

RICE UNIVERSITY

China–U.S. Center for Environmental Remediation and Sustainable Development



Mason B. Tomson

Co-Director of China-US Center for Environmental Remediation and Sustainable Development, Professor of Civil and Environmental Engineering of Rice University

Tomson holds a BS degree in chemistry and mathematics and a Ph.D. in chemistry. He researches organic and inorganic chemical fate and transport, with emphasis on aquatic processes. He has authored or coauthored more than 150 articles in such journals as Science, Journal of the American Chemical Society, Environmental Science and Technology, and Oil and Gas Journal. His research team was among the first to prove ground water could be readily contaminated by organic chemicals from the surface. The team then demonstrated the concepts of facilitated (enhanced) transport and irreversible (resistant) desorption of chemicals from soils and sediments. These concepts have since been applied to fullerene and activated carbon nanoparticles. Tomson directs four research projects, two from NSF on nanotechnology, one form EPA on heavy metals in sediments, and a Brine Chemistry Consortium of thirteen oil and gas production and service companies.



Wei Chen

Co-Director of China-US Center for Environmental Remediation and Sustainable Development, Professor of Nankai University

Wei Chen is a Distinguished Professor of Environmental Science and Engineering at Nankai University in Tianjin, China, and is the director of the Tianjin Key Laboratory of Environmental Remediation and Pollution Control. Chen received a B.S. degree in environmental chemistry from Nankai University and M.S. and Ph.D. degrees in environmental science and engineering from Rice. Chen teaches soil and groundwater remediation and environmental pollution chemistry. His research focuses are non-ideal desorption, bioavailability and reactivity of organic contaminants in soil and sediment, and remediation of contaminated soil, groundwater and sediment. Chen is principal investigator of three research projects funded by the National Science Foundation of China, and four research projects funded by the Ministry of Education and Tianjin Municipal Science and Technology Commission.



Amy T. Kan

Co-Director of China-US Center for Environmental Remediation and Sustainable Development, Rice University

Amy T. Kan graduated with a Ph.D. in food chemistry from Cornell University. She joined the Civil and Environmental Engineering Department as a research scientist in 1985. Her research focus has been in organic and inorganic chemical fate and transport in water, the application and implication of nanoparticles in the environment and oil field scale control, prediction and treatment. With Tomson she developed and demonstrated the concepts of facilitated transport and of irreversible (resistant) desorption of chemicals from soils, sediments and oilfield formation rock. She studied the thermodynamic solubility of mineral salts in organic solvent-salt-water system, which was used extensively in prediction of scale formation in offshore deepwater flow assurance projects. She holds two U.S. patents and has authored or coauthored more than 85 articles. Kan is co-director of the Brine Chemistry Consortium, an industrial collaboration of 13 oil and gas and service companies.