

**Post-Doctoral Scholar Position:  
Hydrodynamic Modelling and Wave Energy Technology R&D**

with the Pacific Marine Energy Center  
and the  
School of Mechanical, Industrial, and Manufacturing Engineering  
Oregon State University, Corvallis, Oregon

**Position:**

The Pacific Marine Energy Center (PMEC) at Oregon State University is recruiting a post-doctoral scholar to support our cutting-edge wave and offshore wind renewable energy research, development, and testing programs. PMEC has an exciting multi-disciplinary R&D project and is looking for an inquisitive, self-motivated, and passionate PostDoc to join our team.

Specifically, PMEC is recruiting a PostDoc to support a new U.S. Navy project to develop a numerical and scaled physical model of a sub-surface wave energy converter (WEC). This project will be in collaboration with CalWave and Dolphin Labs, who will use this research to inform a future designs for commercialization.

**Responsibilities:**

The successful applicant will:

- Lead and mentor a team of multidisciplinary undergraduate students to conduct rigorous, cutting-edge R&D.
- Lead, or support, technology testing and validation in the O.H. Hinsdale Wave Research Laboratory.
- Lead, or support, the development of new hydrodynamic models for offshore sub-surface renewable energy systems.
- Disseminate research findings through high-impact research journals and academic conferences.
- Collaborate with PMEC-affiliated faculty at OSU.
- Collaborate across engineering, social science, liberal arts and humanities research streams.

**Required Qualifications:**

- Ph.D. in engineering or relevant discipline (mechanical, civil, ocean, electrical, environmental, etc.).
- Proven track-record of independent research, critical thinking, and successful academic publications.
- Experience in numerical and/or physical modelling of hydrodynamically active bodies.

**Preferred Qualifications:**

- Proven knowledge of ocean waves and marine energy resource characteristics.
- Numerical modelling of the hydrodynamic effects for ocean conditions. Example numerical codes include WEC-Sim, ProteusDS, OpenFAST, and OrcaFlex.
- Experience working with scaled prototypes in wave tanks, flumes, and similar.
- Mechanical design experience utilizing Siemens NX (or similar CAD package) and associated manufacturing skills.

**Position available:** January 1, 2025

This is a full-time, 18-month Postdoctoral Scholar position, located at Oregon State University in Corvallis, Oregon. Oregon is a beautiful state in the U.S. with access to the ocean and the mountains. Oregon State University has strong programs in both coastal and ocean engineering as well as oceanography.

The College of Engineering has committed to being a national model of inclusivity and collaboration as evidenced by, among other features, a community of faculty, students, and staff that is increasingly collaborative, diverse, and centered on student success. We seek faculty who will broaden our capacity to advance student success across individual identities, racial/ethnic categories and socioeconomic backgrounds. In addition, OSU commits to inclusive excellence by advancing equity and diversity in all that we do. We are an Affirmative Action/Equal Opportunity employer, and particularly encourage applications from members of historically underrepresented racial/ethnic groups, women, individuals with disabilities, veterans, LGBTQ community members, and others who demonstrate the ability to help us achieve our vision of a diverse and inclusive community.

PMEC is a competitively designated U.S. Department of Energy (DOE) Center focused on the responsible advancement of marine energy by expanding scientific understanding, engaging stakeholders, and educating students. Within PMEC, researchers from Oregon State University, the University of Washington, and the University of Alaska Fairbanks work closely with marine energy technology developers, academic and National Laboratory researchers, coastal community members, ocean users, federal and state regulators, and other government officials, to address key challenges in the sector and accelerate its emergence. We serve as an objective voice regarding the opportunities, capabilities, and effects of marine energy, including wave, tidal, riverine, and offshore wind resources. For additional information about the activities within PMEC, please visit: [www.pmec.us](http://www.pmec.us)

**U.S. citizens and residents will be prioritized.**

Stipend and benefits conform with postdoctoral scholar standards at Oregon State. More information about postdoctoral scholar appointments at Oregon State can be found at <http://gradschool.oregonstate.edu/postdocs>

**Application:**

Position is open until filled.

Applicants must send the following documents in a single PDF file to the contact listed below:

- A detailed CV and academic transcript.
- A one-page statement describing your background and how you meet the qualifications for the advertised position.
- Contact information for three references.

The subject line of your email should contain the following text: **“PMEC Post-doctoral scholar in Marine Energy (your last name).”** Please note that only candidates that meet the required skills and expertise will be contacted.

Contact:

Joseph Piacenza  
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