

The Department of Civil and Environmental Engineering at the University of Houston presents...

CIVE 6111 Graduate Seminar

Sociohydrology: "Imagineering" Not Just Engineering Needed to Solve Water Security Challenges



Dr. Murugesu Sivapalan

Chester and Helen Siess Endowed Professor in Civil and Environmental Engineering
Professor of Geography and Geographic Information Science
University of Illinois, Urbana-Champaign

Friday, January 17, 2020

2:45pm-3:45pm

Classroom Business Building (CBB) – Room 106

Abstract

Many parts of the world are facing severe water crises. Historically engineers and domain experts are tasked with design and implementation of technological solutions to water problems, such as the building of dams, pipelines and desalination plants. These work well in the short term, but non-involvement of the beneficiaries of the water works, the people themselves, in conceptualization and execution of otherwise well-intentioned and well-designed solutions often leads to unintended, even adverse, consequences due to issues not considered in the designs and due to non-acceptance by society. I will illustrate this through examples of water management problems in Sri Lanka, Australia, USA, China, Europe, which prompted the launch and growth of the field of sociohydrology. I will put these in the context of UN Sustainable Development Goals related to water, which provide renewed motivation for engineers, social scientists and humanists to come together and work towards developing imaginative solutions for many water security challenges faced by communities around the world.

Bio

Murugesu (Siva) Sivapalan is Chester and Helen Siess Endowed Professor of Civil and Environmental Engineering and Professor of Geography and Geographic Information Science, at the University of Illinois, Urbana-Champaign. He holds a B.S. in Civil Engineering (University of Ceylon, 1975), M.Eng in Water Resources Engineering (Asian Institute of Technology, Thailand, 1977), and M.A. (1983) and Ph.D (1986) in Civil Engineering, with a major in hydrology, from Princeton University. Between 1978 and 1981, Siva worked as a consulting civil engineer in Nigeria, West Africa. Later, during the period 1986-1988 he served as a Post-Doctoral Research Associate at Princeton University. He spent the next 17 years at the Centre for Water Research, The University of Western Australia (UWA), joining as a Lecturer in 1988, and becoming full Professor in 1999. He joined the University of Illinois in 2005. At UWA and at the University of Illinois Siva has taught undergraduate and graduate courses in watershed hydrology, engineering hydrology and stochastic hydrology. Since 2015 Dr Sivapalan has held the position of Chester and Helen Siess Endowed Professor of Civil and Environmental Engineering at the University of Illinois. Siva has also served as Visiting Professor at the Vienna University of Technology (1995), Delft University of Technology (2001, 2008-2010) and Tsinghua University, China (2012), and as Distinguished Visiting Professor at the University of Technology Sydney, Australia (2011). During 2015 he served brief stints as a Distinguished Visiting Fellow at the Peter Wall Institute, University of British Columbia, Canada, and as the President's International Visiting Fellow (PIFI) at the Chinese Academy of Sciences. He currently holds a continuing appointment as Distinguished Visiting Professor at Tsinghua University, China.