



INDOOR RADON ACTIVITY CONCENTRATION IN UTFPR/BRAZIL

YUMI ROCHA HASHIMOTO

**Federal Technological University of Paraná - Paraná, UTFPR
Av. Sete de Setembro, 3165. Curitiba, PR. Brazil
yuhashimoto1@gmail.com**

OBJECTIVES AND METHODOLOGY

○ OBJECTIVES

- To measure the ^{222}Rn concentrations in two houses and on the outside.
- To compare the results obtained with the reference limits set by international organizations.
- To suggest mitigation methods, if found higher values than the recommendations of the competent organs.

○ METHODOLOGY

- 40 CR-39 detectors coupled in diffusion chambers were installed for indoor and outdoor measurements in two pre-fabricated houses.



- The exposure time was three months.
- The detectors were etched.
- The radon concentrations were obtained from the calibration methodology developed by Federal Technological University of Paraná and Nuclear Technology Development Center.

SUMMARY OF RESULTS

- All the concentrations were low.

Location	Average results (Bq/m³)
House 1	10.1 ± 1.5
House 2	7.8 ± 1.2
Exterior	11.5 ± 3.0

- Thus, no mitigation was necessary.

