U.S. National Committee for Soil Sciences (USNC/SS)

Committee

Eugene F. Kelly

Chair

Dr. Gene Kelly is a Professor of Pedology, Deputy Director of the Colorado Agricultural Experiment Station and is Associate Director for Research in the School of Global Environmental Sustainability at Colorado State University (CSU). He was recently on assignment at National Ecological Observation Network (NEON) as visiting head scientist. He received his B.S. and M.S. degrees from Colorado State University and his Ph.D. from the University of California-Berkeley. Kelly conducts research and lectures nationally and internationally on various aspects of soils as related to global change issues. His scientific specialization is in Pedology and Geochemistry with primary interests in the biological weathering of soil and studies of soil degradation and global biogeochemical cycles. His current research is centered on Global Soil Degradation and fundamental role of grasslands in global biogeochemical cycles. He serves as an advisor to the United States Department of Agriculture with the National Cooperative Soil Survey, The National Science Foundation and several major research programs. He is a Fellow of the Soil Science Society of America and is the recipient of the 2016 Soil Science Society of America Research Award. A native of New York, a marathoner and triathelete, he lives in Boulder, Colorado.

Nicholas T. Basta

Member

Dr. Nicholas Basta is a Professor of Soil and Environmental Science and the Director of the Environmental Science Graduate Program with the School of Environment and Natural Resources at the Ohio State University. His research interests include risk-based soil environmental chemistry with emphasis on bioavailability, exposure, and impact to human, agronomic, and ecological receptors; soil environmental chemistry and risk associated with beneficial use of agricultural, industrial, and municipal by-products through land application; and development and evaluation of new in situ technologies used for remediation of contaminated soils. He received his Master's degree in Soil Science from Iowa State University in 1984 and received a Degree of Philosophy in Soil Chemistry with a minor in Analytical Chemistry from the same in 1989.

Samira H. Daroub

Member

Dr. Samira Daroub is a Professor of Soil and Environmental Chemistry with the Department of Soil and Water Sciences and the Everglades Research and Education Center at the University of Florida. She researches phosphorus chemistry and transformation in organic soils under flooded conditions and the use of computer simulation models to predict phosphorus availability to plants as well as in environmental applications. She received her Master's degree in soil science from the American University of Beirut, Lebanon, in 1986 and her Degree of Philosophy in Soil Chemistry from Michigan State University in 1994.

Celine Pallud

Member

Dr Celine Pallud is a Professor of Soil Biogeochemistry and Biogeophysics at the University of California, Berkeley. Her lab focuses on the analysis and prediction of transport and fate of chemical species that are of importance to the functioning, quality and remediation of soils, surface sediments and water. More specifically, their research aims at a mechanistic understanding and quantitative characterization of microbial processes and their impact on the mobility, bioavailability and distribution of nutrients, metals and contaminants. As a consequence, their research is strongly multidisciplinary, standing at the interface between soil microbiology, soil geochemistry and soil physics and explores the coupled geochemical, biological and transport processes in soils and surface sediments. Our approach combines (i) field measurements, (ii) laboratory experiments that focus on the mechanisms, kinetics and equilibrium states of individual biogeochemical processes, and (iii) reactive transport modeling that ultimately allows predicting the response of a natural system to changing conditions.

Abbey Wick

Member

As a Soil Health Academy Group Leader with Syngenta Group, Dr. Abbey Wick develops global soil health programs for internal upskilling and external facing resources. She received her PhD in 2007 from University of Wyoming and was research faculty at Virginia Tech from 2008 to 2012. She has extensive experience in working with landowners and industry on issues ranging from soil nutrient cycling and physical limitations of soils on crop production to best management practices for reclaiming mined lands. She has a diverse research and outreach background in both mineland reclamation and agriculture. She is scientifically trained in soil aggregation, organic matter dynamics, microbial ecology and soluble salt management, and she is practically trained in reducing tillage and incorporating crop crops in rotation. She is self-trained in listening, compiling ideas and making connections resulting in high impact actions.

Aaron Daigh

Ex Officio Member

Dr. Aaron Daigh is an Associate Professor of Vadose Zone Science in the Departments of Agronomy & Horticulture and Biological Systems Engineering at University of Nebraska – Lincoln and a Courtesy Associate Professor at the University of Nebraska Medical Center. He serves as the 90th elected President for the Soil Science Society of America. Dr. Daigh is trained as a vadose zone hydrologist and soil physicist with research interests in the transfer of energy and matter in natural porous media, sources of spatial and temporal variability, and terrestrial contamination, remediation, reclamation, and restoration. Dr. Daigh currently directs research on vadose zone water quality overlying major aquifers using a spectrum of basic fundamental science to systems engineering.

Cristine L. Morgan

Ex Officio Member

Dr. Cristine Morgan is the Chief Scientific Officer of the Soil Health Institue. She is responsible for establishing research priorities to advance soil health and developing the scientific direction, strategy and implementation for soil health research programs. Her duties include leading scientific research that advances soil health science and results in impactful outcomes. Prior to joining the Institute, Morgan was a tenured professor of Soil Science at Texas A&M University in College Station, Texas, where she was recognized for outstanding collaboration, teaching, research, and mentoring. Her emphasis was in soil hydrology, pedometrics, and global soil security. Among her many accomplishments, Morgan conducted ground-breaking research on how management practices influence soil-plant-water relations. She also developed methods that were adopted by the U.S. Department of Agriculture for easily measuring soil carbon. She has a history of applying her knowledge to address real-world problems experienced by farmers and ranchers and is passionate about educating others. Morgan is a Fellow of the Soil Science Society of America, she served as a member of the Soil Science Society of America board of directors, and currently serves on the board of the North American Plant Phenotyping Network. Morgan is an editor-in-chief at the global soil science journal, Geoderma, and founding editor-in-chief of the journal Soil Security. Morgan earned her M.S. and Ph.D. in Soil Science from the University of Wisconsin-Madison, Soil Science Department (2000 and 2003, respectively). Her B.S. degree is in Plant and Environmental Soil Sciences from Texas A&M University, magna cum laude (1998).