



EDUCATION

- PhD Environmental Engineering
University of Michigan, Ann Arbor
- MSE Environmental Engineering
University of Michigan, Ann Arbor
- BSE Civil, Urban, & Geosystems Engineering
Seoul National University

AREAS OF EXPERIENCE

Years with Specialty Earth Sciences – 1.5
Years at Duke University – 1.3
Years at Oregon Health & Science University – 4.5
Years at University of Michigan - 6

Dr. Lee is currently serving as an Environmental Engineer for Specialty Earth Sciences, LLC's New Albany, Indiana office on a variety of environmental assessment and remediation projects.

Dr. Lee is an environmental engineer with over 14 years of research experience in the field of environmental engineering and science. He received his PhD from University of Michigan where he conducted research on mitigating greenhouse gas emissions from landfills and chlorinated solvent degradation by methane oxidizing bacterium. Since then he was a postdoctoral researcher at Duke University, Durham, NC and Oregon Health & Science University, Portland, OR where he researched management of mercury containing waste and how microbial manganese oxide formation would influence uranium remediation, respectively. Dr. Lee has recently joined SE Sciences and serves as an Environmental Engineer for soil and groundwater contamination assessment and remediation projects as well as laboratory bench testing for the evaluation of proposed remedial technologies.

PUBLICATIONS

- **Manganese oxidizing bacteria.** Conducted research on understanding metabolic activities of manganese oxidizing bacteria, and how its activities, i.e., manganese oxide formation, impact uranium remediation. Authored 7 peer-reviewed research articles and 2 book chapters. 2 manuscripts and 1 book chapter in preparation to be submitted for peer-review.

- **Methane oxidizing bacteria.** Conducted research on how methane oxidizing bacteria can be used for chlorinated solvent degradation and mitigation of greenhouse gas emissions. Also, isolated one of the first facultative methane oxidizing bacteria and was involved in the initial studies on characterizing chalkophore produced by methane oxidizing bacteria. Authored 5 peer-reviewed research articles.
- **Management of mercury containing waste.** Assessed the current state of mercury release by landfills resulting from mercury containing waste. 1 manuscript in preparation to be submitted for peer-review.
- **Selenium and arsenic transformation due to release of coal fly ash in the environment.** Was involved in investigating transformation of selenium and arsenic if coal fly ash is released into the environment. 1 manuscript submitted for peer-review.

PROJECT EXPERIENCE

- **Multi-Phase Extraction (MPE) and Soil Vapor Extraction (SVE) Pilot Testing.** Have conducted MPE and SVE pilot testing to evaluate whether MPE or SVE were effective remediation measures for the site in consideration.
- **Active Sub-slab depressurization Pilot Testing.** Performed sub-slab depressurization pilot testing to assess the site specific characteristics in designing active sub-slab depressurization system.
- **Phase II Environmental Site Assessment.** Have performed a number of Phase II ESA of sites in southern Indiana including EPA Brownfield sites.

TRAINING

40 Hour HAZWOPER