

DLYTECHNIC UNIVERSITY RISUD Distinguished Lecture

Organized by:



Safety and Longevity of Marine Structures

Co-organized by:



by

Prof. Dan M. FRANGOPOL

The Fazlur Rahman Khan Endowed Chair of Structural Engineering and Architecture Professor of Civil Engineering Department of Civil and Environmental Engineering Lehigh University, USA



Time: 6:00p.m.-7:00p.m.

Tea reception: 5:30p.m.

Nov

2018

Venue: Room Y305, 3/F, Lee Shau Kee Building (Block Y),

The Hong Kong Polytechnic University (Campus map)

Medium: English

Registration: https://polyu.hk/dEpBv

(Registration deadline: 8 November 2018)

Certificate: Attendance certificate will be issued to registered

participants only

Enquiry: jan.lien@polyu.edu.hk / 3400 8525

Abstract

The main objective of this lecture is to present a comprehensive framework for evaluation of safety and longevity of marine structures. The proposed framework integrates inspections, time-variant system performance, maintenance, probabilistic consequences, and optimum-informed decision making. Comments revolving around the emerging life-cycle management methodologies including adaptive risk-based inspection planning, consideration of lifetime extension in life-cycle management, and incorporation of noneconomic factors in decision-making are provided. The lecture will highlight challenges and future directions for improving structural safety and increase the longevity of marine structures.

Speaker's biography

Dr. Dan Frangopol is the inaugural holder of the Fazlur R. Khan Endowed Chair of Structural Engineering and Architecture at Lehigh University. He is recognized as a leader in the field of life-cycle engineering of civil and marine structures. His main research interests are in the application of probabilistic concepts and methods to civil and marine engineering including structural reliability, probability-based design and optimization of buildings, bridges and naval ships, structural health monitoring, life-cycle performance maintenance, management and cost structural systems under uncertainty, risk-based assessment and decision-making, infrastructure sustainability and resilience to disasters. Dr. Frangopol is the Founding President of the International Associations for Bridge Maintenance and Safety (IABMAS) and Life-Cycle Civil Engineering (IALCCE). He has authored/co-authored 3 books and over 370 articles in archival journals including 9 award-winning papers. He is the Founding Editor of Structure and Infrastructure Engineering. Dr. Frangopol is the recipient of several medals, awards, and prizes, from ASCE, IABSE, IASSAR, and other professional organizations, such as the OPAL Award, the Newmark Medal, the Alfredo Ang Award, the T.Y. Lin Medal, the F. R. Khan Medal, and the Croes Medal (twice), to name a few. He holds 4 honorary doctorates and 12 honorary professorships from major universities. He is a foreign member of the Academia Europaea (Academy of Europe, London) and the Royal Academy of Belgium, an Honorary Member of the Romanian Academy, and a Distinguished Member of ASCE.