

## 2009 Symposium Speakers Bio

**Mike Hoover** is Professor of Soil Science at North Carolina State University and Extension Soils Specialist with North Carolina Cooperative Extension. Mike has his B.S., M.S. and Ph.D. degrees from Penn State University with 34 years experience in on-site wastewater. He has over 100 publications with research interests range from performance of advanced on-site wastewater systems and decentralized design for difficult soils, tracking wastewater plumes through ground water and assessing septic system nutrient loadings on a watershed scale. He is also President of The On-Site Wastewater Corporation, a private consulting company. Mike is the originator of the first hands-on, on-site wastewater-training center in the world in 1989-90. There are now about 20-25 similar centers throughout the world. Mike currently serves as Director of Land and Water, the hands-on training facility for soils, on-site wastewater and groundwater management at NCSU's Lake Wheeler Road Field Laboratory.

**Robert (Bob) A. Rubin**, Professor Emeritus and Extension Specialist, Biological and Agricultural Engineering North Carolina State University, Visiting Scientist USEPA, and Senior Environmental Scientist at McKim&Creed engineering consulting firm. Robert Rubin is water professional with expertise in drinking water, wastewater, storm water, and bio-solid management issues. He has authored several publications on water and waste management and has worked with the US EPA and state agencies on the development of rules, regulations, policies and guidelines for onsite/decentralized systems and land application of bio-solids. Dr. Rubin has conducted an active demonstration and evaluation program addressing onsite-decentralized wastewater; land application systems, solid waste management and water supply management. Dr. Rubin actively cooperates with faculty, industry, elected officials, regulatory agency personnel and citizen groups.

**Craig Goodwin** is a co-founder and General Manager of NCS Wastewater Solutions and under his leadership, NCS has installations in 26 states and Canada. Craig is being recognized nationally in his leadership role in the movement for alternatives to conventional septic/central sewer development. Craig has led NCS to become the premier design, build and management firm for small community and commercial wastewater systems. Craig has written numerous papers related to the subject of decentralized and sustainable wastewater infrastructure. Craig is a frequent speaker at environmental health educational conferences and workshops. He is known by environmental health regulators and peers across the nation for his work and sharing knowledge regarding basic wastewater and land issues to be faced when developing in areas currently without sewer.

**Anish Jantrania** is a Senior Project Manager and Technical Director at NCS Wastewater Solutions. Before joining the NCS, Anish served as Technical Services Engineer for the Virginia Department of Health in the Onsite Sewage and Water Program for over 12 years. Anish is a nationally recognized technical expert and speaker at environmental health conferences and other technical conferences such as ASAE, WEF and NOWRA. Early in his career, Anish worked for the EPA National Small Flows Clearing House and managed the first National Onsite Demonstration Project in Gloucester MA. Anish has written a comprehensive book with Mark Gross titled “Advanced Onsite Wastewater Systems Technology”. Anish has authored or co-authored many technical papers and delivered numerous presentations on the subject of decentralized/onsite wastewater systems. Anish received his B.E. in Agricultural Engineering from the Udaipur University, India, M.S. in Agricultural Engineering from the Ohio State University, Ph.D. in Agricultural Engineering from Clemson University, and M.B.A. from West Virginia University. Anish is a registered professional engineer in Virginia, Massachusetts, and West Virginia.