Abstract:

Plaster is a building material used for coating walls and ceilings. Plaster starts as a dry powder it is mixed with water to form a paste which liberates heat and then hardens. Traditional sand-cement-lime plaster is used extensively in building work as a decorative or protective coating to concrete and masonry walls and concrete ceilings. To avoid radiation hazardous effects we should be taken some shielding precautions or use shielding materials. In this study, heavy plaster was produced using barite aggregate sand instead of ordinary sand and the linear attenuation coefficients have been measured using gamma spectrometer contains NaI(Tl) detector and MCA at 835, 1173 and 1332 keV.

Keywords: Plaster, Radiation Shielding, NaI(Tl) detector