P2-18

DETECTION EFFICIENCY FOR γ-RAY SPECTROMETRY USING MARINELLI GEOMETRY

T. Elnimr¹, S. Metwally² and H. El-Gharbawi¹

 ¹ Radioanalysis Research Laboratory, Physics Department Faculty of Science, Tanta University, Tanta, Egypt
² Physics Department, Ain Shams University, Cairo, Egypt

The applicability of a method to determine gamma ray peak efficiency of gammaray detectors is experimentally tested for point and Marinelli sources at various distances from a high-purity Ge detector. The method determines peak efficiency including self-absorption correction for a volume source consisted of any kind of matrix. An overall uncertainty of 3 to 4% was achieved.