# Progress Report on Nuclear Structure and Decay Data Activities at MTA Atomki


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## Overview of the MTA Atomki evaluation center:

The center at Institute for Nuclear Research (MTA Atomki) consists of two evaluators: János Timár and Zoltán Elekes, who devote altogether 0.4 FTE as a long-term average to mass-chain evaluation work. We are working on mass-chain evaluation since 2009. Our permanent responsibilities are the A=101-105 mass chains. Our evaluation work is funded by the MTA Atomki. During the past two years we could devote to the evaluation work somewhat less effort then the expected average, however we plan to compensate that in the next period. This less effort of course is reflected in the achieved results during this period.

## Status of our permanent responsibilities:

| Mass | Last NDS publication | ENSDF updates |
|---|---|---|
| 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 |

## Mass-chain evaluation and in the 2017-2018 period:

The full evaluation of the A=101 mass chain is in progress in collaboration with the Bucharest center. In this work our responsibilities are the 101Kr, 101Rb, 101Sr, 101Y, 101Zr, 101Ru, 101Rh, 101Pd, while the other isotopes have been evaluated by the Bucharest colleagues. The evaluation was submitted for review and the comments were received. Meanwhile new experimental data were published for these isotopes. Now we are working on the implementation of the review comments and the inclusion of the new data. We have also been working on the full evaluation of the A=105 mass chain in collaboration with the Sofia center. In this work the responsibilities of the Debrecen team are the 105Rh, 105Ag, 105In, 105Sn, 105Sb, 105Te isotopes, while the others are evaluated

by Stefan Lalkovski. This evaluation has also been reviewed and the implementation of the review comments are in progress.

## Other activity:

Together with the two other European data centres (Bucharest, Debrecen, Sofia) 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 Letter of Intent was approved by the core group proposing the SANDA project and consequently the ENSDF activity was included in the proposal. For now, the proposal was reviewed by the experts of the European Commission and judged favorably. Now it is in the phase of grant preparation. This is the first time when the nuclear structure evaluation for ENSDF is included in one of the nuclear data projects funded at the European level.