

## Status report of the Bucharest Data Centre (May 2015 – May 2017)

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### Introduction

The NSDD Data Centre was established in IFIN-HH, Bucharest during the meeting of the network that took place in Vienna in May 2015. Two evaluators are involved in this activity, each of them dedicating 0.2 FTE to evaluation: Alexandru Negret and Sorin Pascu. The activity was supported by IFIN-HH. S. Pascu made an RC proposal at IAEA and a positive answer was recently received. The new Data Centre took the responsibility of six mass chains. The following table lists the cut-off date of these six mass chains:

Mass number	Cut-off date of the latest ENSDF evaluation	Observations
57	September 24, 1998	Under evaluation by A. Negret, B. Singh and R. Firestone
58	January 10, 2010	
59	February 8, 2002	Under evaluation by S. Basunia, in review
117	March 1, 2009	
118	November 1, 1992	
119	December 1, 2008	

### Evaluation activities

During the period 2015-2017 the two members of the IFIN-HH Data Centre were involved in the following evaluation activities:

The full evaluation of the A=57 mass chain by A. Negret, B. Singh and R. Firestone. Also, A. Negret and B. Singh are currently involved in the evaluation of the individual nucleus  $^{86}\text{Sr}$  (the latest evaluation of the A=86 mass chain being performed in 2015 by the same authors).

The full evaluation of the A=130 mass chain is currently performed by S. Pascu, B. Singh and A. Rodionov.

The full evaluation of the A=101 mass chain was performed within a collaboration between the two European Data Centres established in Debrecen and Bucharest. A. Negret performed the evaluation of  $^{101}\text{Sn}$ ,  $^{101}\text{In}$ ,  $^{101}\text{Cd}$  and  $^{101}\text{Ag}$ , S. Pascu evaluated  $^{101}\text{Nb}$ ,  $^{101}\text{Mo}$  and  $^{101}\text{Tc}$  while the other isotopes were evaluated by the colleagues from Debrecen. The final version of the A=101 evaluation is foreseen for this year.

### Other activities

The members of the Bucharest Data Centre are concerned also by the spreading of the evaluation activities in Europe. Indeed, as it was already pointed out several times, the European contribution to ENSDF is currently rather limited, and only two NSDD Data Centres are active (Debrecen and Bucharest). In order to tackle this issue, a meeting took place in Debrecen in February 2016. A few actions were discussed during the meeting:

- A significant effort was made to recognize the importance nuclear structure evaluation activities within the Long Range Plan issued by the Nuclear Physics European Collaboration Committee (NuPECC). Following the presentation made by P. Dimitiou, the final version of 2016/2017 Long Range Plan acknowledged the nuclear structure evaluation as a significant activity for the development of nuclear physics in Europe.
- A. Negret, D. Balabanski, P. Dimitriou, Z. Elekes, Th. Merzimekis, S. Pascu and J. Timar contributed to the ND2016 conference Bruges, September 2016 with a short presentation and a poster with the title "Nuclear Structure and Decay Data Evaluation in Europe". The aim was to raise the awareness of the nuclear data community towards the difficulties of the nuclear structure evaluation activities in Europe.
- A Memorandum of Understanding for the creation of a European community gathering together the laboratories involved in nuclear structure evaluation and compilation but also in outreach and educational activities is still under discussion. Informal discussions took place with various members of the community.