

# Day Program – AORES 2018

**Monday 19 November, 2018**

INORE Social Event at AORES for early career researchers

**Day 1 – Tuesday 20 November, 2018**

Time	Lead Author	Topic
11:00	Registration and lunch	
12:10	Welcome and housekeeping	
<b>Technical Session 1 – Wave energy</b> session chair: Hugh Wolgamot, UWA		
12:15	<b>Deborah Greaves</b> (University of Plymouth)	<b>Keynote address</b> <b>An introduction to the Supergen ORE Hub with some examples of recent research projects at Plymouth university</b>
13:00	Benjamin Schubert (Uni of Adelaide)	Phase dependence in bistable submerged wave energy converters
13:15	Alireza Valizadeh (Carnegie Clean Energy)	Experimental study of a multi-moored point absorber wave energy converter
13:30	David Skene (UWA)	Phase-resolved wave forecasts for wave energy converters in unidirectional seas
13:45	Damon Howe (UTAS)	The offshore solution: floating breakwater integrated oscillating water column wave energy converter
14:00	Francois Flocard (UNSW)	Marine spatial planning of marine renewable farm along NSW coastline
14:15	<b>Afternoon Tea</b>	
<b>Technical Session 2 – Tidal energy</b> session chair: Irene Penesis, AMC, UTAS		
14:45	<b>Daniel Coles</b> (SIMEC Atlantis Energy)	<b>Keynote address</b> <b>Free Stream Tidal Generation – Ready for Large Scale Commercialisation</b>
15:30	Jessica Walker (AMC, UTAS)	The impact of evaluation method on the performance of the horizontal axis marine current turbine
15:45	Jean-Christophe Allo (Sabella)	Real scale project to commercial openings
16:00	Philip Marsh (AMC, UTAS)	Assessment of tidal current resources in Banks Strait, Australia
16:15	Matt Lewis (Bangor Uni.)	Improving methods of characterising resource, interactions and conditions at tidal energy sites: the METRIC project
16:30	Mark Hemer (CSIRO)	Australia's offshore renewables - where do the opportunities lie?
17:00	<b>Sundowner and poster session (UWA watersport complex)</b>	
18:30	INORE event, Stand up paddle boarding on the Swan River	

## Day 2 – Wednesday 21 November, 2018

Time	Lead Author	Topic
8:25	Welcome and housekeeping	
<b>Technical Session 3 – Ocean renewable energy</b> session chair: Richard Manasseh, Swinburne UT		
8:30	<b>Henry Jeffrey</b> (University of Edinburgh, Ocean Energy Systems)	<b>Keynote address</b> <b>Technology Collaboration Programme for Ocean Energy Systems</b>
9:15	Martijn Klabbers (Advisian)	Obtaining high-quality metocean data
9:30	Remo Cossu (UQ)	Methods of seabed surveys for renewable energy devices in wave and tidally-driven environments in Tasmania, Australia
9:45	Haley Viehman (Echoview)	All in the timing: monitoring fish at tidal energy sites
10:00	Cedric Morandini (Bureau Veritas)	Regulatory framework for offshore renewable energy devices
10:15	<b>Morning Tea</b>	
<b>Technical Session 4 – Wind energy</b> session chair: Britta Bienen, UWA		
10:45	<b>Morten Liingaard</b> (Ørsted)	<b>Keynote address</b> <b>Offshore Wind – from demonstration to zero bid</b>
11:30	Britta Bienen (UWA)	Foundations for offshore wind turbines – the role of centrifuge modelling
11:45	Noel Boylan (NGI)	Considerations in the foundation design for offshore renewable energy infrastructure in the Asia Pacific
12:00	Raffaele Ragni (UWA)	Suction buckets for offshore wind turbine foundations
12:15	Barry Lehane (UWA)	Effect of installation method on lateral and axial capacity of monopiles
12:30	Paul Taylor (UWA)	Progress on a simple model for wave loads on fixed vertical cylinders
12:30	<b>Lunch</b>	
13:30	<b>AMET roundtable discussion – part 1</b> session chair: Stephanie Thornton, AMET <b>Developer Showcase</b> will introduce wave and tidal technology companies. Confirmed companies include Carnegie Clean Energy, MAKO Tidal Turbines, SABELLA SAS, Verdant Power and Wave Swell. Four additional companies are pending.	
15:00	<b>Afternoon Tea</b>	
15:30	<b>Alejandro Moreno</b> (US department of Energy)	<b>Keynote address</b> <b>Marine Energy: Developments and Opportunities in the U.S.</b>
16:00-18:00	<b>AMET roundtable discussion – part 2</b> <b>Developing Markets for Ocean Renewable Energy</b> - two expert panels will share their views on domestic and international markets for ocean energy technologies.	
18:30-21:30	<b>Symposium dinner</b> (UWA University Club)	

