

Supergen



Offshore
Renewable
Energy

Early Career Researcher Forum

Early Career Researcher Forum - Agenda

- **09:00 - 09:10: Introductions and Welcome**
- **09:10 - 10:30: ECR Talks:** Tackling the ORE Research Challenges (Session 1)
Chair: Prof. Byron Byrne (University of Oxford)
- **10:30 - 11:00: Break**
- **11:00 - 12:00: Industry-Academic Collaborations:**
Generating new collaborations between Industry and Academia, Guest speaker: David Bould - *Lead R&D Specialist (Ørsted) and Supergen ORE Hub Industrial Advisory Board Member*
- **12:00 - 13:00: Lunch**
- **13:00 - 14:45: ECR Talks:** Tackling the ORE Research Challenges (Session 2)
Chair: Prof. Richard Willden (University of Oxford)
- **14:45 Close of ECR Forum**
- **15:00 – 17:00 Supergen ORE Hub Annual Assembly:** Welcome, opening address

ECR Talks: Tackling the ORE Research Challenges: Session 1

Chair: Prof. Byron Byrne (University of Oxford)

- Dr Simone Michele & Dr Siming Zheng (University of Plymouth) - *"Analytical and experimental modelling of a floating/submerged elastic disk"*
- Dr Moura Mehravar (Aston University) *"Investigating the installation of innovative suction caisson anchors to support offshore renewable energy structures, a feasibility study"*
- Dr Andrew Want (Heriot-Watt University) - *"Dynamic Subsea Power Cables in Offshore Renewable Energy - the Impact of Marine Growth"*
- Dr Rachel Nicholls-Lee (University of Exeter) *"A Novel, Robust, Near-shore, Wave Energy Converter for Remote Communities"*
- Dr David Christie (Bangor University) *"Measuring Wave Modulation by a Large Offshore Wind Farm"*
- Dr Ganapathi Ammasai Sengodan (University of Bristol) *"Hygro-thermal effects on the translaminar fracture toughness of composite laminates"*
- Dr James McNaughton (University of Oxford) *"Reference flow speeds in tidal turbine experiments"*

ECR Forum: Industry-Academic Collaborations

Generating new collaborations between Industry and Academia

Guest speaker: David Bould

Lead R&D Specialist (Ørsted) and Supergen ORE Hub Industrial Advisory Board Member



ECR Talks: Tackling the ORE Research Challenges: Session 2

Chair: Prof. Richard Willden (University of Oxford)

- Dr Stephanie Ordonez & Dr Sheik Malik (University of Strathclyde) "*Damage tolerant hybrid composites for safer and higher performance composite offshore wind turbine blades*"
- Dr Saeed Jahdi & Dr Ian Laird (University of Bristol) "*Optimisation of Compact Wide-Bandgap-Enabled Power Electronics Converters for Offshore Wind Farms*"
- Dr Saishuai Dai (University of Strathclyde) "*Innovative and cross-disciplinary wave energy research, aiming to develop a revolutionary Smart Control Algorithm (SCA)*"
- Dr Paul Judge (University of Edinburgh) "*Upgrade of Power_electronic Grid Emulator to Multi-Channe System and High Current Continuous Power Semiconductor Testor for Next Generation Offshore Wind, Tidal & Wave Converters*"
- Dr Jonathan Demmer (Bangor University) "*Multi-use platforms at sea (MUPS): an innovative way to manage offshore space and reduce coastal anthropic pressure*"
- Dr Xiaosheng Chen (University of Oxford) "*An LES-AL Study of the DTU 10MW RWT*"
- Dr Sam Tucker Harvey (University of Oxford) "*Hot Wire Velocimetry for Tidal Turbine Towing Tank Experiments*"

ECR Research Fund

- A **flexible research fund** for Early Career Researchers to support small activities that either supports and develops their existing research activities, or develops their skills further.
- **Max £5k per award**, total funds available £150k.

First Four Calls

- ~60 High quality proposals received: including >10 joint applications.
- **32 awards made** to a total value of ~£135k. >50% Success Rate!
- Awards included **internships & industrial secondments, enabling small lab equipment, seed / proof of concept research projects**
- Spanning **sensors, fluid mechanics, foundations, control, O&M, ecology**

Fifth Call – deadline TBA (spring 2022)

