## **Guides, Standards and Conventions**

## Evaluations of the decay data of $^{137m}$ Ba, $^{137}$ Cs, $^{151}$ Sm and $^{225}$ Ac from the Decay Data Evaluation Project (DDEP) – 2023

Xavier Mougeot<sup>1,\*,ORCID</sup>, Christophe Dulieu<sup>1</sup>, Xiaolong Huang<sup>2</sup>, Mark A. Kellett<sup>1</sup>, Sylvain Leblond<sup>1</sup>, Baosong Wang<sup>2</sup>

## **Author affiliations**

- <sup>1</sup> Université Paris-Saclay, CEA, List, Laboratoire National Henri Becquerel (LNE-LNHB), 91120 Palaiseau, France
- <sup>2</sup> China Nuclear Data Center, China Institute of Atomic Energy, P.O.Box 275 (41), Beijing 102413, China

\* Corresponding author: xavier.mougeot@cea.fr

ORCID: 0000-0001-6161-8208

## Main text

Since 1995, members of the Decay Data Evaluation Project (DDEP) have evaluated the decay data from different radionuclides of special interest for metrology or practical applications, e.g. nuclear medicine, monitoring and reactor shielding, etc. Since 2004, these evaluations have regularly been published under the auspices of the Bureau International des Poids et Mesures (BIPM) on behalf of the Consultative Committee for Ionizing Radiation (*Comité Consultatif des Rayonnements Ionisants*, CCRI).

DDEP evaluations finalised in 2023 are published with their Tables, which summarise the recommended data of the radionuclides and their decay schemes, and the evaluator's report describing the evaluation procedure (Comments).

Tables and Comments of the <sup>137m</sup>Ba evaluation are available here: <u>Ba-137m Report</u>. Tables and Comments of the <sup>137</sup>Cs evaluation are available here: <u>Cs-137 Report</u>. Tables and Comments of the <sup>151</sup>Sm evaluation are available here: <u>Sm-151 Report</u>. Tables and Comments of the <sup>225</sup>Ac evaluation are available here: <u>Ac-225 Report</u>.

All evaluations have been peer-reviewed and approved for publication by the DDEP collaboration. They can be found, along with additional files in machine-readable formats, on the DDEP section of LNHB website. The list of past and present DDEP members is available here.