FOR IMMEDIATE RELEASE
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University of Southern Indiana

Editor's Note: This release and downloadable photo can also be found on our website.

USI professors to present "RADON: Health, Hazards, and your Home"

Dr. Kent Scheller and Dr. William Elliott, associate professors in physics and geology at the University of Southern Indiana, will present "RADON: Health, Hazards, and your Home" at 6:30 p.m. Thursday, September 24 in room 1101 in the Education and Science Center.

Their free public lecture talks about the presence of radon gas in the Tri-State. Scheller and Elliott will present findings of their research on environmental radon, its source and where it is most abundant locally. The hazards of radon in your home will be discussed, along with the options of homeowners to remove this dangerous, radioactive gas.

Scheller and Elliott's paper, "Geochemical and γ ray characterization of Pennsylvanian black shales:

Implications for elevated home radon levels in Vanderburgh County, Indiana," was accepted and published in the Journal of Environmental Radioactivity this summer.

Radon is a radioactive gas that results from the decay of uranium in the Earth's crust. The study characterizes the presence and relative quantity of radon precursors in the Pennsylvanian black shales of southwest Indiana. Cores were drilled on the USI campus to a depth of 780 feet during exploration for coal-bed methane. Gamma ray logs of the cores were taken to measure radioactive activity. Characteristic gamma rays from various isotopes were identified confirming the presence and relative quantity of radon precursors in core samples. Geochemical analysis of cores was also conducted to measure presence and quantity of trace metals and radon precursors.

Of 744 homes tested in Vanderburgh County from 2007 to 2013, 169 homes (22.7 percent) had elevated radon levels greater than 4 pCi/L. Additionally, 246 homes (33.1 percent) had measured radon levels of 2-4 pCi/L. About 80 percent of radon levels greater than 4 pCi/L are located in proximity to the Dugger and Shelburn formations, or the Shelburn and Patoka formations. These formations are stratigraphically associated with Pennsylvanian black shales, which are interpreted to be the ultimate source of radon in Vanderburgh County. High radon levels also occurred in homes built on alluvium, terrace deposits, and outwash adjacent to the Ohio River.

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Founded in 1965, the University of Southern Indiana is celebrating its 50th anniversary in 2015. USI enrolls approximately 9,500 undergraduate, graduate and doctoral students in 80 majors. A public higher education institution, located on a beautiful 1,400-acre campus in Evansville, Indiana, USI offers programs through the College of Liberal Arts, Romain College of Business, College of Nursing and Health Professions and the Pott College of Science, Engineering, and Education. USI is a Carnegie Foundation Community Engaged University and offers continuing education and special programs to more than 15,000 participants annually through Outreach and Engagement. Find 50th anniversary information at www.usi.edu/50.

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