

**3rd REMS Annual Conference Day One**  
**Offshore Wind: The Next 10 Years**

**Monday 18<sup>th</sup> September 2017, Vincent Building, Cranfield University**

09:00	Arrival Tea and Coffee	
09:15	Welcome and Overview	Prof Feargal Brennan (Cranfield)
09:20	Opening Lecture	Prof Michael Muskulus (NTNU)
<b>REMS 2020 Student Presentations – Chair Dr Ali Mehmanparast</b>		
09.45	Numerical Design Methods for Offshore Monopile Foundations	Abdullah Al-Mamun Shaikh
09.53	Material Pre-Straining Effects on Fatigue and Fracture Behaviour of Offshore Wind Monopile Structures	Satya Anandavijayan
10.01	Calibration of Cyclic Loading Models for Monopile Foundations	Toby Balaam
10.09	Development of Multi-disciplinary Prognostic and Diagnostic Model of Dynamics for the O&M of an Offshore Bottom-fixed Wind Farm	Debora Cevasco
10.17	Valuation and Financial Modelling Methodology to Support Decision Related to Energy Investment Under Uncertainty	Enrico Di Martino
10.25	Development of Multi Grade Functional Steel Structure by Wire plus Arc Additive Manufacture (WAAM) for Marine Application.	Philip Taiye Dirisu
10.33	Integrity Issues in High Productive Hybrid Welding Processes of Renewable Energy Marine Structures	Wai Jun Lai
10.41	Reliability-based Optimisation of Floating Wind Turbine Support Structures	Mareike Leimeister
10.49	Wind Turbine Array Efficiency Optimisation With CFD Modelling	Lun Ma
10.57	Extrapolation of Offshore Wind Turbine SHM Data From Instrumented to Non-instrumented Units	Mark Richmond
11.05	Assessment of Crack Arrest Behaviour in Modern Structural Steels	Jessica Taylor
11:15	Coffee Break	
<b>REMS 2019 Student Presentations – Chair Prof Guy Houlsby</b>		
11.45	Variability in Epibenthic Biodiversity on Offshore Wind Turbine Substructures	Paul Causon
12.03	Corrosion Fatigue in Marine Structures	Victor Igwemezie
12.21	The Influence of Residual Stresses on the Structural Integrity of Renewable Energy Marine Structures	Anais Jacob

12.39	Foundation Response to Scour Protection	Russell Mayall
13.00	Lunch	
<b>Rems 2019 Student Presentations – Chair Dr Mahmood Shafiee</b>		
14.00	Multi-directional Cyclic Loading of Monopile Foundations	Iona Richards
14:18	Structural Reliability of Offshore Wind Assets	Matti Scheu
14:36	Mitigation of Loads on Offshore Floating Wind Turbines Through Advanced Control Strategies	Dawn Ward
14:54	A Laboratory Investigation into the Drained Behaviour of Sand at Low Stress Levels	Jonathan White
15:15	Tea	
<b>REMS 2018 Student Presentations – Chair Prof Byron Byrne</b>		
15.30	Risk-based Evaluation Framework of Sustainable Energy Technologies	Anastasia Ioannou
15.50	Jacket Piles for Offshore Wind Turbines	Trevon Joseph
16.10	Optimisation of Structural Health Monitoring (SHM) Systems Through the Integration of Technological and Analytical Methods	Waseem Khodabux
16.30	Development of a Framework for the Effective Data Management of Structural Health Monitoring Systems for Offshore Wind Turbines	Maria Martinez Luengo
16.50	Multi-objective and Multi-criteria Decision Making on Offshore Wind Farm Location and Support Structure	Vera Mytilinou
17.10	Development, Implementation and Assessment of Constitutive Models for Finite Element Analysis of Offshore Foundations	Scott Whyte
17:30	Close	Prof Feargal Brennan/ Prof Byron Byrne