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## Education in radiochemistry

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### The ISORadioLab project devoted to students of high schools of minor Italian islands: The radon measurements to introduce them to STEM subjects

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ISORadioLab is an INFN (Italian National Institute of Nuclear Physics) citizen science project, mainly devoted to high school students, but also with a broader engagement to middle school student and the population in general. It was born in 2021 as a complementary part of the National RadioLAB INFN project devoted to the indoor radon -222 concentration that involved 9 Italian Regions but also Albania and Ecuador schools[1,2,3]. Both projects are devoted to the students of High Schools to bring them more confident with the items of radioactivity, by presenting and discussing good reasons to acquire and conserve expertise and knowledge in the nuclear field as important contribution to the society.

The students are involved in the in the experimental measurements of the radon-222 concentration by CR-39 solid state nuclear track dosimeters (SSNTD) and with electrete ion chambers inside different places such as their school, home or other indoor sites of their interest. They conduct the experiences in a way that allow to realize that a LAB is not just a physical place but a METHOD of "KNOW" through the "KNOW-HOW".

The preliminary results of this study, together with the evaluation of the knowledge and the risk perception associated to the ionizing radiations are presented. Moreover, this work can be seen as a model to implement the citizen science protocol to map at national scale the radon concentration or every other physical quantity of interest in confined spaces, starting from schools but also in homes, public places, public administrations and so on.

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