

## DDEP EVALUATION

### Evaluations of the decay data of $^{55}\text{Fe}$ , $^{55}\text{Co}$ , $^{103\text{m}}\text{Rh}$ , $^{103}\text{Pd}$ , $^{129\text{m}}\text{Sn}$ and $^{166}\text{Ho}$ from the Decay Data Evaluation Project (DDEP) – 2024

Xavier Mougeot<sup>1</sup>, Philippe Cassette<sup>2</sup>, Valery P. Chechev<sup>3</sup>, Christophe Dulieu<sup>1</sup>, Xiaolong Huang<sup>4</sup>, Mark A. Kellett<sup>1</sup>, Tibor Kibédi<sup>5</sup>, Nikolay K. Kuzmenko<sup>3</sup>, Sylvain Leblond<sup>1</sup>, Alan L. Nichols<sup>6</sup>, Brian E. Zimmerman<sup>7</sup>

### Author affiliations

<sup>1</sup> Université Paris-Saclay, CEA, List, Laboratoire National Henri Becquerel (LNE-LNHB), 91120 Palaiseau, France

<sup>2</sup> Sofia University “St. Kliment Ohridski”, Faculty of Physics, 1164, Sofia, Bulgaria

<sup>3</sup> V.G. Khlopin Radium Institute, 28 Second Murinsky Ave, St. Petersburg, 194021, Russia

<sup>4</sup> China Nuclear Data Center, China Institute of Atomic Energy, P.O.Box 275 (41), Beijing 102413, China

<sup>5</sup> Department of Nuclear Physics and Accelerator Applications, Australian National University, Canberra, Australia

<sup>6</sup> Department of Physics, University of Surrey, Guildford GU2 7XH, UK

<sup>7</sup> Physical Measurement Laboratory, National Institute of Standards and Technology, Gaithersburg, MD, 20899-8462, USA

---

## Abstract

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 2024 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  $^{55}\text{Fe}$  evaluation are available here: [Fe-55 Report](#).

Tables and Comments of the  $^{55}\text{Co}$  evaluation are available here: [Co-55 Report](#).

Tables and Comments of the  $^{103\text{m}}\text{Rh}$  evaluation are available here: [Rh-103m Report](#).  
Tables and Comments of the  $^{103}\text{Pd}$  evaluation are available here: [Pd-103 Report](#).  
Tables and Comments of the  $^{129\text{m}}\text{Sn}$  evaluation are available here: [Sn-129m Report](#).  
Tables and Comments of the  $^{166}\text{Ho}$  evaluation are available here: [Ho-166 Report](#).

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](#).