

DEPARTMENT OF CIVIL ENGINEERING

SEMINAR

The European Experience on the Quality Control of Bridges Outcomes from COST Action TU1406

Professor Jose Campos e Matos Minho University, Portugal

Date: July 18, 2019 (Thursday) Time: 11:00 a.m. - 12:00 noon

Venue: Room 612B, 6/F Haking Wong Building

The University of Hong Kong

Abstract

During this lecture, some important novel studies related to bridge quality control and management will be discussed. In the first part, the bridge assessment including performance indicators and assessment techniques will be covered. An emphasis will be made to the outcomes from the COST Action TU 1406 (www.tu1406.eu). Then, approaches of applying these indicators to the management of existing bridge stock will be introduced. The major part will be assessment of performance prediction models and how maintainability could be integrated for the life-cycle cost analysis. At the end, the difference between the management of a single bridge and a network of bridges, optimization models and decision-support algorithms will be discussed. The application will be exemplified by the research and development project "Sustainable Infrastructure Management Systems (SustIMS)". The main objective is to show the operators about the standardization of this procedure, and contribution of these frameworks for a more sustainable and efficient management of their bridge stock.

About the Speaker

Professor Matos received the B.Eng. Degree and the M.S. Degree in civil engineering in 2002 and 2008, respectively. He obtained his Ph.D. Degree in civil engineering in 2013 in the field of probabilistic-based safety assessment of existing structures. His teaching activities, as well as the supervision of MSc and PhD thesis, started from 2007 at School of Engineering of University of Minho. He has been a member of ISISE – Institute for Sustainability and Innovation in Structural Engineering since 2007. His research interests include asset management systems, life-cycle costs (LCC), safety assessment, risk evaluation and sustainability. Prof. Jose has become author or co-author of more than 75 publications in international conferences and journals, as well as participates in several international committees and international working groups. He also served as coordinator, among others, for the research project Sustainable Infrastructure Management System (SustIMS, Portugal 2020) and the project SAFEWAY – GIS_Based Infrastructure Management System for Optimized Response to Extreme Events on Terrestrial Transport Networks (Horizonte 2020), as well as the Action COST TU 1406 – Quality specifications for roadway bridges, standardization at a European level (BridgeSpec).

- ALL ARE WELCOME -

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