ACTIVITY OF CAJAD

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Our **Exfor** activity had three main directions:

1. Compilation for A-Library

After the last meeting in 2000, we prepared A050, A051 and A052 TRANS files. These TRANS files contains monitor reaction data, astrophysical data, fission data. The files include new entries and some corrected old entries. Some Entries, which have analogues in C- and T-libraries are deleted.

2. Status of B-library

I would like to hope that the work for transformation B-entries to today EXFOR rules is finished.

It is needed to remark, that we used original compilations of Munzel's group, which were received from Karlsruhe. Practically all original publications were read again and many informal corrections were included. Duplicated entries were excluded too. I would like to remark the existing of another versions of B-library. More detailed information about different versions of EXFOR entries is presented in V. Varlamov's report. My opinion: all Nuclear Reaction Data Centres must have identical entries. If similar differences will be kept, using of our libraries will be complicated**,** because citation of EXFOR entries will not be exact**.** Therefore CAJAD recommend to refuse from old versions B-library.

3. Team-work with NEA DATA-BANK

During the year 2001, 100 entries were prepared for O-library.

These entries contain data for elastic and inelastic scattering, production cross section of radioactive and stable isotopes, data for material analysis by charged beams. This work is orientated for nuclear wastes transmutation, medical applications and material analysis.

4. Data dissemination

We met some difficulties to organize the Internet site for our Centre. Therefore we decide to use the site of V. Varlamov's Centre. Our collaboration is very useful for both Centres, as I think. The collaboration permits to decrease expenditures and accelerate preparing data for dissemination. Our Centre, in EXFOR area, has the responsibility to transform new TANS files in needed format and transmit them to Moscow State University.

Usually CDFE receives new data in one-two days after appearance of new TRANS files at open area of NDS.

More detailed information about the site will be presented by V.V. Varlamov. At the same time I would like to remark that the data dissemination through Internet has a reverse side: we have no information about requests of our users. Probably, some time later we will have the possibility to fix up the requests.

Therefore we know requests only from the groups, which invite our Centre to participate in their investigations. In EXFOR area we participate in medium energy investigations of ITEP, which measured production cross sections of radioactive isotopes by charge particle beams with energy 100.-1000 MeV/nucleon. For example, we received a request to find data (or calculate cross sections) for suitable monitor reaction for C-12, Al-27 and copper beams in 100 -1000 MeV/nucleon energy region.

5. Additional remarks

During many years of our activity in the compilation area, we accumulated a large experience in communication with authors. All understand that data tables are more preferable than figures in publications. We met different attitude to our requests for data tables in different groups. For example, we have full, without any exclusion, data tables from the group of Fragment Separator of GSI. Some authors send their data even without our requests. But these examples are exclusive. Most authors, from developing countries especially, do not reply at our requests. I believe it is because the data tables are lost. I see two reasons why they are lost.

First, it is very often that after the work is finished the group is breaded up. Somebody, who had responsibility for data processing and presentation, leaves the group for another laboratory and his connection with the group disappears**.** At these conditions it is impossible to find data tables. Second, some authors are afraid, that their data will be criticized at the centre or the data will be used by the centre and the authors will loose their priority. Could NDS help us to receive charge particle data from developing countries?

Data tables have been lost in developed country too. I would like to mention only two European papers:

1. The results of very important experiment on pion production cross section in sub-threshold area (published in PR/C). Each negative pion will create a “star” with number neutrons. Therefore the data are important for nuclear wastes transmutation. The data were measured in Sweden by an international group. We could only find data for positive pions at interaction of protons with nitrogen. All other data are presented as little size figures, which are not suitable to scan.
2. The results of production cross sections for interaction of protons with several important elements obtained in United Kingdom.

Unfortunately I have no proposal how to save the numerical data.