



**RINA**  
NSW SECTION



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## **RINA/IMarEST Technical Presentation**

### **The Effect of Mooring Systems on Floating Wave Energy Converters**

<b>Presenters</b>	Eric Gubesch PhD Candidate, Australian Maritime College
<b>Date</b>	Wednesday 7 April 2021
<b>Time</b>	6:30 pm AEST
<b>Meeting</b>	This presentation will be held as a video-conference webinar using WebEx software hosted by Engineers Australia. Registration for the presentation is required (see below).

This presentation discusses the hydrodynamic performance and motion characteristics of a column-stabilised asymmetrical oscillating water column (OWC) wave energy converter. A 1:36 scale model of the OWC was experimentally tested at the Australian Maritime College and was numerically modelled with Star CCM+ computational fluid dynamics (CFD) software.

The design incorporates several geometric relationships for high-performance asymmetrical OWCs and typical design requirements utilised in the offshore oil and gas industry. Detailed analysis includes physical and numerical decay tests to quantify the natural period of the OWC moonpool and rigid-body motions, response amplitude operators, turbine damping coefficients for the power take-off system, and hydrodynamic capture-width ratios.

**Registration** Registration for this presentation may be completed at

<https://cvent.me/avM3d3>

Enter your first and last names and email address, career stage and engineering sector, agree to the terms and conditions, and click Next/Next, then enter the Discount Code IMARRINA to reduce the payment to zero, and click Submit.

When registered, you will receive a confirmation email containing the URL and password for the webinar.