



Berkeley Lab

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY



Simulation Research Group - Job Openings Building Technologies Department

Two Scientific Engineering Associates (Requisition 73431) and One Post-Doctoral Fellow (Requisition 73434)

The Building Technologies Department seeks multiple researchers to design, develop, implement and distribute next generation building simulation tools based on Modelica, the Functional Mockup Interface standard and the Building Controls Virtual Test Bed.

Candidates of these positions will:

- Conduct research, implement and distribute next generation Modelica-based simulation-tools for building energy and control systems.
- Develop and implement object-oriented, equation-based simulation models of renewable energy systems and of control algorithms in Modelica.
- Create software to link domain-specific simulation programs to each other for co-simulation in support of rapid prototyping, for simulation-based interactive learning and for model-based operation.
- Conduct research and develop software to extend the applicability of building simulation tools from design to system commissioning and operations.

Mechanical Research Scientist/Engineer (Requisition 72848)

The Building Technologies Department seeks a Research Scientist to develop energy-efficient facade-related technologies and systems for very low energy buildings using simulation tools and field studies, and then accelerate widespread market adoption of these technologies and systems. The candidate will:

- Develop, implement, evaluate, and promote existing and next generation facade-related technologies and systems in support of very low energy and Net Zero Energy Buildings.
- Develop and implement object-oriented equation-based simulation models addressing thermal and daylighting aspects of facade- and building-related energy systems and their control algorithms.
- Develop and apply domain-specific simulation tools to support rapid prototyping of new technologies and systems, and integrated facade-system and whole-building level analysis.
- Extend the applicability of building simulation tools from design to system commissioning and to operations.

Berkeley Lab offers employees a competitive compensation and generous benefits package, and an opportunity for career growth.

For more information and to apply, go to <http://jobs.lbl.gov> and enter the requisition number, or go directly to <https://lbl.taleo.net/careersection/2/jobdetail.ftl?lang=en&job=73431> (Scientific Engineering Associate) <https://lbl.taleo.net/careersection/2/jobdetail.ftl?lang=en&job=73434> (Post-doctoral fellow) <https://lbl.taleo.net/careersection/2/jobdetail.ftl?lang=en&job=72848> (Research Scientist/Engineer)

LBNL is an Equal Opportunity/Affirmative Action employer.

The mission of Berkeley Lab's Environmental Energy Technologies Division is to perform analysis, research and development, leading to better energy technologies and reduction of adverse energy-related environmental impacts. Our work increases the efficiency of energy use, reduces its environmental effects, provides the nation with environmental benefits, and helps developing nations achieve similar goals through technical advice.