



Postdoc Position Immediately Available at Prof. Lei Zuo's Lab

On Power Electronics & Control for 100 W-100 kW Marine Energy Harvesting

Wave Energy Conversion: Towards Research Convergence



Position Summary:

This position requires a Ph.D. degree in Electrical Engineering or a related engineering field with experience on power electronics design and implementation from 100 W to 100kW. As part of this position, the candidate will be expected to contribute significantly to ongoing and potential future related projects, including ocean wave energy conversion, ocean tidal and current energy conversion, offshore wind energy, and regenerative vibration control, funded by the U.S. DOE, ONR, NSF, USDA, national labs, and industry. The candidate works at the University of Michigan, Ann Arbor, and will be engaged with other research, development and outreach activities of Dr. Lei Zuo's research group in both Virginia Tech and University of Michigan. The expected term will be 2+ years, annually renewable.

Roles and Responsibilities:

- 1. Conduct research on topics across power electronics for off grid and grid applications, including AC/DC and DC-DC converter design, energy storage, power management, electrical machines, feedback control, etc.
- 2. Significantly contribute on multiple concurrent projects through research design, data collection,

- analysis, modelling, simulation, implementation and demonstration. Power electronics hardware experience is thus required.
- 3. Manage project activities and staff, including mentorship of doctoral, master's, and undergraduate students.
- 4. Develop new research programs and other professional duties in a timely manner.
- 5. Collaborate with faculty, researchers, staff and students in the project team and from external organizations, to:
 - a. Successfully complete research deliverables;
 - b. Disseminate efforts and findings from research and outreach initiatives including by manuscripts in peer-reviewed publications, topical conferences, symposia, and workshops.

How to apply:

Candidates with required knowledges and experiences can send a **cover letter** and the **resume** with contacts of three **references** to Prof. Lei Zuo

Lei Zuo, Ph.D, Professor

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