



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學



DEPARTMENT OF
CIVIL AND ENVIRONMENTAL ENGINEERING
土木及環境工程學系



Hong Kong Concrete Institute
香港混凝土學會



Research on Corrosion and Its Prevention of Marine Infrastructure (海洋工程腐蝕與防護材料研究)

Prof. Weihua LI (李偉華教授)

Institute of Oceanology, Chinese Academy of Sciences
(中國科學院海洋研究所)

ABSTRACT

The exploitation and utilization of marine resources play a pivotal role in the national economy and people's livelihood. Marine environment is the most severe corrosive one. Marine corrosion will not only reduce the service life of ocean engineering structure, but also increase the post-maintenance costs. If an effective corrosion control technology is taken, 25-40% of the economic losses will be avoided. This lecture will focus on the mechanisms of marine corrosion and introduce the research results and application examples of the anti-corrosion and surface coating technologies for reinforced concrete structures, steel pipelines etc. subjected to corrosive marine environments.

海洋資源的開發與利用，關係著國計民生。海洋環境是最為嚴酷的腐蝕環境。海洋腐蝕不僅會減少海洋工程結構的服役壽命，而且增加後期的維護費用。如果採取有效的腐蝕控制技術，其中 25-40% 的損失可以避免。本講座將闡述海洋腐蝕的危害，並介紹了表面塗層及其它防腐蝕技術的研究成果與在海洋鋼筋混凝土結構及管道結構等方面的應用實例。

Date: 10 June 2016 (Friday)

Time: 6:00 p.m. – 7:00 p.m.

Venue: Room Y305, 3/F, Block Y, The
Hong Kong Polytechnic
University, Hung Hom, Kowloon

SPEAKER'S BIOGRAPHY

Dr Li is a recipient of the National Science Fund for Distinguished Young Scholars. She serves as the Secretary-General of International Coating Technology Innovation Association, Deputy Director of the Protection and Repair Materials and Application Technology of Special Committee-Architectural Society of China, Deputy Director of Special Committee of Nonmetal Materials-Chinese Society for Corrosion and Protection. She is an Adjunct Professor of Tongji University.

Dr Li's research interests cover the corrosion mechanism of green protective materials and their application in marine engineering, and she has made multiple breakthroughs in the research and applications of anti-corrosion materials. She has published 5 monographs, 87 SCI papers and 51 EI papers with a total number of citations exceeding 1000. Aside from this, she has released 10 provincial or ministerial standards and authorized 26 national invention patents.

For her contributions in the field of corrosion and protection, Dr Li has been granted 7 Provincial Science and Technology Awards as the first completed person. She has won many prestigious awards such as the "New Century Women's Inventor", "Outstanding Female Scientists of Chinese Academy of Sciences".

*** All Interested Are Welcome ***

For further information, please contact Dr Jian-Guo Dai at Tel. 27666026

Free Admission. Please reserve your seat with Mr. Hossain by email: Mohammad.hossain@connect.polyu.hk
Certificates of attendance will be provided to participants if they attend the whole lecture.