



# **Pacific Marine Energy Center**

Oregon State University 338 Owen Hall Corvallis, Oregon 97331

02/11/2022

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

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

#### Position:

The <u>Pacific Marine Energy Center (PMEC)</u> 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 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 a post-doc to support new Department of Energy and US Navy projects to develop numerical and scaled physical models of sub-surface wave 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 sub-surface 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.

**Position available**: January 1, 2022 (open until filled)

This is a full-time, 12-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. 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:

For full consideration, apply by March 4, 2022.

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 Energy (your last name)." Please note that only candidates that meet the required skills and expertise will be contacted.

### Contact:

B. Langley
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