

A37. "Monitor CIELO mailing lists, and try to receive tabulated experimental data from evaluators who have their own internal database (Dupont, Simakov)"

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The NDS/IAEA and NEA/Data Bank staff are involved in the CIELO project in various ways: compilation of the Experimental Data in EXFOR, development of evaluated data, participation/organisation of the relevant Meetings. During this activity the NDS and NEA monitor the usage of historical and newly measured data and check their completeness and correctness in EXFOR.

Several examples of the already implemented work are given below.

$^{16}\text{O}(n,\alpha)^{13}\text{C}$ and inverse reaction $^{13}\text{C}(\alpha,n)^{16}\text{O}$ cross section data

1. Historical $^{13}\text{C}(\alpha,n)^{16}\text{O}$ data measured by J.K. Bair and F.X. Haas in 1973 were available in Entry C0489.002 until 2014 as data scanned by NACRE from Fig. 3 of PR/C7 (1973)1356.

Communicating within CIELO project the (original) data of Bair-and-Hais'73 were provided to NDS by G. Hale - now they replaced the NACRE data in C0489.002.

2. $^{16}\text{O}(n,\alpha)^{13}\text{C}$ data by G. Georginis (IRMM) were not available since 2007 in Entry 23040.003.

Communicating within CIELO project the original data were received by NDS from the author and were compiled in 23040.

3. To facilitate the comparison of the cross sections measured for the direct and inverse reactions, a procedure based on the principle of the detailed balance was implemented in the EXFOR retrieval system since March 2015 (action A72, see V. Zerkin's working paper of this meeting).

H(n,n) angular scattering data

During [Meeting on Standards](#) held by NDS in Dec 2014 Gery Hale pointed out the necessity to "make corrections to the G. Fink' data (22207.002), at least converting the lab cross sections and angles to c.m. relativistically. This is a 1% effect, which is comparable to the errors they are quoting."

The only existing source of such details could be the Diploma Thesis of G. Fink.

NDS requested Fink' Diploma Thesis (1986) from the Uni Karlsruhe library.

U-235 and U-238 neutron data

1. $^{235}\text{U}(n,f)$ PFNS data of P. Staples (Nucl. Phys. A591(1995)41, Entry 13982.002).

M. White at [RCM-2](#) of IAEA CRP on IRDFF has reported that some values were published in this article incorrectly, the authors have also neglected the multiple scattering correction in the sample.

NDS monitors this "a posterior study" for possible corrections of Entry 13982.

2. The new measurements of the $^{238}\text{U}(n,2n)$ cross sections were performed at TUNL (Krishichayan et al.) in the energy range 6.5 to 15 MeV.

NDS communicates with authors of this new measurement to monitor all important details which impact on this reaction cross section (which is very important for the IRDFF and CIELO projects).