

Abstract Submitted  
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**Decay heat and anti-neutrino energy spectra in fission fragments from total absorption spectroscopy** KRZYSZTOF RYKACZEWSKI, Oak Ridge National Lab — Decay studies of over forty  $^{238}\text{U}$  fission products have been studied using ORNL's Modular Total Absorption Spectrometer. The results are showing increased decay heat values, by 10% to 50%, and the energy spectra of anti-neutrinos shifted towards lower energies. The latter effect is resulting in a reduced number of anti-neutrinos interacting with matter, often by tens of percent per fission product. The results for several studied nuclei will be presented and their impact on decay heat pattern in power reactors and reactor anti-neutrino physics will be discussed.

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