



EIMR INTERNATIONAL CONFERENCE 2022

Environmental Interactions of Marine Renewables

EIMR 2022; Programme Day 2 - Wednesday 5th October

10.45am Conference Day welcome; Chair of the EIMR2022 Scientific Advisory Committee - Prof. Ben Wilson (SAMS UHI)

11.00am to 11.50 noon – Theme Session “Emissions (Noise and EMF)”

Chair; Joe Onoufriou (Marine Scotland Science)

Live summary of pre-recorded oral presentations for this theme session discussion (2 minutes x 1 slide by each presenter)

<i>Pre-recorded oral presentations for theme session discussion</i>	<i>Presenter</i>
<i>Characterisation of underwater operational noise of two types of floating offshore wind turbines</i>	Nienke van Geel SAMS UHI
<i>Comparison of underwater operational noise of two tidal stream turbines and modelling of single turbines v turbine arrays</i>	Denise Risch SAMS UHI
<i>Do electromagnetic fields from renewable energy subsea power cables affect the righting reflex of coastal invertebrates?</i>	Erica Chapman Marine Station
<i>The free-swimming behaviour of migratory Anguillid eels encountering in situ electromagnetic fields (EMF) from an electrical transmission cable</i>	Zoe Hutchison Scottish Government

12.00 noon to 12.50pm – Keynote for the day

Chair; Ben Wilson (SAMS UHI)

Innovation in a dynamic medium: integrated instrumentation for studying interactions with marine renewable developments – Emma Cotter (PNNL)

1.00pm to 2.00pm; Conference break (live e-Posters session - 1.15pm to 1.45pm)

<i>Live e-posters to view</i>	<i>Presenter</i>
<i>A local approach to the standardisation of socio-economic values for suitability mapping</i>	Inne Withouck Flanders Marine Institute
<i>IMARDIS Cyberinfrastructure – a cloud-based data management system for environmental impact assessments of tidal turbines</i>	Noel Bristow Bangor University
<i>Deep recurrent neural networks to classify marine mammals around tidal turbines using passive acoustic monitoring</i>	Vahid Seydi Bangor University
<i>Evaluating the performance of multibeam echosounders with standardised targets</i>	Nicholas Petzinna UHI
<i>The applicability of unmanned aerial vehicles as a survey tool within tidal stream environments</i>	James Slingsby ERI UHI



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2.00pm to 2.50 pm – Theme Session “Megafauna in proximity 2”

Chair; Nadja Hohenadl (Scottish Association for Marine Science – SAMS UHI)

Live summary of pre-recorded oral presentations for this theme session discussion (2 minutes x 1 slide by each presenter)

<i>Pre-recorded oral presentations for theme session discussion</i>	<i>Presenter</i>
<i>Marine Migrations of Salmon in Highly Developed Seas; Potential Impact of Marine Renewable Developments</i>	Matthew Newton Marine Scotland Science
<i>Studying seals with sonar: preliminary results from a tidal turbine marine mammal monitoring system</i>	Gordon Hastie SMRU
<i>A risk assessment methodology for collision risk of fish and marine mammals with in-stream tidal turbines</i>	Max Carcas Sustainable Marine

3.00pm to 3.50 pm – Theme Session “Scaling up from single devices to potential future seas 1”

Chair; Andrea Copping (Pacific North West National Laboratory - PNNL)

Live summary of pre-recorded oral presentations for this theme session discussion (2 minutes x 1 slide by each presenter)

<i>Pre-recorded oral presentation for theme session discussion</i>	<i>Presenter</i>
<i>Taking a Broader Look at Environmental and Ecological Effects of Marine Energy Development</i>	Lenaig Hemery PNNL
<i>Monitoring marine mammals around tidal turbines: insights from recent monitoring in Scotland and examining transferability</i>	Carol Sparling SMRU
<i>Numerical modelling of flow and dispersion in the central North Sea: Implications for connectivity of epibenthic communities</i>	David Woolf Heriot Watt University
<i>Wave Modulation by Large Wind Farms</i>	David Christie Bangor University

4.00pm to 4.30pm - live e-Posters session

<i>Live e-posters to view</i>	<i>Presenter</i>
<i>Efficiency of environmental DNA compared to conventional methods for biodiversity monitoring purposes at offshore energy sites</i>	Lenaig Hemery PNNL
<i>Changes in the distribution and abundance of marine top-predators in the North Sea associated with present and future wind farm developments</i>	Sophie Crouch Bangor University
<i>Potential environmental effects of widespread future deployment of floating ORE structures</i>	Caitlin Harris UHI
<i>Tethys: Facilitating Knowledge Sharing on Environmental Effects of Marine Renewable Energy Around the World</i>	Hayley Farr PNNL

Finish Day Two