

OSIGp Selections of OTC 2017

Report on OSIGp Evening Event
The University of Western Australia, 22 June 2017

By Michael Cocjin, OSIGp Committee Member

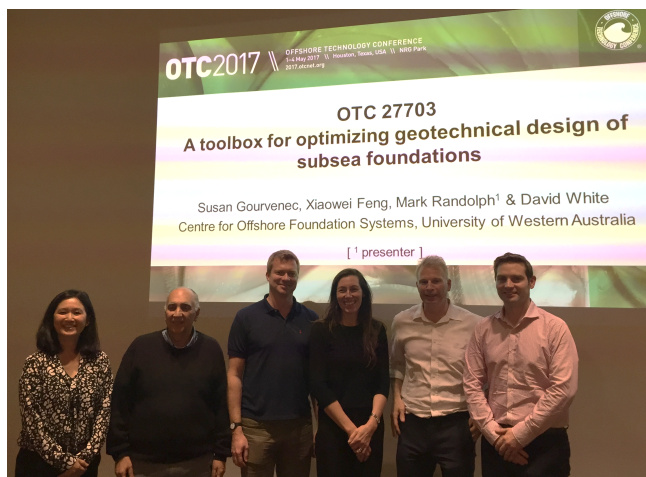


Photo: OSIGp Selections of OTC 2017 presenters: Noel Boylan, Fraser Bransby, Susan Gourvenec, David White, and Ehsan Heshmati with OSIGp Chair Fiona Chow (right to left)

Not even the gusty late-afternoon rains typical of Perth winter could forestall a great turn out to this year's "OSIGp Selections of OTC" last June 22. At 5:30 PM, more than 70 damp umbrellas lined up outside the Indian Ocean Marine Research Centre (IOMRC) auditorium at the University of Western Australia (UWA). Inside, a diverse mix of industry practitioners, students and academics was welcomed to an early evening snacks provided by Subcon, this year's sponsor.

Since it was NAIDOC week, the technical program was officially opened by OSIGp Committee Chair Fiona Chow with an "Acknowledgment of Country" that examined the ancient Aboriginal culture through the perspective of geological history.

This year, four papers from OTC Houston were selected by the Committee and were presented for 15 minutes each, followed by 5 minutes Q & A.

David White from UWA opened the technical session with the paper "**Pipe-Clamping Mattress (PCM) to Stop Flowline Walking**". Dave's presentation highlighted the success story of a "nut cracker-inspired" mattress that clamps subsea pipeline to provide weight to arrest "pipeline walking". Dave shared anecdotes of how the mattress was conceived, developed, and deployed in the tropical waters of the Philippines for the Shell Malampaya project, all within a period of 12 months.

Ehsan Heshmati from Curtin University then presented the paper entitled "**Great Australian Bight: New Offshore Frontiers, Challenges and Potential Solutions**". Ehsan highlighted the challenges encountered in developing a potential location for an offshore oil and gas development, with offshore southern Australia as a case study. The remoteness of the area, increased water depth, and the harsh environmental conditions offshore were among the key challenges discussed in length, with results from BP drill sites forming the baseline data to uncover the otherwise unknown subsea conditions of this particular region.

Fraser Bransby from Fugro AG and **Noel Boylan** from NGI Perth shared the podium to give the third presentation entitled "**The State of Knowledge of Pipe-Soil Interaction for On-bottom Pipeline Design**". The two presented recent developments in the understanding of pipe-soil interaction based on research carried out and industry experiences gathered over the years. A long list of topics was covered, including best practices for on-bottom pipeline design, mitigation of design issues associated with geohazards, hydrodynamic stability and thermal expansion management.

Susan Gourvenec from UWA closed the evening with her presentation entitled "**A Toolbox For Optimizing Geotechnical Design Of Subsea Foundations**". Susan's presentation summarised her research work on subsea shallow foundations at UWA during the last 15 years. The presentation highlighted the different components of a tool box of solutions for optimising geotechnical design of subsea foundations derived from a blend of physical model testing in a geotechnical centrifuge, numerical analysis and theoretical modelling, all made available online at <http://www.webappsforengineers.com/>.

All of the presentations were high quality and were well received, with enthusiastic questions from the audience and engaging discussion with the presenters.

The program ended with Fiona, on behalf of the OSIGp Committee, presenting Dave White a parting gift for his departure back to the UK, and acknowledging his valuable contributions to the SUT-OSIGp since its inception in 2012.