

FUNDED POST-DOCTORAL POSITIONS AT THE SBS LAB

ABOUT THE LAB

The [Sustainable Buildings and Societies \(SBS\) Laboratory](#) is moving from the University of Colorado to **Pennsylvania State University**. The lab is looking to recruit **two (2) individuals with doctoral degrees, with complete funding guaranteed**. New candidates will start in January 2022, with PSU.

POSITION DESCRIPTION

Currently, the SBS Lab is seeking two Post-Doctoral candidates for **separate positions with different research focuses**.

Position 1: Design, modeling, and construction of a grid-interactive community test facility with buildings, PVs, smart appliances, electric vehicles, batteries, and other smart devices. The physical and virtual testbeds based on this facility will be used to perform research in indoor environmental quality, demand responses, energy efficient, advanced control. **The Post-Doctor is also expected to** 1) supervise two Ph.D. students who will also work on the facility; 3) develop and conduct collaborative research with Penn State faculty, industry partners, and DOE national laboratories; 4) develop new research papers and grant proposals using this facility.

Position 2: Assist the Associate Director for Research at the [Global Building Network](#) to establish and maintain international collaborative research on sustainable buildings. The Global Building Network is an initiative of Penn State and the United Nations Economic Commission for Europe (UNECE). It aims to advance building science, construction processes, and building management to create an international framework that will make buildings more sustainable, more efficient, and healthier for people.

EXPERIENCE

The following criteria are **required for Post-Doctoral candidates applying for either position**:

- Ph.D. in Mechanical Engineering, Architectural Engineering, Electrical Engineering, or a related thermal-fluid science field
- Demonstrated experience in building energy systems through journal publications
- Strong knowledge in building energy efficiency, district energy system, or distributed energy re-course
- Excellent verbal and written communication and presentation skills

Additional Requirement for **Position 1**:

- Prior experience conducting experiments on building energy and control systems - **required**
- Prior experience designing or building experiment facilities - **highly desired**
- Demonstrated experience with system modeling and model development - **highly desired**

Additional Requirement for **Position 2**:

- Prior experience in developing grant proposals - **required**
- Successful proposal development with US funding agencies (e.g., NSF, DOE) - **highly desired**

CONTACT + DEADLINES

Applicants with specific research questions or inquiries about the SBS Lab can reach the director of the lab, **Dr. Wangda Zuo**, at wangda.zuo@psu.edu. Details about deadlines and admissions for these post-doctoral positions are forthcoming; **interested applicants are encouraged to contact Dr. Zuo**. The departmental page for Architectural Engineering at PSU can be found [here](#).

