

# 27 December 2024

The Portal and Repository for Information on Marine Renewable Energy (<u>PRIMRE</u>) team wishes you a very happy holiday season and a wonderful New Year! This special end-of-the-year edition of the <u>PRIMRE Blast</u> features a few announcements, opportunities, and upcoming events, as well as a brief look at some 2024 PRIMRE statistics! Thank you for contributing to PRIMRE!

Announcements Upcoming Events Top Tethys Eng. Docs Top MHKDR Datasets Top Projects Content Recently Added Photos

### Announcements

Marine Energy Illustrations Survey

Pacific Northwest National Laboratory (PNNL) is currently developing new marine energy illustrations and is <u>seeking input from marine energy scientists and educators</u> regarding which graphics would be most beneficial to their work. The survey solicits preferences on illustration styles, types of graphics, and ideas for illustrations, with some example illustrations provided. The final illustrations will be made publicly available on <u>Tethys</u> and <u>Tethys Engineering</u>.

#### EnergyTech UP

The U.S. Department of Energy (DOE) Office of Technology Transitions has opened registration for the <u>EnergyTech University Prize (EnergyTech UP</u>), where student teams will compete to identify a promising energy technology, assess its market potential, and create a business plan for commercialization. Faculty submissions are due 13 January 2025, an informational webinar will take place on 23 January, and student registration for the Explore Phase is due 3 February.

#### Calls for Abstracts

The <u>Call for Abstracts</u> for the <u>40th International Workshop on Water Waves and Floating Bodies</u> (<u>IWWWFB 2025</u>) is open through 10 January 2025. The workshop will take place on 11-14 May 2025 in Shanghai, China.

The <u>Call for Abstracts & Paper Submissions</u> for the <u>16th European Wave and Tidal Energy</u> <u>Conference (EWTEC 2025)</u> has now opened until 13 January 2025. EWTEC will take place on 7-11 September 2025 in Madeira, Portugal.

The <u>Call for Abstracts</u> for the <u>European Geoscience Union (EGU) General Assembly 2025</u> is now open through 15 January 2025. The EGU General Assembly 2025 will take place on 27 April–2 May 2025 in Vienna, Austria and online.

#### Career Opportunities

PNNL is soliciting applications for a <u>Postdoctoral Research Associate – Coastal</u> <u>Biogeochemistry</u> to study different marine carbon dioxide removal (mCDR) technologies. Applications are due 13 January 2025.

The University of Oxford is seeking a <u>Postdoctoral Research Assistant in Integrated Engineering</u> <u>Models for Tidal Energy Systems</u>. Applications are due 13 January 2025.

European Marine Energy Centre (EMEC) is looking for an <u>Operations & Technology Director</u> to lead EMEC's operational, technical and project delivery activities and an <u>Assistant Project</u> <u>Manager</u> to support the management of the project lifecycle and liaise with relevant stakeholders.

BladeRunner Energy is seeking a <u>Mechanical Systems/Mechatronics Engineer</u> to support the engineering development of its hydrokinetic system.

## **Upcoming Events**

#### Upcoming Conferences

The National Hydropower Association is hosting <u>Waterpower Week 2025</u> from 31 March to 2 April 2025 in Washington, DC, U.S.

Save the date! The University Marine Energy Research Community (UMERC) will be holding their <u>UMERC 2025 Conference</u> from 12-14 August 2025 in Corvallis, Oregon, U.S. Registration information, agenda, calls for abstracts/posters, and more information will be coming soon.

#### Upcoming Course

The Atlantic Marine Energy Center is hosting a fully funded, intensive course, <u>Introduction to</u> <u>Marine Energy</u>, from 3-9 August 2025 at the University of New Hampshire in Durham, New Hampshire, U.S. The course is designed for U.S. undergraduate students (rising juniors and seniors) and beginning graduate students interested in the field of marine energy. Applications are due 10 January 2025.

## **Top Viewed Documents on Tethys Engineering**

<u>Tethys Engineering</u> currently hosts over 8,300 documents on the technical aspects of marine energy research and development, including journal articles, conference papers, and reports.

