

## **Measuring Radon Gas Flow in a Home**

Zachary R. Nault

*Departmental Affiliation:* Physics and Astronomy  
College of Arts and Sciences

The primary goal of this research is to measure how radioactive Radon gas flows into a home. Radon is a naturally occurring gas produced in the Earth's crust by Uranium ore. As it moves up toward the surface it can enter homes and places of business through the floor. People can then be exposed to this Radon which can lead to health problems such as lung cancer. For this preliminary study, one house was selected that was previously known to have a Radon gas problem. The house has a Radon Evacuation System that pumps the Radon out of the home where it can safely decay in the air. This system is to be deactivated and the change in the Radon levels monitored. From this data we should be able to better understand how the radon is entering the home and moving within it.

*Information about the Author:*

A senior physics major, Zachary has an interest in nuclear physics and high energy physics.

*Faculty Sponsor:* Dr. Shirvel Stanislaus

*Student Contact:* [zach.nault@valpo.edu](mailto:zach.nault@valpo.edu)