Center of Nuclear Physics Data (CNPD), RFNC-VNIIEF

Technical paper for the NRDC Meeting, Vienna, IAEA, April 21-23, 2015

S. Taova

Russian Federal Nuclear Center-VNIIEF

Russia, 607188, Sarov, Nizhnii Novgorod region, Mira Ave., 37

Compilation activity

Seven final files trans.f053, trans.f054, trans.f055, trans.f056, trans.f057, trans.a081 and trans.a82 were submitted for the EXFOR data library within the past period. One prelim file was also prepared: prelim.a083. These files include 44 new entries and 171 revised entries.

In May 2014 we started to fulfill our new duties. Now we are responsible for compilation of charged particles nuclear data obtained in former Soviet Union countries (except Ukraine). (Our previous responsibility was compilation of CPND on light nuclei, coordinated with other Centres). The character of our work significantly changed. While in previous years we mainly dealt with the old articles and were forced to digitized data, now we compile modern data and have to contact with the authors to obtain these data.

We have received a "rich heritage" from CAYaD – a great number of entries needed to be corrected. A challenge work for us is to avoid data duplications in Exfor (Actions A40-43). We have already started this activity, and file prelim.a083 is our first contribution to this task.

Scanning of journals "Izvestiya Akademii Nauk", "Yadernaya Fizika" and EPJ/A has been performed.

Software

InpGraph,   EXFOR-Editor

The development of a new version of digitizing program InpGraph 3.1 has been completed. When developing new software several important tasks were solved. The main advantage of this version is a combination of intuitively understandable interface and convenient tools for data digitizing. We also tried to implement an approach "identical user's reactions on identical user's actions".

Development of a new version of EXFOR-Editor which does not require a special installation was practically finished. New short Manual containing information on EXFOR-Editor was prepared. It includes the description of both basic and newly implemented functions appeared in EXFOR-Editor and InpGraph programs. New versions of software and the Manual (in Russian only) are placed on CNPD web site. English version will be prepared this year.

<u>General</u>

S. Taova and G. Pikulina took part in the Workshop on Exfor compilation, which was held on October 6-10, 2014 in Vienna. Two reports on the development of InpGraph software were prepared: G. Pikulina "Structure of software on graphic data processing for the Exfor data library", S. Taova "User's interface of a program on graphic data processing for the Exfor data library: approaches, solutions, capabilities".