

# 海象觀測即時監測預警系統

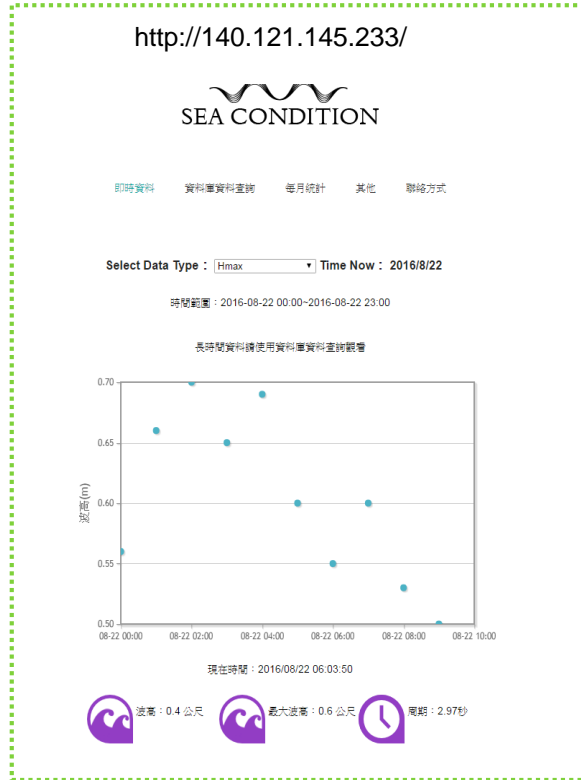
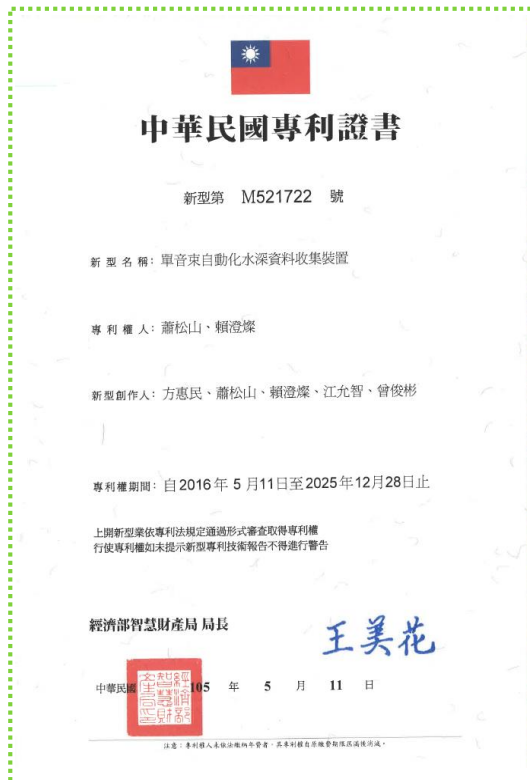
執行單位

慈濟大學

計畫主持人

江允智

- 計畫主要技術包括：本土化區域型正規化波譜、自主開發超音波泥沙濃度計、海象環境資料監測、海事工程可施工條件監測預警。
- 計畫將持續發展基礎淘刷預警系統



- 本計畫與上緯新能源公司共同推動風海觀測塔海象觀測技術發展及觀測站建置，達成符合國際離岸風電開發海象觀測規範之需求，並將觀測成果相關海域環境資訊建置即時監測系統提供相關資訊與本海域相關單位組織如漁會、縣政府、經濟部水利署第二河川局、示範風場工程規劃設計單位及海事工程施工單位，作為海象觀測技術發展中知識服務的示範。此外本計劃更以即時監測系統為基礎，利用觀測資料分析及發展數值模式以平常與極端海象條件進行預測，將可能造成風場營運及對週遭環境的影響與衝擊指標因子予以識別並量化預警值與行動值，完成自動化的預警系統。第三年則以完善系統資訊化界面、監測預警系統運作問題與應用於風場運維回饋、技術文件與操作手冊、及教育訓練等。期能建立完整海象即時監測與預警系統，及技術手冊與教育訓練等，透過產業界與學術界研發合作，共同提升國內離岸風場運維能力及國內相關海象觀測產業發展等願景。

