

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

Progress Report to the NRDC Meeting  
May 18-20, 1999

The Executive Committee of JCPRG

## General

In 1998, 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 retrieval systems using internet and the InteligentPad for the CPND in both of NRDF and EXFOR,
4. Distributing the CPND and promoting utilization in Japan.

In 1998 much of our effort was concentrated on the third subject mentioned above. The details of the work will be reported later. This year (1999), we plan to make a new electric editor system for compiling and inputting the NRDF data, and also to make a revised version of the EXFOR translation system.

## NRDF Data Compiling Activity.

In 1998 we newly compiled 6 entries (196 tables, 0.53 MB) based on the data obtained with the accelerators in Japan. We list the references and the institutes which provided us with their data:

## **References**

Data Number:1699:

[Title] DEUTERON ELASTIC SCATTERING AND (D,P) REACTIONS ON 208PB AT ED=22MEV AND J-DEPENDENCE OF T20 IN (D,P) REACTION

[First Author] K.HIROTA

[Journal] Nucl.Phys.A628 p547 1998

Data Number:1700:

[Title] ALPHA SPECTROSCOPIC FACTORS FOR 6LI,7LI,9BE AND 12C FROM THE (P,P ALPHA)REACTION AT 296 MEV

[First Author] T.YOSHIMURA

[Journal] Nuct.Phys. A641 p3 1998

Data Number:1701:

[Title] MOST PROBABLE CHARGE OF FISSION PRODUCTS IN 24MEV PROTON

INDUCED FISSION OF 238U  
[First Author] H.KUBO  
[Journal] Phys.Rev.C57 p178 1998

Data Number:1702:  
[Title] MECHANISM OF THE FORWARD-ANGLE (D,P<sub>N</sub>)REACTION AT INTERMEDIATE ENERGIES  
[First Author] H.OKAMURA  
[Journal] Phys.Rev.C58 p2180 1998

Data Number:1703:  
[Title] PARTICLE DECAYS FROM 12B AND 12N MIRROR NUCLEI  
[First Author] T.INOMATA  
[Journal] Phys.Rev.C57 p3153 1998

Data Number:1704:  
[Title] ELASTIC SCATTERING OF POLARIZED PROTONS FROM 58NI AT EP=192, 295,400 MEV  
[First Author] H.SAKAGUCHI  
[Journal] Phys.Rev.C57 p1749 1998

### **Institutes**

- Tohoku Univ. (CYRIC) - 1 entry
- Tsukuba Univ.(UTTAC) - 1 entry
- Research Center for Nuclear Physics, Osaka Univ. (RCNP) - 3 entries
- RIKEN Accelerator - 1 entries

By March of 1999 the amount of the compiled data has reached 25,110 tables of about 71.46 MB. Our aim is to store all data produced with Japanese accelerators in the NRDF database. Every year the NRDF data are compiled approximately by 1,000 tables and 3 MB.

### EXFOR Translation from NRDF

In 1997 we have made 31 EXFOR files translated from the NRDF data from 1994 to 1996. However, we received several claims about those data from IAEA. After making the revised version, we sent them to IAEA again.

In 1998, we newly transformed 8 entries of the NRDF data to the EXFOR data. After checking several codes which were not translated, we will send their files to IAEA.

In 1999 we plan to make a revised translation system on the workstation.

### 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/~nrdf/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**

### Advisory committee:

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Akira HASEGAWA (Japan Atomic Energy Research Institute)  
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Working Staff of Making a Graph Reading System:

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