

UWA Industry-Focused Offshore Engineering PhDs in Wave-Structure Interaction

We are seeking highly capable and self-motivated PhD candidates for two PhD projects in wave-structure interaction (see right). These projects will be undertaken within The Industrial Transformation Research Hub for Offshore Floating Facilities (OFFshoreHub: see <http://offshorehub.edu.au/> for further information and other opportunities).

The OffshoreHub is partnered with Shell, Woodside, Bureau Veritas and Lloyds Register who will provide additional training and access to their proprietary technology and data in order to add industry know how and practical relevance to your research.

To be eligible for the PhD positions you should have a strong first degree that included courses on hydrodynamics, fluid mechanics and preferably offshore/ocean engineering. You should be looking to complete your PhD degree on a topic with strong relevance to industry, starting your study early 2018.

Applicants are expected to be eligible for a UWA scholarship, e.g. an International Research Training Program (non-Australians) or Research Training Program (Australians) scholarship (see <http://www.scholarships.uwa.edu.au/> for more information), although this requirement may be waived in exceptional cases. For those applicants who secure a UWA scholarship, top-up funding is available which brings the total tax free stipend to AUD\$35,500.

Further information: Prospective PhD candidates may contact Dr Hugh Wolgamot (Project 1) at hugh.wolgamot@uwa.edu.au, Dr Ian Milne (Project 2) at ian.milne@uwa.edu.au for additional information on the research projects.

To apply: Please send your application including resume, full academic transcripts, details of any papers you have authored and the results of any English test you have sat within the last 2 years (such as IELTS or TOEFL – not needed for Australian citizens) to admin-cofs@uwa.edu.au.



Project 1: Greenwater loading on topside structures for FPSOs – This project will use numerical and experimental modelling to investigate the structural loads that result from greenwater (i.e. water shipped onto a vessel) in large ocean waves. The project outcomes will be (i) an improved understanding of greenwater-structure interaction, and (ii) better guidance on impact loading to be used in the assessment of greenwater loads on topside structures.

Project 2: Roll damping of Floating Liquefied Natural Gas (LNG) carriers during side-by-side offloading – This project will use experimental modelling and computational fluid dynamics to investigate the roll response of Floating LNG (FLNG) carriers during side-by-side offloading. The project will aim to model accurately all aspects of roll damping behaviour so as to improve engineering models to estimate offloading operability. The outputs will be compared with full scale field data.

Shell's Prelude FLNG facility located offshore Australia will be one of the world's first deployments of FLNG technology

