



Nuclear Structure and Decay Data evaluation at **MTA Atomki** **Debrecen, Hungary**

Progress Report
for the 2017-2018 period

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Status of the permanent responsibilities



<u>Mass</u>	<u>Last NDS</u>	<u>ENSDF updates</u>
101	1998	2006-10 to 2010-08
102	2009	2009-08
103	2009	2009-10 to 2015-05
104	2007	2007-09 to 2015-06
105	2005	2005-11 to 2015-06

Planned activities for the 2017-2018 period

- Evaluation of the A=101 mass chain in collaboration with the Bucharest center. Debrecen planned to evaluate the ^{101}Kr , ^{101}Rb , ^{101}Sr , ^{101}Y , ^{101}Zr , ^{101}Ru , ^{101}Rh , ^{101}Pd nuclei.
- Evaluation of the A=105 mass chain in collaboration with the Sofia center. In this work the responsibilities of the Debrecen team are the ^{105}Rh , ^{105}Ag , ^{105}In , ^{105}Sn , ^{105}Sb , ^{105}Te nuclei.
- Finishing the evaluation of the full A=46 mass chain, which we started Before this period.

Completed evaluation tasks

- The evaluation of the $A=101$ mass chain was submitted for review, and the comments were received. Meanwhile new experimental data were published for these isotopes. At present we are working on the implementation of the review comments and the inclusion of the new data together with the Bucharest team.
- The evaluation of the $A=105$ mass chain has also been reviewed and the implementation of the review comments are in progress with the Sofia center.
- The evaluation of the $A=46$ mass chain could not be finished. Its completion remained for the next period.

Other activity

Together with the Bucharest and Sofia centers we have submitted a Letter of Intent to participate in the Horizon 2020 Euratom proposal SANDA in order to get funding for ENSDF evaluation in Europe.

The proposal with the included ENSDF activity was reviewed by the experts of the European Commission and judged favorably.

The project is now in the phase of grant preparation.

Plans for the next period

- Completion and publication of the $A=101$ mass chain in collaboration with the Bucharest center.
- Completion and publication of the $A=105$ mass chain in collaboration with the Sofia center.
- Completion and publication of the full $A=46$ mass chain.
- Evaluation of the $A=104$ mass chain.

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