

Abstract Submitted  
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**Updated Decay Data Library for Actinides** F.G. KONDEV, I. AHMAD, J.P. GREENE, Argonne National Laboratory, A.L. NICHOLS, M.A. KELLETT, International Atomic Energy Agency — Accurate decay data for actinide nuclides and their decay chains are important in the nuclear fuel cycles of both thermal and fast reactors. These data have also found increasing application in many other power-related fields such as fuel manufacture and reprocessing, waste storage and management, nuclear facility design, safety assessments and safeguards/proliferation issues. Specific requirements for improved actinide decay data have been outlined in a recent review by Nichols [1]. As a consequence of this review and debate within the nuclear data community, an IAEA Coordinated Research Project (CRP) on “Updated Decay Data Library for Actinides” was initiated in October 2005. Staff from various research laboratories in seven countries and one international body are involved in these efforts to quantify with greater accuracy the complete decay data for almost 40 actinides and 45 of their daughters. An overview of the IAEA CRP programme will be presented, including the present status of the on-going work. Results from new measurements of the decay properties of a number of nuclei, such as  $^{240}\text{Pu}$ ,  $^{243-246}\text{Cm}$  and  $^{249,250}\text{Cf}$ , will also be presented and discussed. This work was supported by the U.S. Department of Energy, Office of Nuclear Physics, under Contract No. DE-AC02-06CH11357.

[1] A.L. Nichols, *Appl. Radiat. Isot.* 55, 23-70 (2001).

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