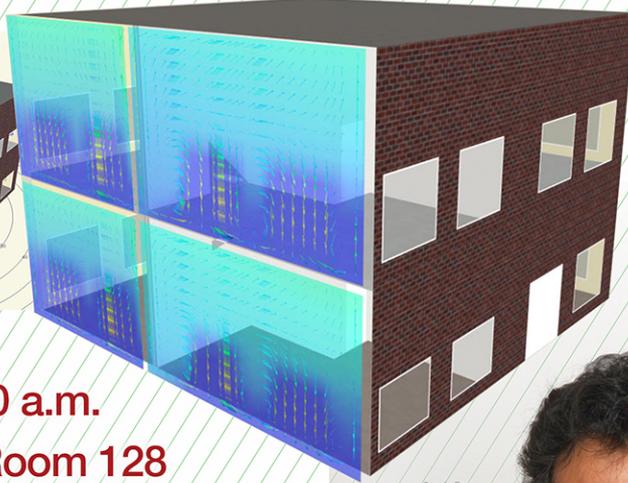
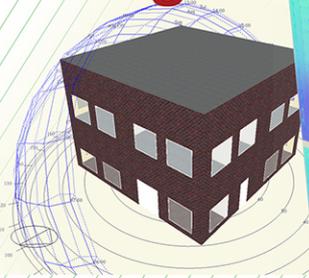


Modeling for Building Energy Savings



Monday
August 24, 10:30 a.m.
Building 5100, Room 128
JICS Auditorium

Abstract

Buildings use 41% of the energy used in the United States, and consumption is projected to grow by 25% in the next two decades. Use of energy simulation tools in the design of energy-related building systems is essential for identifying methods that improve building efficiency. A recent study showed that buildings designed with simulation consume 44% less energy.

Buildings researcher Mahabir Bhandari will discuss how EnergyPlus, DOE's open-source flagship, whole-building energy simulation engine improves energy analysis through calibration of building simulation models using detailed measured data. Bhandari will also present how simulations can be applied to challenging needs based on case studies on site-wide energy savings and assessment analysis.



Dr. Mahabir Bhandari

is an R&D staff member in the Whole-Building and Community Integration Group at ORNL. He has more than 15 years of experience in fenestration and whole-building energy modeling. He is a Leadership in Energy & Environmental Design (LEED)-accredited professional with a specialty in building design and construction. His current research includes thermally insulated and multifunctional windows, module development for EnergyPlus, whole-building energy modeling, manual- and auto-calibration, combined heat and power, industrial energy data analysis for energy-savings impact, and integration of building information modeling.