



Rabi H. Mohtar, PE

Rabi H. Mohtar, PE, ASABE Fellow, is the recipient of the 2022 ADS/Hancor Soil and Water Engineering award for providing exceptional leadership toward achieving food and water security through science, policy, water-energy-food nexus analytic tools, and multi-scale hydrologic processes.

Mohtar is a professor in the Department of Biological and Agricultural Engineering and the Zachry Department of Civil and Environmental Engineering at Texas A&M University. He teaches courses and conducts research in the water-energy-food (WEF) nexus and its policy implications. He is a faculty affiliate in the Water Management and Hydrologic Sciences program and at the Texas A&M Energy Institute. He is also director of the WEF Nexus Research Group.

Mohtar has made key career contributions in modeling water and land use systems and has developed a global perspective on the challenges of the water/food relationship. Mohtar is an expert in the theory of hydro-structural pedology. He leads a pedostructure lab, which characterizes soil hydrostructural properties using continuous and simultaneous measurements of soil shrinkage/swelling, water potential, and hydraulic conductivity.

Mohtar has also developed modeling platforms to evaluate environmental impacts of land use and water management. Mohtar co-developed Kamel[®], the porous media characterization and modeling platform adopted by SEAMLESS (System for Environmental and Agricultural Modeling: Linking European Science and Society). He also co-developed the WEF Nexus Tool, a scenario based analytical tool for assessment and integration of scientific

and policy inputs for wide range of users including funding agencies, academics, technology providers, and entrepreneurs.

A 29-year member of ASABE, Mohtar has served on a number of ASABE committees including the Natural Resources and Environmental Sciences Hydrology Group and the Applied Science Engineering for Sustainability committee. Mohtar is also a member of the American Chemical Society, the International Water Resources Association, the World Water Council, and the Sustainable Water Future Programme.

Mohtar is author or coauthor of more than 180 peer-reviewed articles, book chapters, policy briefs, and other publications. Mohtar has also coauthored 9 books. Throughout his career, Mohtar has received a number of awards. Most recently, he received the PRIMA WEF Nexus award and was honored at the American Chemical Society Division of Environmental Chemistry Symposium. He received the 2010 Kishida International award and was inducted as an ASABE Fellow in 2018.

