

# Job Opening

## Student Research Assistantships

**Applications due by Wednesday, April 26, 2023 at 5 pm (Pacific).**

The [Schatz Energy Research Center](#) at Cal Poly Humboldt has openings for two undergraduate students for research assistantships related to (a) offshore wind power development and (b) biochar life cycle assessment.

These intern positions are anticipated to start on or near May 15, 2023 and continue through August 11, 2023. Internships may be extended depending on the level of research engagement during the summer.

The positions are supported with stipends made possible through the Bob and Lou Cane Memorial Fund.



### Position summaries

The student interns will be assigned responsibilities based on background skillsets, project needs, and student interests. A position is available in each of the following projects:

- **Offshore wind - mooring entanglement:** Floating offshore wind lease areas in California overlap with known marine animal habitats. Floating turbines are anchored to the seafloor using mooring lines, which can become entangled with lost fishing gear or other debris, and in turn entangle wildlife (i.e. secondary entanglement).

Our entanglement mitigation project will develop a system of technologies to monitor and identify mooring line entanglements. We will use computer simulation to predict floating turbine motions and cable stress for scenarios with and without secondary entanglements, and this position will support those efforts.



- **Biomass - life cycle assessment of biochar:** Biomass conversion technologies convert forestry or agricultural waste to valuable products or fuels. These technologies have the potential to reduce emissions related to forestry treatments.

Our environmental assessment aims to quantify the life cycle emissions and characteristics of biochar generated using small scale conversion equipment. These conversion systems are being designed to support decentralized biomass utilization and enable remote communities to convert forest materials onsite. This position will include hands-on laboratory experimentation.



# Qualifications

## Minimum qualifications

### Education and Experience

- Eligible applicants must be undergraduate students in good academic standing at Cal Poly Humboldt who are registered for at least 6.0 units the coming semester (Fall 2023).

### Required knowledge, skills, and abilities

- Proficiency with modern office computing, including word processing and spreadsheet analysis.
- Ability and willingness to work with and learn from others effectively in a team setting.
- Ability to communicate effectively in written and interpersonal contexts.
- Ability to self-motivate and follow through on assignments.
- Interest and enthusiasm for issues related to energy and environmental sustainability.
- Ability and interest to engage in quantitative analysis related to simulation of offshore wind turbines (*for applicants to the offshore wind opportunity*).
- Ability and interest to perform analytical measurement and lab testing (*for applicants to the life cycle analysis opportunity*).

## Compensation and term

Interns will receive a stipend of \$5,000 payable in three installments. It is anticipated that interns will contribute approximately 15-25 hours per week toward Center research efforts, dependent on project need and intern availability.

## How to apply

**All application materials must be received by Wednesday, April 26, 2023 at 5 pm (Pacific).**



**Applicants must submit the following via email to [schatzenergy@humboldt.edu](mailto:schatzenergy@humboldt.edu):**

- A formal letter of application. In the letter, please describe your background, what motivates you to apply, and the research opportunity to which you are applying. If you wish to apply to both research opportunities, a separate letter of application for each is required.
- A resume (1 page maximum)
- Unofficial transcripts of prior academic work at Cal Poly Humboldt and other colleges or universities

## Questions?

For additional information, please email [schatzenergy@humboldt.edu](mailto:schatzenergy@humboldt.edu) or call (707) 826-4345.

## Who we are and what we do

Since 1989, the Schatz Center has been a leader in applied research and project development for clean and renewable energy. Our current portfolio includes microgrid development, sustainable transportation design, carbon life cycle analysis, solar product testing, offshore wind feasibility studies, and planning and policy for clean energy access around the globe.

As residents of a rural coastal community, we are keenly aware of our social and environmental responsibilities. We are committed to increasing energy access and resilience for communities worldwide — and do so through clean and renewable design that reduces climate change and restores environmental and human health.



## About the Bob and Lou Cane Memorial Fund

The Bob and Lou Cane Memorial Fund was established to honor the memories of Bob and Lou Cane by supporting two student internships at the Schatz Energy Research Center.

Internships will provide transformational experiences to the students and will enable them to engage with Schatz Center staff and affiliated faculty on research, scholarship, and creative activity endeavors. The fund will support two undergraduate research assistantships for summer 2023 at \$5,000 per student.

Cal Poly  
**Humboldt.**

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*For more information, visit [schatzcenter.org](http://schatzcenter.org)*