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HawkRadon

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HawkRadon

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Abstract

In this project, the students decided to measure the values of radon in the water and in the air in different points of our city and, at the same time, warn people about the consequences of high values. We placed several detectors to measure the values of radon concentrations and concluded that some of the values were well above the reference values. The project was only possible due to the unconditional help of the city council of Pinhel, the LabExpoRad of Beira Interior University and the students that attended our school last year. We think that this work represents a school open to an open society.

Keywords

Community; detectors; environmental awareness; radioactivity; radon.

Open Schools for Open Societies

Conferência OSOS

Open Schools for Open Societies

Pavilhão do Conhecimento – Centro Ciência Viva

14 Fevereiro 2020

HawkRadon

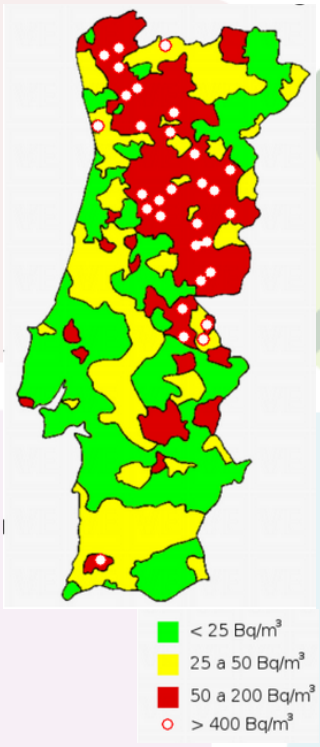
Agrupamento de Escolas de Pinhel • Pinhel • Ana Paula Saraiva • 12ºA

This project was only possible due to the unconditional help of some institutions and the students that attended our school last year because they started this.

Agrupamento de Escolas de Pinhel

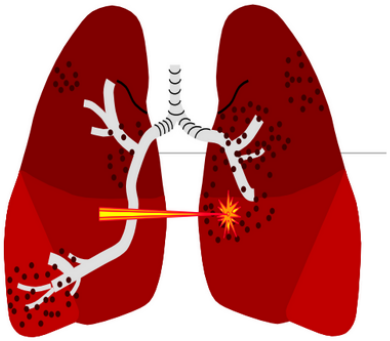
UNIVERSIDADE BEIRA INTERIOR

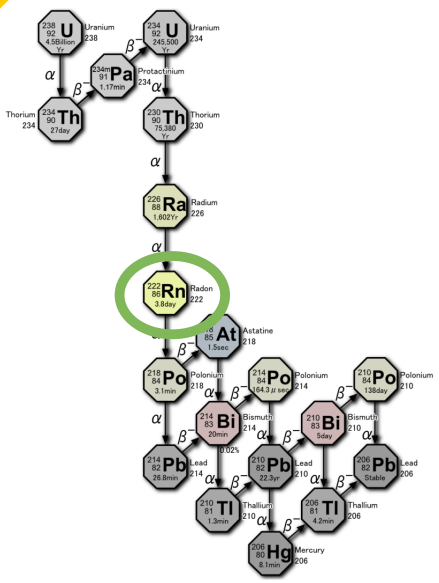
Pinhel
cidade falcão



Granite → Radon → Cancer

Sentir Feel



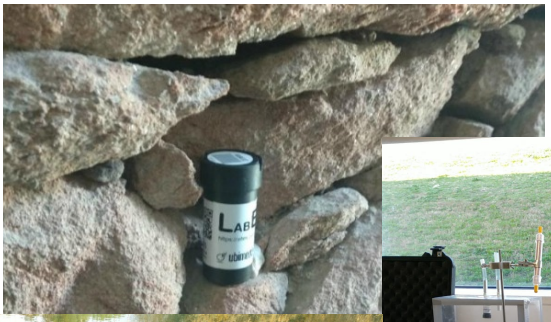


CIÊNCIA VIVA

Imaginar Imagine

This problem and the dangers it presents are not very well-known. In order to realize how serious this problem is, we decided to acquire data on concentrations of radon in our area.

Our class carried on the work initiated by the students of Physics in the past year and together we placed several detectors to measure the values of the concentrations.



CIÊNCIA VIVA

LabExpoRad
UNIVERSIDADE DA BEIRA INTERIOR

Formulário de registo - Radão na Água e Ar

A.1 Amostra

Identificação	Folha de amostra nº		Técnico	
Localização da amostra	País	Portugal	Distrito	Guarda
	Código Postal		Cidade/ Vila	Pinhel
Agrupamento de Escolas de Pinhel	Localização exata da amostra	N.A.		
	Origem da água	N.A.		
	Identificação do dispositivo de amostragem	N.A.		
			2019	

A.2 Medição da concentração da atividade de radão

Água		Ar	
Nº amostra	A (Bq/L)	Nº detetor	A (Bq/m³)
1	32,8	1	411,7
2	188,5	2	440,3
3	217,0	3	232,6
4	0,2	4	459,0
5	431,0	5	2000,6
6	156,3	6	643,1
7	188,3	7	684,0
8	316,3	8	924,1
9	8,3	9	424,9
10	4,6	10	917,3
11	5,0	11	336,4
12	5,3	12	257,1
13	7,3	13	410,9
14	4,6	14	211,7
Comentários	Resultados preliminares.		
		Assinatura	

Some of the worst :
2000,6 Bq/m^3
924,1 Bq/m^3
917,3 Bq/m^3

Criar Create

The best way to face this problem is to use the information we gathered to inform the general population about this subject.

Reference level:

- 300Bq/m^3 in air;
- 500Bq/L in water.

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Partilhar Share

Soon we will host an open door conference and we will invite everyone, so that we can educate them on this issue.

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