

# 28<sup>th</sup> Special seminar on The IDEC Institute, 15<sup>th</sup> PHIS Seminar

**Date:** July 4th, 2023, 12:00 ~

**Place:** Hiroshima University, Graduate School of  
Advanced Sciences of Matter Build, 6F Seminar room

**Online:** <https://x.gd/sLgwy>

**Title :** Radon as an indicator of ventilation  
in a built environment

**Name :** Prof. Janja VAUPOTIČ, Ph.D.

**Affiliation :** Department of Environmental  
Sciences, Jožef Stefan Institute,  
Ljubljana, Slovenia



## Abstract

Radon ( $^{222}\text{Rn}$ ) as a radioactive noble gas is the subject of many investigations in various scientific disciplines. As a gas, it is very mobile and carries information long distances across the Earth's crust, oceans and atmosphere. Indoors it accumulates and reaches at least an order of magnitude higher concentrations than outdoors. Its radioactivity assures low detection limits with simple monitors. Because of these unique characteristics, it has recently become increasingly used as an indicator of the effectiveness of ventilation in the built environment. Due to small, portable, silent and simple radon monitors, which are unobtrusive for building users, long-term continuous follow-up of radon can be easily conducted in living and working environments. Recent studies, also ours, emphasize the benefits of the simultaneous measurements of radon and carbon dioxide to indicate indoor air quality. Some examples of radon monitoring in living and working environments in Slovenia will be presented. They represent input data for modelling, where the adequacy of design ventilation rates is checked.

Microbial Genomics and Ecology



Contact

Fumito Maruyama, Ph.D.

Tel & Fax: 082-424-7048

E-mail: [fumito@hiroshima-u.ac.jp](mailto:fumito@hiroshima-u.ac.jp)

HP: <https://mge.hiroshima-u.ac.jp/en/>

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