

HSU Sponsored Programs Foundation
Job Announcement
Research Assistant or Engineering Technician

Position Summary: The [Schatz Energy Research Center](#) has an opening for **one or more** Research Assistants or Engineering Technicians. We are looking to fill positions for one or more of the following topic areas: offshore wind power, off-grid solar for rural electrification, bioenergy, renewable energy microgrids, and clean transportation. Positions are based in Arcata, California (USA). A six-month commitment is required (starting in early 2019). Reappointment is desirable but contingent on funding, workload requirements, and performance.

Background: The Schatz Center is an international leader in applied research and project implementation related to clean and renewable energy. Located in a modern facility at Humboldt State University, our dynamic team consists of approximately 40 faculty, professional staff, and students. The Center's portfolio of clean energy projects includes renewable energy power systems, sustainable transportation, energy efficiency, energy planning and policy, and access to energy in Africa, Latin America, and Asia. Project activities include research, development, demonstration and deployment, planning, and analysis.

Compensation: \$21.88-\$24.13 per hour, depending on skills and experience. The position(s) will be three-quarter time or full-time, benefited, and non-exempt (hourly). Benefits include medical, dental, vision, and life coverage. Retirement benefits become available after one year of service. This is not a state position.

Duties and Responsibilities: Based on background skillsets, project needs, and interests, the selected applicant(s) will work on one or more of the following active research areas:

1. **Offshore Wind Power:** Examine the socioeconomic and policy dimensions of offshore wind power in Northern California by conducting stakeholder outreach and evaluating policies at the local, state, and federal levels.
2. **Off-Grid Solar for Rural Electrification - Product Performance Testing:** Conduct laboratory and desk-based research, data analysis, and report writing/review to support deployment and quality assurance of off-grid solar electricity and/or solar water pumping systems in Africa and/or South Asia.
3. **Off-Grid Solar for Rural Electrification - Analysis of Solar Product Users, Technology, & Impacts:** Perform analysis of several nationally representative household energy surveys to characterize solar product users. Model environmental and welfare benefits/impacts of energy transitions. Develop and apply tools and approaches to assess the market-readiness of off-grid solar products.
4. **Bioenergy:** Analyze the performance of biomass conversion systems with physical testing and data analysis. Assess the quality of biomass and biochar products by conducting laboratory tests and physical assessments. Evaluate the market for biochar by designing and conducting interviews with biochar producers and consumers.
5. **Renewable Energy Microgrids:** Assist with microgrid and EV charging station design, permitting and regulatory processes. Assist with CAD drawing. Assist with evaluation of system benefits and business model. Construction observation.
6. **Clean Transportation:** Data processing and analysis of electric vehicle load projections. Perform optimization modeling to develop vehicle charging infrastructure. Review and apply equipment specifications. Contribute to translating analysis results to real world scenarios.

Key Responsibilities Within These Research Areas May Include:

1. Community and/or stakeholder outreach and policy analysis (research areas 1, 3, 4)
2. Statistical/mathematical analysis and modeling (research areas 3, 6)
3. Technical design, analysis, testing, and fieldwork (research areas 2, 4, 5)

Minimum Qualifications: Eligible applicants should have a bachelor's degree or equivalent experience in an appropriate natural science, social science, engineering, or policy field; be computer literate and proficient in MS Word and Excel; be detail-oriented, and have very good writing and communication skills.

Desirable Qualifications:

*Note that eligible applicants are **not** expected to have qualifications in all of the listed research areas nor all the qualifications listed under any specific research area.*

Qualifications relevant to all positions: Experience and/or knowledge of renewable energy systems, technologies, and related policies.

Qualifications relevant to specific research areas:

1. **Offshore Wind Power:** Experience with interview/survey design, social science methods, human subjects research, statistical analysis, and/or facilitating meetings with stakeholders, policymakers, and researchers. Knowledge of energy policy, environmental policy, and the permitting process for offshore wind projects.
2. **Off-Grid Solar for Rural Electrification - Product Performance Testing:** Laboratory experience including measurements using electronic instrumentation. Experience with solar energy, rechargeable batteries, small scale water pumping systems, and/or efficient lighting systems. Experience with and knowledge of social issues in the developing world, particularly in Africa and Asia. Language skills relevant to the work in Africa and Asia, such as French, Chinese, Swahili and Hindi. Construction and trade skills in areas such as electrical installations, plumbing, and general building.
3. **Off-Grid Solar for Rural Electrification - Analysis of Solar Product Users, Technology, & Impacts:** Experience with data processing, statistical analysis for causal inference, clustering algorithms, and sensitivity analysis. Experience analyzing nationally representative survey data and survey sampling methodologies. Proficiency in the R Programming Language.
4. **Bioenergy:** Experience making measurements in a laboratory environment. Experience with data analysis of thermal and fluid systems to evaluate system performance. Construction and trade skills in areas such as electrical installations, plumbing, and general building.
5. **Renewable Energy Microgrids:** Knowledge of electricity fundamentals, solar PV and battery storage systems. Experience with engineering plan sets and CAD.
6. **Clean Transportation:** Experience with model optimization techniques. Proficiency in data analysis and modeling in R, Python, MatLab, or similar languages, and GIS. Knowledge of concepts related to electricity fundamentals, utility rate structures, distributed energy resources, and demand response.

Application Procedure: Applicants should submit (i) a letter of application, (ii) a one-page resume, (iii) and an [HSU SPF Employee Information Form for Applicants](#) to the Schatz Energy Research Center via email to serc@humboldt.edu. In the letter, be sure to identify which research area(s) are of greatest interest to you and what motivates you to apply for this opportunity. The letter will be used in part to evaluate the quality of the applicant's writing.

Application Deadline: All application materials must be received by 4:00 p.m. Pacific Time (US), Wednesday, December 19, 2018.

Questions and Inquiries: For additional information about the position, please send an email to serc@humboldt.edu or call 707-826-4345.

Humboldt State University Sponsored Programs Foundation (HSU SPF) is an Affirmative Action/Equal Opportunity Employer. We consider qualified applicants for employment without regard to race, religion, color, national origin, ancestry, age, sex, gender, gender identity, gender expression, sexual orientation, genetic information, medical condition, disability, marital status, protected veteran status, or any other legally protected status. More information about HSU SPF's Equal Employment Opportunity hiring can be found [here](#).

For assistance with the application process, please submit an Accommodation Request Form which can be found [here](#) or call the SPF Interim Compliance Support Coordinator at (707) 826-5169.