# Post-Doctoral Scholar Positions: Hydrodynamic Modelling and Wave and Solar Energy Technology R&D

with the Pacific Marine Energy Center and School of Civil and Construction Engineering Oregon State University, Corvallis, Oregon

#### Position:

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

Specifically, PMEC is recruiting post-docs to support new Department of Energy and US Navy, DOE and NSF projects to develop numerical and scaled physical models of floating and sub-surface wave, wind and solar energy converters, autonomous underwater vehicle recharging, and real-time hybrid simulation of offshore wind turbines.

## **Responsibilities:**

The successful applicant will:

- Lead a team of graduate and 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 floating and subsurface and hybrid renewable energy systems.
- Disseminate research findings through high-impact research journals and academic conferences.
- Collaborate with PMEC Director and 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 Solidworks (or similar CAD package) and associated manufacturing skills.

This is a full-time Postdoctoral Scholar position, with funding available up to three years based on performance, 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. Oregon State University is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to age, race, color, religion, sex, sexual orientation, gender identity, or national origin, disability status, protected veteran status, or any other characteristic protected by law.

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: <a href="https://www.pmec.us">www.pmec.us</a>

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 <a href="http://gradschool.oregonstate.edu/postdocs">http://gradschool.oregonstate.edu/postdocs</a>

## Application:

Position is open until filled.

Applicants must send the following documents in a single PDF file (Word documents will not be opened) 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 and Solar Energy (your last name)." Please note that only candidates that meet the required skills and expertise will be contacted.

Contact:

B. Langley

Operations Manager, Pacific Marine Energy Center Oregon State University

Corvallis, Oregon, USA

Email: pmec@oregonstate.edu