

Neutron Attenuation Performance of Barite Concrete Samples

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For the radiation safety purpose, a mixed concrete wall setup is being designed and tested at Thai Research Reactor. In this work, using barite as the main aggregate, the concrete samples, which were meant primarily to be used as gamma shielding materials, were evaluated for their neutron radiation attenuation properties. A 50-Ci Am-Be was used as the neutron source and a BF₃ was used to measure the transmitted neutrons. The results between different mixtures are reported and discussed.

Summary

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