



皇家造船師學會暨輪機工程及海事科技學會  
香港聯合分會

The Hong Kong Joint Branch of  
The Royal Institution of Naval Architects  
and the Institute of Marine Engineering, Science and Technology

郵寄地址：香港郵政總局郵箱 2516 號 電郵：ben.lau@lr.org  
Postal Address: G.P.O. Box 2516, Central, Hong Kong. Email: [ben.lau@lr.org](mailto:ben.lau@lr.org)



香港海事科技學會  
THE HONG KONG INSTITUTE OF  
MARINE TECHNOLOGY



## Hong Kong Institution of Engineers

Mechanical, Marine, Naval Architecture and Chemical Division

**\*\* Notice of Joint Seminar\*\***

### **Power Management Design Details and Building of Lithium-ion (Li) Power Battery Hybrid Powered Boat with Solar and Wind Energy Contributions**

**Synopsis:** *The presentation shares the experience in the design and trial of a hybrid powered boat using low resistant hull form, light weight structure material, high efficiency propelling, high performance light weight Li-Fe battery system assisted with solar panel and wind sail / turbine as propulsion power. The vessel was equipped with a Double Mode hybrid propelling system. A diesel generator set was installed to provide enough power in busy harbor waterway. Based on the vessel's resistant curve, the Power Management System was designed to monitor the battery energy level and to control the solar panel to optimize their efficiencies. A large electronic display was provided onboard to show the real time shipboard power management system data with animation to the passengers for education purpose.*

**Speaker: Dr. Wang Beitian, D.Phil. (University of Oxford), Surveyor of Ships, Marine Department, HKSAR Government.**

*Dr. Wang served as Assistant Engineer at the Ningbo Harbour Authority and Lecturer of the Harbin Shipbuilding Engineering University. He later worked at HUD, CNCO and HKST as Projects Manager and with GMT Shipping Ltd as Project Director and Naval Architect. Before joining the Marine Department, Dr. Wang was the Technical Director, Wuxi Dong Fang High Performance Vessel Ltd, China Ship Research Center.*

**Date:** 25 October 2011 (Tuesday)  
**Venue:** Room No. DE 308, Hong Kong Polytechnic University, Hunghom, Kowloon  
**Time:** 6:30 p.m. to 8:00 p.m. (Tea /Coffee with snacks from 6.00p.m.)

**Registration & Enquiries :**

*In order to encourage exchange of ideas, Q&A sessions will be available, and you are welcome bring up queries, comments, etc. This seminar is free of charge and prior registration is required on first-come-first-served basis. On-line registration via HKIE-MMNC website at <http://mc.hkie.org.hk/> is available or by return of the following slip. CPD certificates will be available on request. For enquiries, please contact Ir YM CHENG by email at [yimingcheng@gmail.com](mailto:yimingcheng@gmail.com).*

---

**Registration / Reply Form**

( Email: [yimingcheng@gmail.com](mailto:yimingcheng@gmail.com), or Fax: 2542 4841)

Please reserve one seat for me to attend the Seminar event on **25 October 2011 (Tuesday)**

Name : \_\_\_\_\_

Membership No.: (HKIE / HKIMT / IMarEST / RINA ) \_\_\_\_\_ Others (please specify) \_\_\_\_\_

Signature: \_\_\_\_\_ Tel : \_\_\_\_\_ Fax : \_\_\_\_\_

Email : \_\_\_\_\_ Company Name: \_\_\_\_\_

Date: \_\_\_\_\_