MASc, PhD and Research Engineer Opportunities
in Marine Renewable Energy and the Ocean Environment

Institute for Integrated Energy Systems (IESVic)

West Coast Wave Initiative, University of Victoria,

Starting Date: Flexible

We are seeking interested student and engineer candidates for various positions within marine renewable energy and the ocean environmental modelling fields. Student positions at Masters (MASc), PhD or PostDoc level; and specific opportunities for research engineers.

Roles include:

1) Numerical modelling of wave, tidal and offshore wind resources. In-situ measurement analyses, model development and validation. Experience with SWAN, FORTRAN, and Matlab would be considered an asset but not essential. Most suited as a graduate student position. Starting date: ASAP

2) Implementation of marine renewable energy converters (MREC) within above wave and tidal coastal model. Developing meta-models of MREC’s and integrating these within coastal models. Experience with SWAN, FORTRAN, Matlab and ProteusDS would be considered an asset but is not essential. Most suited as a graduate student position. Starting date: ASAP

3) Offshore wind technology modeller. Experience modeling wind turbines and power predictions, working with wind resource data, collaborating with SME’s and deployment experience would be an asset but is not essential. Most suited as a research engineer position. Starting date: Early 2018

4) Tidal energy converter modeller. Experience modelling different types of tidal energy converter, working with SME’s and any marine deployments, would be an asset. Most suited as a research engineer position. Starting date: Early 2018

5) Software Engineer. Experience in managing large datasets, databases and developing user-interfaces. Most suited as a research engineer position. Starting date: Early 2018

6) Instrumentation Engineer. Deployment, retrieval, maintenance and upkeep of a fleet of wave measurement buoys, along with data management and collection. Part-time or as part responsibility with another role. Starting date: tbc.
The successful candidates will have obtained an undergraduate degree in engineering (preferably Mechanical with a minimum GPA of 5.0 (B), or equivalent). The ideal candidate: will have proven success with being able to work independently, have excellent communication and interpersonal skills and a demonstrated ability to collaborate with others.

These positions will be connected to the West Coast Wave Initiative (WCWI - http://www.uvic.ca/wcwi/), a major collaborative research project with private sector partners and an international collection of wave energy converter technology developers, to assess the gross, net and usable wave energy resource off the coast of the Pacific Northwest. The WCWI uses wave monitoring buoys and near shore wave propagation models to determine the raw wave energy resource, high fidelity computer simulations to predict the converter output, and electrical grid integration toolboxes to understand the value of marine renewables when installed at targeted locations in the region.

Students will be in the Department of Mechanical Engineering and based in the stimulating multi-disciplinary environment of the Institute for Integrated Energy Systems (IESVic); http://www.iesvic.uvic.ca), University of Victoria, BC. Work locations would be either Victoria or Sidney, BC.

Excellent oral and written communication skills in English are essential.

Interested candidates should email a detailed curriculum vitae, a description of research experience and interests, and names and contact information of at least two professional references to:

Dr. Bryson Robertson
Institute for Integrated Energy Systems (IESVic)
University of Victoria
P.O. Box 1700, Victoria, BC V8W 2Y2 Canada
email: bryson@uvic.ca ; including “WCWI Student/Engineer Opportunity” in the subject line.