



## Beaufort Undergraduate Internship Programme 2011

### PROJECT NO. 2

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**Supervisor:** Prof. Fiona Regan

**Project Title:** The development of transparent antifouling- antifogging-antiglare "self cleaning" materials for application in the marine environment

**Duration of Project**

**From:** 11 June 2012

**To:** 14 September 2011

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#### **Project Description:**

Instrumentation exposed to the marine environment often undergoes a loss of efficiency within hours of being deployed. In this project the development of transparent, self-cleaning coatings are required for application to items that require an optical protection. Photovoltaic panels are one of the many items that require this protection – especially when deployed for long periods of time. Up to 40% of their efficiency is compromised by dust and dirt among other matter such as bird droppings.

In this project we propose the development and characterisation of novel materials for application to optical instrumentation on marine based platforms.