PRIMRE BLAST

29 December 2023

The Portal and Repository for Information on Marine Renewable Energy (PRIMRE) team wishes you a very happy holiday season and a wonderful New Year! This special end-of-the-year edition of the PRIMRE Blast features a few announcements, opportunities, and upcoming events, as well as a brief look at some 2023 PRIMRE statistics! Thank you for contributing to PRIMRE!

Announcements

Telesto Webinar Recording

The recording for PRIMRE's latest webinar, "Introducing Telesto: PRIMRE's Knowledge Hub for Marine Energy Development Resources and Guidance", is now available. The new and improved version of Telesto is home to open-source wiki pages, structured databases, and tools that provide information about the development life cycle of marine energy.

ETIPP Seeking Regional Partners

The U.S. Department of Energy's (DOE) Energy Transitions Initiative Partnership Project (ETIPP) is seeking applications from regional partners around the United States to design a 12- to 18-month project that will help increase the resilience and reliability of a clean energy grid in selected communities. ETIPP offers technical assistance to remote and island communities to analyze energy systems and plan for increased resilience. Applications are due 10 January 2024.

Calls for Abstracts

The Call for Abstracts for European Geophysical Union (EGU24) closes on 10 January 2024. EGU24 will take place on 14-19 April 2024 in Vienna, Austria, and online.

The Centre for Ocean Energy Research (COER) at Maynooth University Ireland has opened the Call for Posters for its 2024 Wave Energy Workshop until 15 January 2024. The workshop will take place on 26 January 2024 in Maynooth, Ireland.

Funding & Testing Opportunities

The U.S. DOE Water Power Technologies Office (WPTO) is accepting marine energy-related submissions for the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs, which offer competitively awarded grants to small businesses to support scientific excellence and technological innovation. The deadline to submit letters of intent is 3 January 2024.

The U.S. DOE recently announced up to $10 million in funding for the Inspiring Generations of New Innovators to Impact Technologies in Energy 2024 (IGNIITE 2024) program, led by the Advanced Research Projects Agency-Energy (ARPA-E). The new program will support early-career scientists and engineers seeking to develop impactful new energy technologies. Concept papers are due 5 January 2024.

Career Opportunities

IFREMER, the French Institute for Ocean Science, has launched a call for proposals for post-doctoral fellowships focused on wave energy conversion, wave tanks, and hydrodynamics of floating structures. Applications are due 8 January 2024.

Pacific Northwest National Laboratory (PNNL) is seeking an Operations Specialist 3 to work with researchers to ensure that PNNL processes and procedures are followed for all laboratory and field research activities. Applications are due 12 January 2024.

The Coastal Studies Institute (East Carolina University Outer Banks campus) is seeking a Program Manager for a portfolio of projects related to marine energy device and component testing at the Jennette's Pier Wave Energy Test Center. Applications are due 15 January 2024.

The Environmental Research Institute (ERI) is recruiting for a Research Fellow in Renewable Energy and the Environment to join its multi-disciplinary group working to advance understanding of the biophysical interactions of marine and offshore renewable energy with the environment. Applications are due 18 January 2024.

Upcoming Events

Upcoming Webinars

The IMPACT and VALID projects are jointly hosting a webinar, "Harnessing Ocean Power: Progressing with Wave Energy Converter Technology through Rig Testing", on 31 January 2024 from 2:00-3:00pm CET (1:00-2:00pm UTC). Register here.

PNNL and the National Renewable Energy Laboratory are hosting an informational Marine Energy Career Panel on 7 February 2024 from 3:00-4:30pm PST that will feature National Laboratory staff who are working to advance the marine energy industry. The webinar is aimed at current students and those interested in working in the marine energy industry. Register here.

Upcoming Conferences

The Pan American Marine Energy Conference (PAMEC 2024) will take place on 22-24 January 2024 in Barranquilla, Colombia. Register here.

Ocean Sciences Meeting 2024 will take place 18-23 February 2024 in New Orleans, Louisiana, U.S. Early bird registration is available through 10 January 2024 here.