## Day 3 – Thursday 22 November, 2018

Time	Lead Author	Topic
8:30	Welcome and housekeeping	
<b>Technical Session 5 – Wave energy</b> session chair: Jeff Hansen, UWA		
8:35	<b>Jørgen Hals Todalshaug</b> (CorPower Ocean AB)	<b>Keynote address</b> <b>How to make a wave energy converter</b>
9:20	Harrif Santo (A*STAR) Paul Taylor (UWA)	The performance of the three-float M4 wave energy converter off Albany, on the south coast of Western Australia
9:35	Brian Winship (AMC, UTAS)	Use of reflections to simulate WEC array effects
9:50	Guy McCauley (UWA)	Radiation testing of a submerged wave energy converter
10:05	Tom Denniss (Wave Swell Energy) Gregor MacFarlane (AMC, UTAS)	Development of a vented OWC wave energy converter with a unidirectional air turbine power take-off
10:20	Richard Manasseh (Swinburne UT)	Performance of arrays of generic wave energy converters around the Australian continent
10:35	<b>Morning Tea</b>	
11:00	<b>Bryson Robertson</b> (Oregon State University, Pacific Marine Energy Centre)	<b>Keynote address</b> <b>The Pacific Marine Energy Centre and Quantifying Opportunities for Wave Energy</b>
11:45- 12:45	<b>Discussion session I</b> session chair: Mark Hemer, CSIRO Review of key achievements and emerging/remaining challenges in the ORE sector 2 years on from AORES 2016	
12:45	<b>Lunch</b>	
<b>Technical Session 6 – Tidal energy</b> session chair: Jean-Roch Nader, AMC, UTAS		
13:30	<b>Vicky Coy</b> (ORE Catapult)	<b>Keynote address</b> <b>UK Perspectives on the offshore renewable energy sector</b>
14:15	Jarrold Sinclair (MAKO Tidal Turbines)	Demonstrating the potential of tidal power at the Port of Gladstone
14:30	Ian Milne (UWA)	Distortion of turbulence onset to a tidal turbine
14:45	Alex Hay (Dalhousie Uni.)	On remote acoustic turbulence measurement in a high-flow tidal channel
15:00	Trey Taylor (Verdant Power)	Lessons learned from Verdant Power's Roosevelt Island Tidal Energy Project in New York City
15:15	<b>Afternoon Tea</b>	
15:45	<b>Christophe Gaudin</b> (UWA)	<b>Keynote address</b> <b>Wave Energy Development in Albany: Example of successful developer-university partnership.</b>
16:30- 17:30	<b>Discussion session II</b> Identification, assessment and selection of an optimum site for a project	
18:00- 19:30	<b>Thanksgiving Day Sundowner</b> US Consul General's Residence – 8 Bellevue Terrace, West Perth <b>*** RSVP required before Friday 16 Nov - <a href="mailto:aores2018-oceans@uwa.edu.au">aores2018-oceans@uwa.edu.au</a> ***</b>	

**Friday 23 November, 2018**

## Australian Tidal Energy Workshop

The workshop will share the outcomes to date of the **AUSTEn** project, a three-year project to map Australia's tidal energy resource in unprecedented detail, as well as to assess tidal energy's economic feasibility and ability to contribute to Australia's energy needs.

Importantly, the workshop will also allow targeted discussions of the needs of the different sectors to ensure the project delivers benefits to users, as well as to start building relationships between sector players in order to build more effective collaborations in the future.

Registration is required, please contact [AUSTEn@utas.edu.au](mailto:AUSTEn@utas.edu.au) for further details.

## AORES posters

No.	Lead Author	Topic
1	Christelle Auguste (AMC, UTAS)	Investigation of sediment transport processes near tidal stream devices in Australia
2	Gino Parisella (Curtin Uni)	Solution verification of a wave energy device simulation
3	Nicole Fiumana (UWA)	Active suction anchors for offshore renewables
4	Nazanin Ansarifard (AMC, UTAS)	Performance comparison of the inflow and outflow radial turbines in a twin turbine configuration
5	Tim Pugh (Carnegie Clean Energy)	Wave Energy Site Development – Is it as important as device design?
6	Francois Flocard (UNSW)	Assessment of coastal protection benefits of wave farms using numerical wave and sediment transport modelling
7	Constantin Scherelis (AMC, UTAS)	Biophysical coupling of hydrodynamics and fish distribution at promising tidal energy candidate sites
8	Manuel Herduin (UWA)	Anchor sharing for wave energy converters
9	Eric Gubesch (AMC, UTAS)	The concept of a column-stabilised platform for OWC-WEC devices: A hydrodynamic investigation
10	Jenny Hayward (CSIRO)	Offshore hydrogen
11	Raju Ahamed (Curtin Uni)	Design of multi-degree of freedom based electromagnetic oscillator for wave energy convertor
12	Larissa Perez (UQ)	On measurements to estimate turbulence for tidal turbines using new generation ADCPs in Banks Strait, Australia
13	Roy Mitchell (OneTide)	High efficiency Ocean Energies deployment mobilisation in a single lunar tide –the reality is here
14	Wei Shen (UNSW)	Assessment of electricity grids in prospective tidal regions
15	Paul Baker (Agile Innovations)	Continuous wave energy capture using a bi-directional radial outflow/crossflow hydro-kinetic electric turbine
16	Trey Taylor (Verdant Power)	The Roosevelt Tidal Energy Project
17	Renan Leal Campos Fonseca da Silva (UWA)	Understanding the influence of submerged structures on nearshore processes with application to wave energy converters
18	Saad Sayeef (CSIRO)	Review of currently available devices for tidal energy conversion and storage