

# Job Title: R&D Associate Staff Member - Weatherization Assistance Program

Requisition Id 6558

## Overview

The Integrated Building Performance Group is seeking an Associate R&D Staff Member to join ORNL's dedicated team in support of the U.S. Department of Energy (DOE) programs to safely and sustainably reduce energy costs for low-income households.

ORNL supports DOE's Weatherization Assistance Program (WAP) with a variety of activities, including through the evaluation of various weatherization programs and efforts. The successful applicant to this position would work in the areas of residential building weatherization and indoor air quality and have the opportunity to participate in a wide range of research and development opportunities.

ORNL has been tasked by the DOE Weatherization Assistance Program to perform a study to investigate the safety of weatherizing homes with existing vermiculite insulation. Vermiculite insulation has the high potential for containing asbestos. The program has no data on the actual impact of diagnostic measurements (e.g., blower door measurements) or the installation of energy conservation measures on asbestos levels in homes with existing vermiculite insulation. Questions include: Does blower door testing increase asbestos levels in homes with existing vermiculite insulation? Is there a way to safely insulate over existing vermiculite insulation without impacting indoor asbestos levels and/or occupant and worker health? A field study is envisioned to measure indoor asbestos levels in homes with existing vermiculite insulation before, during, and after (a) blower door tests are conducted and (b) insulation is installed consistent with program and industry standards. The study results will be used by DOE to develop additional guidance on strategies to address asbestos contamination in vermiculite insulation (i.e., how to better approach the weatherization of homes with existing vermiculite insulation, including precautions needed, avoidance criteria, etc.).

## Job Duties and Responsibilities

- Serve as the principal investigator for the vermiculite study. This will include:
  - Finalizing the experimental plan for the study and gaining the buy-in to the plan from the sponsor and the weatherization network
  - Implementing the plan by working and contracting with states, local weatherization agencies, asbestos contractors, and others
  - Collecting and ensuring the quality of all study data
  - Analyzing the data writing the final report
  - Provide periodic progress reports to the sponsor and the weatherization network
- Participate in the development and completion of both policy- and audit-related projects and reports.
- Communicate with program sponsors and participate in meetings with and current and potential sponsors of work
- Communicate with the network on current and future work, including presentations at conferences and workshops
- Work with collaborators both inside and outside the laboratory to further WAP goals and priorities
- Participate in the development of progress reports, white papers, fact sheets, case studies, and other guidance and reporting documents for the program

## Basic Qualifications

- PhD in mechanical engineering, architectural engineering, or related engineering discipline with 3 or more years of relevant experience
- Experience and education in indoor air quality
- Proficiency in statistical analysis
- Knowledge of building science
- Familiarity with weatherization practices and diagnostics
- Proficiency with the use of the Microsoft Office suite, particularly Word and Excel
- Excellent written and verbal communication skills

## Preferred Qualifications

- Experience with statistical software (e.g. R or similar)
- Experience with indoor air quality modeling software such as CONTAM
- Experience with building energy modeling tools such as EnergyPlus or OpenStudio
- Willingness to travel for the execution of the vermiculite study
- Active participation in professional societies such as the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE)

This position will remain open for a minimum of 5 days after which it will close when a qualified candidate is identified and/or hired.

We accept Word (.doc, .docx), Adobe (unsecured .pdf), Rich Text Format (.rtf), and HTML (.htm, .html) up to 5MB in size. Resumes from third party vendors will not be accepted; these resumes will be deleted and the candidates submitted will not be considered for employment.

If you have trouble applying for a position, please email [ORNLRecruiting@ornl.gov](mailto:ORNLRecruiting@ornl.gov).

ORNL is an equal opportunity employer. All qualified applicants, including individuals with disabilities and protected veterans, are encouraged to apply. UT-Battelle is an E-Verify employer.