THE UNIVERSITY OF VERMONT
ENGINEERING AND
MATHEMATICAL SCIENCES

Dr. Kathryn Hinkelman, Assistant Professor (Fall '24)
Department of Civil and Environmental Engineering
University of Vermont, Burlington, VT 05405

Fully-Funded Ph.D. Positions in Environmental Engineering

The Sustainable Energy and Environments (SEE) Laboratory in the Department of Civil and Environmental Engineering (CEE) at the University of Vermont (UVM) invites applications for **Ph.D. positions in Environmental Engineering** under the supervision of Dr. Kathryn Hinkelman. The SEE Laboratory develops sustainable, resilient, and equitable energy technologies at the nexus of built and natural environments, with expertise in building and community energy systems (e.g., district heating and cooling, HVAC/R), computational modeling and simulation (e.g., Modelica), and system-level design (e.g., biomimetics, LCA). Our research offers **extensive collaboration** with other universities and DOE national labs (e.g., NREL, LBNL, PNNL). The successful candidate will have a unique professional development opportunity to help shape the newly-established laboratory and grow sustainable energy research in CEE at UVM.

Appointment

The appointment is expected to start on **January 13, 2025**; however, this date can be shifted forward (e.g., a Fall semester start on August 26, 2024) or backward upon mutual agreement to match the needs of the selected candidate. Please note that the admission of selected candidates is conditional on admission to a graduate program in CEE at UVM. See Graduate Admissions at UVM for full application requirements.

Qualifications

The following are some characteristics and qualifications that align well with the position:

- A highly-motivated researcher that demonstrates a strong work ethic and a willingness and ability to learn new knowledge quickly.
- A bachelor's or master's degree (preferred) in Environmental, Civil, Mechanical, or Architectural Engineering, or a closely related field, prior to starting the position.
- Expertise in some of the following areas: fluid mechanics, heat transfer, thermodynamics, building and community energy and control systems, computational modeling and simulation (e.g., CFD, FEA, EnergyPlus, TRNSYS), or environmental life cycle assessment (e.g., SimaPro, GaBi, openLCA).
- Programming experience in Python, Julia, Modelica, C/C++, or MATLAB.
- Strong English language skills, including technical writing and verbal communication.
- The ability to work successfully independently and in collaborative team environments.
- Research experience with tangible outcomes (e.g., peer reviewed publications) is preferred.

We encourage candidates to apply even if they do not think they possess every single point above, particularly for candidates from underrepresented or marginalized groups who may not have had access to certain development opportunities. We will work with any selected candidates to develop targeted competencies on a personalized basis.

About the University of Vermont

Burlington, home of UVM, is known for its high quality of life, features year-round outdoor recreation and cultural events, and is recognized for its world-leading accomplishments in urban sustainability. Greater Burlington has a population of ~150,000 and enjoys a panoramic setting on Lake Champlain, bordered by the Adirondack and Green Mountains. The City of Burlington is one of the most environmentally progressive cities in the nation, with 100% of its electricity coming from renewable sources, while Vermont has the "the largest share of in-state electricity net generation from renewable resources of any state".

To Apply

Please contact Dr. Kathryn Hinkelman (khinkelman@psu.edu) with the subject heading "UVM SEE Lab Graduate Application" and provide (1) a CV (including a publication list, if available), (2) unofficial transcripts (both undergraduate and graduate if applicable), and (3) a one-page research statement introducing your research experience and interests, particularly with respect to the criteria mentioned above. Additional information may be requested upon review. Review of applications will continue until all positions are filled.