Speaker Profile

Gregory V. Lowry, Ph.D.
Professor-Civil & Environmental Engineering
Deputy Director-Center for Environmental Implications of Nanotechnology (CEINT)

Contact Details

Organization Name:
Carnegie Mellon
University

Address:
5000 Forbes Av.
119 Porter Hall

Town, State
Pittsburgh, PA

Postal Code: 15217

Country: USA

Phone: 412 268 2948
Fax: 412 268 7813
Email:
glowry@cmu.edu

Website:
www.ce.cmu.edu/~glowry

Dr. Lowry is a Professor of Civil & Environmental Engineering at Carnegie Mellon University in Pittsburgh, PA. He has a Ph.D. in Civil & Environmental Engineering from Stanford University. Dr. Lowry conducts interdisciplinary research in environmental science and engineering with an emphasis on fundamental and applied research of fate, transport, transformations, and toxicity of organic and inorganic contaminants and engineered nanomaterials in the environment. In particular he studies the effect of polymeric and NOM coatings on nanoparticle attachment behaviour and characterizes transformations of engineered nanomaterials in environmental matrices. He currently serves as Deputy Director of the NSF Center for Environmental Implications of Nanotechnology (CEINT).

After completing a post doctoral position in Geological and Environmental Science at Stanford University in 2001, Dr. Lowry joined the Civil & Environmental Engineering faculty at Carnegie Mellon. His research projects include development of reactive in situ sediment caps for remediation of PCB contaminated sediment, development and testing of polymer-modified nanoscale zerovalent iron for in situ treatment of groundwater contaminants, assessing the environmental implications of engineered nanomaterials, and understanding the fate of super critical CO_2 injected into the deep subsurface and its impact on aquifer biogeochemistry. A significant effort is underway in Dr. Lowry's laboratory to characterize the nanoscale features of adsorbed or grafted polymers and polyelectrolytes on nanoparticles, and determine how those characteristics affect the attachment of nanoparticles onto various environmental surfaces and microbial membranes.

Dr. Lowry is currently a panellist on the NRC committee to develop a Federal research strategy for nanomaterial EHS, and serves or has served on the advisory board of several NSF and NIEHS Centers related to nanotechnology and the environment. He is a member of the American Association for the Advancement of Science (AAAS), American Chemical Society, American Geophysical Union (AGU), Association of Environmental Engineering and Science Professors (AEESP), American Society of Civil Engineers (ASCE), and the Air & Waste Management Association (AWMA).

Dr. Lowry received the Steven J. Fenves Award for Systems Research in 2011, the Carnegie Science Center Award (Environmental Category) in 2010 and 2011, the ASCE Walter L. Huber Research Prize and the AEESP Malcom Pernie Frontiers in Research Award in 2009. Dr. Lowry will be a Cox Visiting Professor in Geological and Environmental Science at Stanford University for the 2011/2012 academic year to develop new X-ray spectroscopic methods for characterizing the transformations of engineered nanoparticles in environmental and biological media.