Upcoming Workshops

In addition to the PAMEC 2024 Conference Program, PAMEC in partnership with key partners, is hosting several workshops prior to the conference.

- PNNL is hosting an Ocean Thermal Energy Conversion (OTEC) Workshop on 19 January to review OTEC technologies, discuss potential environmental effects, and examine additional uses of deep cold water. Register here.
- The PRIMRE team is also hosting a workshop on Marine Energy Data Organized – PAMEC Workshop on PRIMRE and International Data Sharing on 20 January to present on the resources available within PRIMRE and discuss opportunities for international databases to connect to the system. Register here.
- Fundy Ocean Research Centre for Energy (FORCE) is also hosting a workshop on Monitoring for Interactions Between Marine Animals and MRE Devices on 20 January to present on environmental monitoring around wave and tidal devices. Register here.

Top Documents on Tethys Engineering

Tethys Engineering currently hosts over 7,800 documents on the technical aspects of marine energy research and development, including journal articles, conference papers, and reports.

1. **Performance comparison of pelamis, wavestar, langley, oscillating water column and Aqua Buoy wave energy converters supplying islands energy demands – Jahangir et al. 2023**
2. **Next-Generation Marine Energy Software Needs Assessment – Ruehl et al. 2023**
3. **OES Annual Report: An Overview of Ocean Energy Activities in 2022 – Ocean Energy Systems (OES) 2023**
4. **Tidal Stream Power Development in San Bernardino Strait, Philippines – Battaglia 2018**
5. **Co-enhancements of several design parameters of an archimedes spiral turbine for hydrokinetic energy conversion – Badawy et al. 2023**

6. **Wave energy generation and storage costs in Australia: an analysis for Wave Swell Energy Limited – Osman et al. 2022**
7. **A critical review of technologies for harnessing the power from flowing water using a hydrokinetic turbine to fulfill the energy need – Yadav et al. 2023**
8. **Performance enhancement of a bottom-hinged oscillating wave surge converter via resonant adjustment – Liu et al. 2022**
9. **International Levelised Cost of Energy for Ocean Energy Technologies – OES 2015**
10. **Ocean Energy Key trends and statistics 2022 – Ocean Energy Europe 2023**

Top Datasets on MHKDR

The Marine Hydrokinetic Data Repository (MHKDR) is the repository for all data collected using funds from the U.S. DOE's WPTO, including results from tank tests and open sea trials.

1. **High Resolution Ocean Surface Wave Hindcast (US Wave) Data – National Renewable Energy Laboratory (data from 2020, last updated 2023)**
2. **RANS Simulation ADM of the NREL Phase VI wind turbine modeled as MHK Turbine – University of Washington (data from 2016, last updated 2021)**
3. **Aquantis 2.5 MW Ocean Current Generation Device - Scaled Tank Test Design and Results – Dehlsen Associates (data from 2015, last updated 2020)**
4. **RANS Simulation VBM of Single Full Scale DOE RM1 MHK Turbine – University of Washington (data from 2013, last updated 2020)**
5. **Focusing Wave Energy for Wave Energy Converter Applications – Martin and Ottaway (data from 2010, last updated 2020)**
6. **Wave Energy Prize - 1/20th Testing - AquaHarmonics Point Absorber – Ricardo Detroit Technical Center (data from 2016, last updated 2020)**
7. **Small Scale WEC Performance Modeling Data – National Renewable Energy Laboratory (data from 2021, last updated 2022)**
8. **Oscylator-4 Energy Converter St. Clair River Installation Data 2016 – Vortex Hydro Energy (data from 2016, last updated 2020)**
9. **Admiralty Inlet Advanced Turbulence Measurements: June 2014 – National Renewable Energy Laboratory (data from 2014, last updated 2020)**
10. **Northwest National Marine Renewable Energy Center, OR - Project Plans – Northwest National Marine Renewable Energy Center (data from 2016, last updated 2018)**