# Technology Development of Oceanographic observation, Real-time Monitoring and Early Warning System

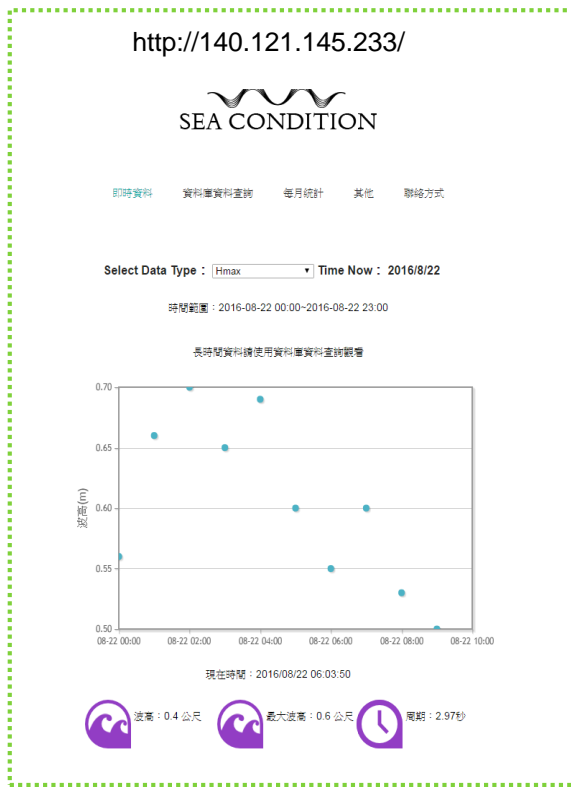
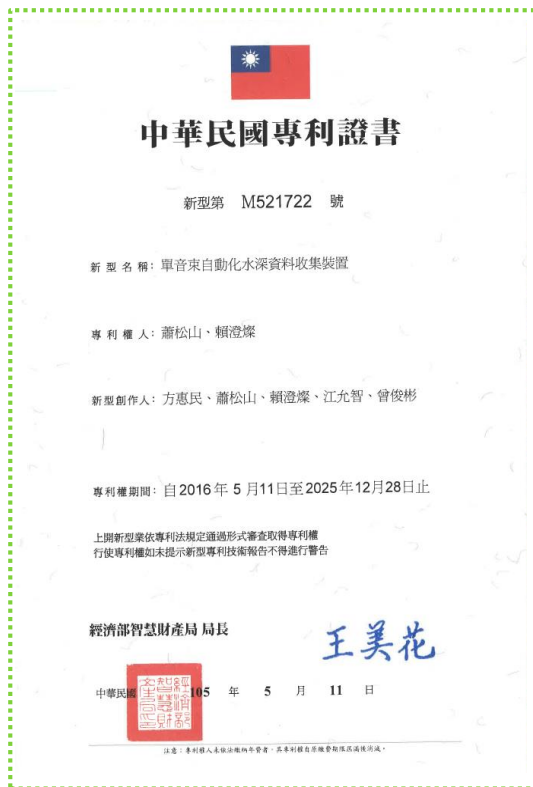
Execution Unit

Tzu Chi University

Project Director

Yun-Chih Chiang

- This project can improve the offshore oceanographic observation and the application of monitoring and early warning system technology. It could promote the development of offshore renewable energy industry in Taiwan.



- This Industry-university collaboration project will perform by three years including four items of key technology as follows: first is established the station and technology of oceanographic observation; second is the model of hydrodynamics, sediment transports and morphodynamics during operation service of offshore wind farm in normal/extreme marine condition; third is the development of the equipments and technology for the observation of suspended sediments; fourth is the development of the remote real-time monitoring and early warning system.
- This project could collaborate between university institution and industry to promote, to improve and to engage in the research and development of the planning, operation and maintenance capacity for offshore wind farm.