









UWA Industry-Focused Offshore Engineering PhDs

PhD research opportunity

The Industrial Transformation Research Hub for Offshore Floating Facilities (OFFshoreHub) is sponsoring PhD research at UWA on topics related to metocean, floating offshore structures, the behaviour of mooring systems and risers, subsea foundations and anchors, and facility longevity. Further information on the structure, themes and aims of the Research Hub are outlined in the attached brochure.

We are seeking highly capable and self-motivated PhD candidates to join our research team. You should have a strong first degree that included courses on hydrodynamics, offshore/ocean engineering, geotechnical engineering or topics related to data analytics and asset management. You should be looking to complete a PhD degree on a topic with strong relevance to industry, starting your study in late 2016 or early 2017.

You will be working with a world-class team of UWA researchers in close collaboration with our industry partners. Your research will relate to novel engineering technology associated with offshore floating facilities. 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.





Applicants must be eligible for an IPRS (non-Australians) or APA (Australians) fee scholarship (http://www.scholarships.uwa.edu.au/). For those applicants who secure a scholarship, top-up funding is available which brings the total tax free stipend to AUD\$35,500.

UWA research environment and support

You will work in UWA's Faculty of Engineering and Mathematical Sciences, which has world-leading strength in offshore engineering. We are a large team of collaborating academics working on metocean, hydrodynamics, structures, management. geotechnics, and asset Mentoring, training and support are provided by our staff and the large cohort of postgraduate students, and our PhD graduates are in high demand for academic and industrybased careers. PhD candidates will also be given the opportunity to be mentored by a staff member from one or more of the industry partner organisations.

More information on the OFFshore Hub can be found on our website: www.offshorehub.edu.au and available PhD topics are listed under: www.offshorehub.edu.au/get-involved/opportunities/.

Further information: prospective PhD candidates should contact Professor David White at david.white@uwa.edu.au or Dr Andrew Grime at andrew.grime@uwa.edu.au as early as possible for additional information on potential research topics.

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 by the 19th August (non-Australians) or by the 30th September (Australians). We will assess your application to see if you would be suitable to apply for a UWA scholarship.

UWA Application deadline: 31 August 2016 for the next IPRS fees scholarship round (non-Australians)
UWA Application deadline: 31 October 2016 for the next APA fees scholarship round (Australians)

The ARC Industrial Transformation Research Hub for Offshore Floating Facilities at UWA









FLNG vessel

Experimental testing of FLNG side by side off-loading

About

The Industrial Transformation
Research Hub for Offshore
Floating Facilities (ITRH) is a multidisciplinary research group jointly
funded by Australian and
international industry and the
Australian Research Council (ARC).
The ITRH will tackle critical
engineering challenges for the
next generation of offshore oil and
gas projects by creating novel
designs, new technologies and
new operating procedures in a
collaborative manner.

Research

The ITRH involves 5 interlinked multi-disciplinary projects that will develop new technologies required for the design of safe and efficient offshore projects in the areas of ocean forecasting, riser



Centrifuge testing of Subsea Equipment

and mooring longevity, vessel motion and offloading, and novel anchoring and subsea foundations. The research program involves a blend of physical and numerical modelling supported by fieldwork and analysis of observations from existing facilities.

Structure

The ITRH is led by Professor David White and managed by Dr Andrew Grime who work with a team of 20 academic staff principally based in the Indian Ocean Marine Research Centre at UWA. This team bring a wealth of technical experience to the activities of the ITRH, and are integrated with the larger ocean science and engineering community at UWA.

Industry Partners

The ITRH industry partners are Shell, Woodside Energy, Bureau

Deployment of bottom boundary layer sensor array



Veritas and Lloyds Register. Each partner organization is committed to help shape the research directions, drive the technology transfer, and assist with the mentorship of the researchers and students.

UWA: world-leading facilities

UWA's offshore engineering research is underpinned by world-leading facilities for modelling offshore systems, including Australia's National Geotechnical Centrifuge Facility, and three O-tube cyclone simulation flumes – which are uniquely capable of reproducing extreme metocean conditions at the seabed, for example to study pipeline and foundation stability. UWA also has leading technologies for numerical modelling of geotechnical and hydrodynamic systems.



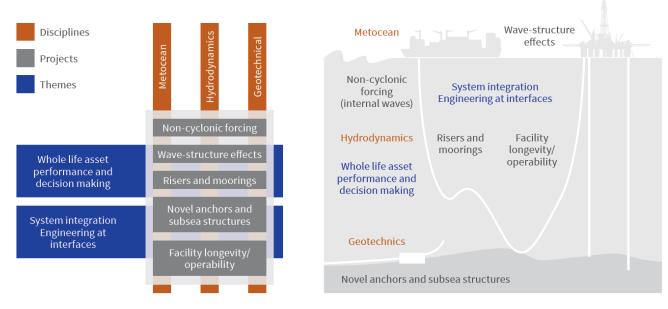




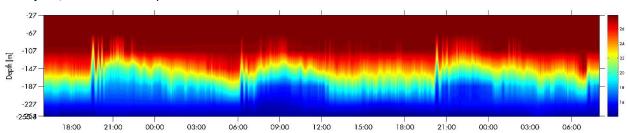








ITRH OFF Projects, themes and disciplines



Time-varying density above seabed

Capabilities

The ITRH is hosted at UWA by the Centre for Offshore Foundation Systems (COFS) and the School of Civil, Environmental and Mining Engineering (SCEME).

The ITRH is expanding the existing facilities at COFS and SCEME in order to deliver successful outcomes for the wide-ranging research program. These facilities include the National Geotechnical Centrifuge Facility (NGCF), UWA's unique O-tube flume facilities, the ocean data collection and analysis equipment as well as a new collaboration space at UWA – the Woodside FutureLab OceanWorks.

Track record

The Faculty of Engineering, Computing and Mathematics (ECM) at UWA has a long track record of distinction in research, and in serving the needs of the local and international community. ECM provides a research environment that breeds excellence and fosters ingenuity, with impact to change the world.

The ITRH will draw upon this track record in order to deliver transformational outcomes that meet the future needs of industry.

Contact

Professor David White Hub Director david.white@uwa.edu.au

Dr Andrew Grime
Hub Manager
andrew.grime@uwa.edu.au















"The Hub provides resources and industry partnerships that will allow us to make new research contributions that serve vital industry needs."

Mike Efthymiou, Shell EMI Professor of Offshore Structures



