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# **The Europe Regional Project on Enhancing Coastal Management in the Adriatic and the Black Sea by using Nuclear Analytical Techniques**

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## **Title:** The importance of correction factors for the measurement of some radionuclides in sediment and coastal sand samples by HPGe detector

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HRGS is commonly applied since it is a quite easy, rapid, and non-destructive method amongst all other nuclear analytical techniques. It does not require tedious and complex procedures for the samples to be counted, i.e. it is quite simple from point of view of sample preparation.

However, the careful data reduction methods should be applied to obtain more accurate the activity results for environmental, marine and other samples.



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The purpose of this study is to estimate the effect of self-absorption( $F_s$ ), true coincidence summing factors( $F_{coi}$ ) and spectral interference( $F_{csi}$ ) for the activity determination of some gamma-emitting radionuclides in sediment and sand samples when a HGRS was used.

The details of the correction methods and the obtained results are presented in poster paper.