

CHALLENGES AND SOLUTIONS

Radiological indices determination and correlation between radioactivity and stable elements in ornamental rocks

T. M. El Hajj¹, <u>P. S. C. Silva</u>², G. A. S. A. Dantas³, A. Santos² and H. Delboni Jr.³

¹University of Alfenas, Rodovia José Aurélio Vilela, 11999, Poços de Caldas, Brasil

²Institute of Nuclear and Energetic Research, Av. Prof. Lineu Prestes, 2242, São Paulo,

Brasil

³University of São Paulo, Rua Professor Melo Moraes, 2373, São Paulo, Brasil





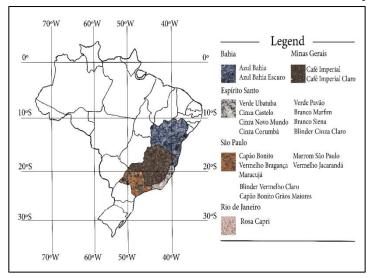


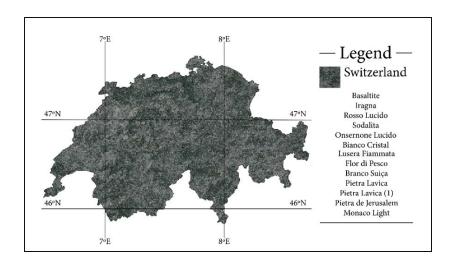
Objective

To evaluate the radiological risk indices of ornamental rocks collected in Brazil and Europe and to correlate its radioactive content with their chemical composition. Samples were chosen according to the best sellers in the market.

Methodology Neutron Activation Analysis amples reference naterial and yntethic standards re weighed and acked. Counted by gamma spectrometry

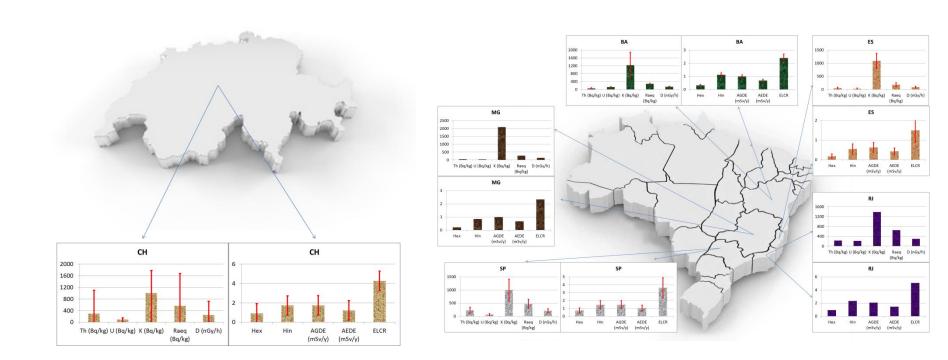
Sampling sites





Results and Discussion

Activity concentration and radiological hazard indices for the samples from Switzerland and Brazil



Conclusions: see in the poster