- 1. <u>OES Annual Report: An Overview of Ocean Energy Activities in 2022</u> Ocean Energy Systems (OES) 2023
- 2. <u>Ocean Thermal Energy Conversion (OTEC) Economics: Updates and Strategies</u> Vega & Martin 2024
- 3. <u>Lessons learnt from the design, installation and initial operations phases of the</u> <u>6MW 4-turbine tidal array in Scotland's Pentland Firth</u> – Black & Veatch 2020
- 4. <u>Performance comparison of pelamis, wavestar, langley, oscillating water column</u> <u>and Aqua Buoy wave energy converters supplying islands energy demands</u> – Jahangir et al. 2023
- 5. <u>Tidal Energy in Malaysia: An overview of potentials, device suitability, issues and outlook</u> Rahim et al. 2023
- 6. <u>Tidal Stream Power Development in San Bernardino Strait, Philippines</u> Battaglia 2018
- 7. <u>Analysis and optimization of a deep-water in-situ power generation system based on</u> <u>novel ductless Archimedes screw hydrokinetic turbines</u> – Zhang et al. 2024
- 8. <u>Techno-economic assessment of global and regional wave energy resource potentials</u> <u>and profiles in hourly resolution</u> – Satymov et al. 2024
- 9. <u>Integrated physical design, control design, and site selection for an underwater</u> <u>energy-harvesting kite system</u> – Naik & Vermillion 2024
- 10. <u>Evaluating the economic viability of near-future wave energy development along the</u> <u>Galician coast using LCoE analysis for multiple wave energy devices</u> – deCastro et al. 2024

# **Top Viewed Datasets on MHKDR**

The Marine Hydrokinetic Data Repository (<u>MHKDR</u>) enables research, collaboration, and transparency by providing open access to over 32 terabytes of marine energy data.

- 1. <u>High Resolution Ocean Surface Wave Hindcast (US Wave) Data</u> National Renewable Energy Laboratory (NREL) 2020
- 2. <u>2017 Western Passage Tidal Energy Resource Characterization Measurements</u> NREL 2017
- 3. <u>Wave Energy Prize 1/20th Testing RTI Wave Power Oscillating Wave Surge</u> <u>Converter</u> – Ricardo Detroit Technical Center 2016
- 4. <u>Wave Energy Prize 1/20th Testing AquaHarmonics Point Absorber</u> Ricardo Detroit Technical Center 2016

- 5. <u>Small Scale WEC Performance Modeling Data</u> NREL 2021
- 6. <u>Aquantis 2.5 MW Ocean Current Generation Device Scaled Tank Test Design and</u> <u>Results</u> – Dehlsen Associates 2015
- 7. <u>Wave Energy Prize 1/20th Testing Harvest Wave Energy Oscillating Wave Surge</u> <u>Converter</u> – Ricardo Detroit Technical Center 2016
- 8. <u>UNH TDP Voltsys Raw Data and Processing Scripts Fall 2021</u> NREL 2021
- 9. <u>Wave and Offshore Wind Resource in the U.S. Pacific Ocean Minor Outlying</u> <u>Islands</u> – PNNL 2020
- 10. <u>Wave Energy Prize 1/20th Testing SEWEC Attenuator</u> Ricardo Detroit Technical Center 2016

## **Top Viewed Content on the Marine Energy Projects Database**

The <u>Marine Energy Projects Database</u> provides up-to-date information on marine energy projects, test sites, devices, organizations, and technologies around the world.

- 1. <u>3 MW Lanzarote Wave Park</u> (Project) Bombora Wave
- 2. <u>40 South Energy R115</u> (Device) 40 South Energy
- 3. <u>Agucadoura</u> (Test Site) WavEC Offshore Renewables
- 4. AMOG Wave Energy Converter (Device) Australian Marine Offshore Group
- 5. <u>AW-Energy WaveRoller</u> (Device) AW-Energy
- 6. <u>Bermuda Seabased Power Park</u> (Project) Seabased
- 7. <u>CorPower Ocean C4 WEC</u> (Device) CorPower Ocean
- 8. EMEC Fall of Warness Eday Tidal Test Site (Test Site) EMEC
- 9. ANDRITZ Hydro HS1000 (Device) ANDRITZ Hydro
- 10. <u>Eco Wave Power Wave Clapper</u> (Device) Eco Wave Power

## **Recently Added Marine Energy Photos**

The <u>Tethys Engineering Photo Library</u> currently contains over 800 photos of marine energy devices, projects, and test sites from over 65 developers around the world. <u>Contribute today</u>!



Nova Innovation's Eunice Tidal Turbine under the Northern Lights



Waverider Buoy Recovery from European Marine Energy Centre (EMEC) Wave Test Site



Oscilla Power's TritonC Wave Energy Converter Deployment in Hawaii



Spiralis Energy's Axial Skelter Turbine



Oneka Technologies Iceberg Buoy in Fort Pierce, Florida

## The PRIMRE Team

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