Docent, [Southwest Museum](#): (2000 - 2003)