



**The DFG Research Training Group on Urban Water Interfaces (UWI) invites
to a guest lecture by**

**Professor Joseph Hun-wei LEE
The Hong Kong University of Science and Technology
(HKUST)**

Monday, 18th September 2017, 11:00 am, TU Berlin, TIB-area, room 566

**Lecture title: *The Hong Kong Harbour Area Treatment Scheme (HATS)
and Coastal Water Quality Management***

Abstract

For a city with 733km of coastline, an internationally famous harbour and 262 islands, water quality is extremely important and is a key facet of public health policy. The Hong Kong Harbour Area Treatment Scheme (HATS) is a sewage collection and treatment scheme that serves a population of around 3 million in the urban areas of Hong Kong. The sewage receives Chemically Enhanced Primary Treatment (CEPT) and chlorine disinfection at the Stonecutters Island Sewage Treatment Works (SCISTW). The treated effluent (1.8 million m³/d) is discharged via a submarine outfall diffuser into the adjacent Victoria Harbour. The SCISTW is the largest treatment plant of its kind in the world.

This talk gives an overview of HATS and the development of WATERMAN - a real-time, beach water-quality forecast system which gives daily forecasts for 16 representative beaches in Hong Kong. Recent research on in-situ full scale field experiments (performed with prototype sewage and chlorine inside the treatment works) and mathematical modeling related to the optimization of chlorine disinfection dosages will also be presented.

About the speaker

Professor Lee is Elman Family Professor of Engineering and Public Policy and Chair Professor of Civil and Environmental Engineering at HKUST. He is the Chief Editor of the Journal of Hydro-environment Research and past Vice-President and Honorary Member of the International Association for Hydro-environment Engineering and Research (IAHR). He was the first Asia-based academic to receive the American Society of Civil Engineers Hunter Rouse Hydraulic Engineering Award (2009) and has received numerous other awards including the Croucher Senior Research Fellowship (1998) and the 2010 China State Scientific and Technological Progress Award. He is a Fellow of the Royal Academy of Engineering of the UK, and the Hong Kong Academy of Engineering Sciences.

Prof Lee has served on many international advisory bodies and as an independent expert on numerous hydro-environmental projects, including the Commission of Inquiry into Excess Lead Found in Drinking Water (2015) in Hong Kong. Prof Lee has served as Pro-Vice-Chancellor and Vice-President (Staffing) at the University of Hong Kong (2004-2010) and Vice-President for Research at HKUST (2010-2016).