Postdoctoral Position: Turbulence in High-Flow Tidal Channels

Applications are invited for a 2-year Postdoctoral Fellowship in flow variability in relation to tidal hydroelectricity development using in-stream tidal energy converters in the Bay of Fundy, Canada, home to the world's highest tides. The position is part of a collaboration among three Canadian universities (Acadia University, Dalhousie University and the University of New Brunswick).

The principal goal of the project is to achieve improved knowledge and understanding of turbulence in high-flow tidal channels through the combined use of state-of-the-art observations and numerical modelling. While the emphasis is on the science, the position also provides opportunities for direct involvement with the industry, including participation in decisions on site selection, turbine monitoring program requirements, and analysis of environmental impacts. The successful candidate will be expected to travel to collaborate with project partners and to attend international conferences The appointment is available for a period of up to two years, with the possibility of renewal for a third year depending on funding. The annual salary will depend on experience, but is expected to be $45,000-$50,000 CND. The start date is open to negotiation, but the position is available to be filled immediately.

Applicants should have a PhD, or be close to completing a PhD, in Physical Oceanography, Mathematics, Fluid Mechanics, Physics, Coastal Engineering, or a related field. A solid background in time series and statistical analysis is a requirement. Experience in numerical fluid dynamics/oceanography, coastal hydrodynamic modelling and/or oceanographic instrumentation for in-situ flow measurement would be advantageous. Applications, including a CV and the names and contact information for three references, and/or inquiries for additional information should be sent to Professor Richard Karsten (richard.karsten@acadiau.ca) and Professor Alex Hay (alex.hay@dal.ca).

Prof. Alex Hay
Department of Oceanography
Dalhousie University
Halifax, NS, Canada
B3H 4R2
Email: alex.hay@dal.ca

Prof. Richard Karsten
Acadia Tidal Energy Institute
Acadia University
Wolfville, NS, Canada
B4P 2R6
Email: richard.karsten@acadiau.ca