ERRATUM

Erratum to: Fission product analysis in HEU irradiated within a boron carbide capsule: comparison of detection methodology at PNNL and AWE

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The authors would like to include Jonathan L. Burnett as the second author, and the complete author group is given in this erratum.

In the original publication, the introductory paragraphs describing Compton suppressed gamma spectroscopy should read; According to Burnett, “Compton suppressed gamma-spectrometers usually consist of a germanium (Ge) detector surrounded by a sodium iodide (NaI) shield. The shield allows the veto of Compton scattered events where the full energy of an incident gamma-photon is not completely absorbed by the Ge detector. The photon exits the Ge crystal leaving only part of its energy to be counted and producing the Compton continuum. This unwanted background may obscure discrete peaks of interest preventing radionuclide detection. The NaI shield measures the escaping scattered photon, allowing simultaneous (Ge + NaI) Compton background events to be rejected. This

produces a significant suppression of the Compton background, a large increase in the measured peak to background ratio and a step-change in detection sensitivity. The improved sensitivity offers advantages for samples containing complex mixtures of fission products. Such samples may produce multiple interferences requiring spectral deconvolution for accurate interpretation. Their combined effect may also elevate the Compton continuum, especially in the presence of high yield fission products and their daughters such as ^{140}Ba (^{140}La) and ^{132}Te (^{132}I)” [21].

Paragraph 4 of the introduction should also reference Burnett and Davies [21].

Reference

21. Burnett JL, Davies AV (2013) Compton suppressed gamma-spectrometry for Comprehensive Nuclear-Test-Ban Treaty samples. J Radioanal Chem 295:497–499

The online version of the original article can be found under doi:[10.1007/s10967-015-4395-8](https://doi.org/10.1007/s10967-015-4395-8).

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