Top Content on the Marine Energy Projects Database

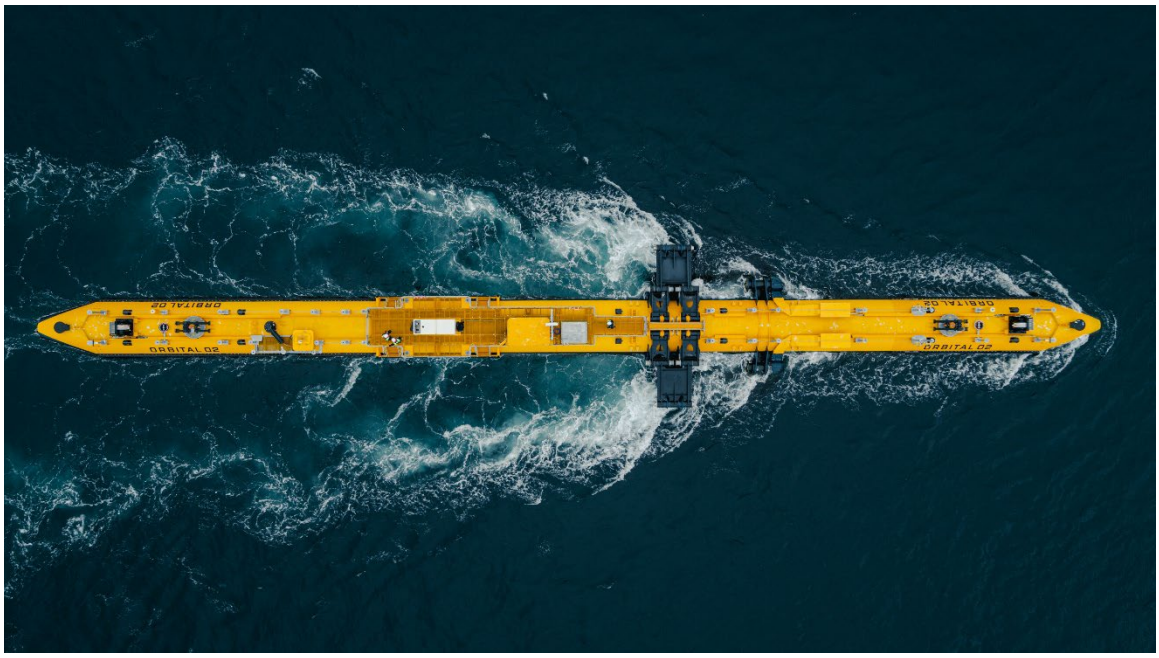
The Marine Energy Projects Database provides up-to-date information on marine energy projects, test sites, devices, organizations, and technologies around the world.

1. **40 South Energy R115 (Device) – 40 South Energy**
2. **3 MW Lanzarote Wave Park (Project) – Bombora Wave**
3. **AMOG Wave Energy Converter (Device) – Australian Marine Offshore Group**
4. **AOE Sooke Basin Test (Project) – Accumulated Ocean Energy Inc**
5. **650 kW ZJU Turbine (Device) – Zhejiang University**
6. **AltaSea Eco Wave Power (Project) – Eco Wave Power**
7. **Admiralty Inlet (Project) – Snohomish County PUD No 1**
8. **Agucadoura (Test Site) – WavEC Offshore Renewables**
9. **AW-Energy WaveRoller (Device) – AW-Energy**
10. **ANDRITZ Hydro HS1000 (Device) – ANDRITZ Hydro**

Recently Added Photos

The Tethys Engineering Photo Library currently contains over 700 photos of marine energy devices, projects, and test sites from over 60 developers around the world. Contribute today!

CorPower Ocean's C4 Wave Energy Converter



Orbital Marine Power's O2 Tidal Energy Device

Mutriki Wave Power Plant

Mocean Energy's BlueX Wave Energy Converter

Ocean Renewable Energy Company's RivGen Device

The PRIMRE Team

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