

NUCLEAR DATA PROJECT NUCLEAR STRUCTURE AND DECAY DATA EVALUATION ACTIVITY REPORT

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This report summarizes the nuclear structure and decay data evaluation activities of the ORNL Nuclear Data Project since the 2002 USNDP Meeting. The group's future plans for the nuclear structure and decay evaluations are also included.

The ORNL Nuclear Data Project's responsibility includes the compilation/evaluation of astrophysics reaction cross-section data, as well as the evaluation and compilation of nuclear structure data. The accomplishments and future plans of the astrophysics group are not included in this report. Also not included are the programs for nuclear structure database development and dissemination, which provide a modern and efficient user access to the nuclear data, and for semi-automatic conversion of journal articles and other data sources into ENSDF-format databases. These programs are continuously developed and maintained.

Nuclear Structure and Decay Evaluations

- **Published evaluations:**

Evaluations of nuclear structure data pertaining to all nuclei for the following mass chains were completed, and adopted data, levels, spin, parity and configuration assignments are presented in:

A= 244: Y. A. Akovali, Nucl. Data Sheets 98, 1009 (2003)

A= 217: Y. A. Akovali, Nucl. Data Sheets 100, 141 (2003)

- **Submitted evaluation:**

A=247: Y. A. Akovali; evaluations are completed and submitted. These evaluations have not been reviewed.

- **Evaluation in progress**

Evaluations of $A=243$ nuclei have been started. It is estimated that they will be finalized in Spring 2004.

- ***Plans for future evaluations***

Evaluations of nuclear structure and decay data for $A=241$ and 237 nuclei are planned to be started after the evaluations of $A=243$ nuclei are submitted for publication. $A=241$ and $A=237$ evaluations are expected to be completed in 2004.