

(資料)

## Japan Charged-Particle Nuclear Reaction Data Group (JCPRG)

Progress Report to  
the IAEA Advisory Group Meeting  
May 11-15, 1998

The Executive Committee of JCPRG

### General

In 1997, we have carried out the following businesses:

- (1) Compiling all the CPND(Charged Particle Nuclear Reaction Data) produced in Japan with the NRDF(Nuclear Reaction Data File) format,
- (2) Translating the NRDF data into the EXFOR data,
- (3) Making a combined index database for the CPND in both of NRDF and EXFOR for the convenience of the customers in Japan,
- (4) Distributing the CPND and promoting utilization in Japan.

In 1997 much of our effort was concentrated on the second subject mentioned above. The details of the work will be reported later. This year (1998), we plan to make a new practicable database based on the IntelligentPad system. A preliminary system for the NRDF data has been already made by Chiba. As the next step, we make the system more practicable and extend the system to be able to manage EXFOR files as well.

### NRDF Data Compiling Activity

In 1997 we newly compiled 35 entries (595 tables, 1.6 MB) based on the data obtained with the accelerators in Japan. We list the institutes which provided us with their data:

- Tohoku Univ.(CYRIC) — 1 entry
- Tsukuba Univ.(UTTAC) — 3 entry
- Institute of Nuclear Study, Tokyo Univ. (INS) — 9 entries
- Tandem Accelerator Lab., Kyushu Univ. — 1 entries
- Research Center for Nuclear Physics, Osaka Univ. (RCNP) — 12 entries
- JAERI Tandem, LINAC & V.D.G. — 4 entries

- RIKEN Accelerator — 12 entries
- KEK Accelerator — 2 entries

By March of 1998 the amount of the compiled data has reached 24,914 tables of about 70.93 MB. Our aim is to store all data produced with Japanese accelerators in the NRDF database. Ever year the NRDF data are compiled approximately by 1,000 tables and 3 MB.

#### EXFOR Translation from NRDF

The conversion to the EXFOR has been done of the NRDF data compiled from CPND which were produced in Japan up to 1993. We checked at this moment some problems we had encountered to continue increasing translatable NRDF data and we have discussed a possible way of improving the NRDF compilation. In the near future the translation system on the mainframe computer is to be moved to the workstation. By that time several improvements on the translation system, including version-up of the NRDF dictionary should be done. At present we have obtained 31 EXFOR files translated from the NRDF data from 1994 to 1996.

The nine EXFOR entries which were translated from the NRDF files were found to have the duplicated files. We made unified files and translated into EXFOR files of revised NRDF ones.

#### Customer Services

Retrieval services of NRDF and EXFOR data are available by using computers in the Hokkaido University Computing Center. In addition to these services, the WWW homepage (<http://nucl.sci.hokudai.ac.jp/~nrd/index.html>) has been opened to public. In order to extend the NRDF data service, we have started to make a developed retrieval system based on the IntelligentPad.

## ANNEX: Organization and members of JCPRG

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