

Japanese Revisions and Comments for High Priority Request List of Revised Version in May, 1998

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1. Introduction

After one year progress, Japanese Nuclear Data Committee have revised the Japanese High Priority Request List (HPRL). Here, the revised list is shown in this report as well as comments for the previous version of HPRL. The revised list is attached in separated table. The recommendation of inclusion of available sample list is also described at the end of this report.

2. Revisions for Japanese High Priority Request List

4.A.13-14 Withdrawn.

4.A.18 Kept, since evaluations of JENDL-3.2 and ENDF/B-VI are discrepant at the energy above 10 MeV and it is also important for calculation of PKA spectra. Priority is added.

4.A.29 Withdrawn.

4.A.34-41 Withdrawn since they were considered WPEC/SG6.

4.D.5-6 Priority is changed to "1" since it is also important for application of nuclear waste transmutation. The measurement is difficult since the sample price is so expensive. If the sample more than 0.5g is available, Tokyo Institute of Technology (TIT) can measure.

4.D.10 Withdrawn since data are met. TIT also measured the data and the results agreed with those of Wisshak with in 5% accuracy.

4.F.2 Energy range and accuracy are changed. Priority "1" is added.

4.F.3-7 Energy range and accuracy are changed. Priority "1" is added.

4.F.10 Energy range and accuracy are changed. Priority "1" is added.

4.F.20-21 Energy range and accuracy are changed. Priority "1" is added.

4.F.23 Energy range and accuracy are changed. Priority "1" is added.

4.F.27-29 Energy range is changed. Priority "1" is added.

4.F.32-33 Energy range is changed. Priority "1" is added.

4.F.35 Energy range is changed. Priority “1” is added.

4.G.10 Energy range is changed. Priority “2” is added.

4.H.37-38 Withdrawn.

7.A.1-31 Comment is changed. Priority is added.

7.A.12 Withdrawn.

7.A.10,13 Requester’s name is changed to “M. Teshigawara (JAERI)”.

new Newly added request.

3. Comments for Previous Version of High Priority Request List

3.A.* Double-differential cross section data for all elements at 14 MeV are met.

3.A.7-9 “18 MeV (11.5 MeV planned)” in comment should be revised as “11.5 and 18 MeV by”.

4.A.13-14 Status of “withdrawn” is not indicated in the table.

4.A.18 Numerical data measured by LANL have not come out yet.

4.A.29 Status of “withdrawn” is not indicated in the table.

4.B.4 “DDX measurements in progress at Tohoku University” in comment should be revised as “A spectra and (n,alpha) cross section were measured around 14 MeV at Tohoku University”.

4.D.3 Priority “2” is not indicated in the table. The experiment is difficult, because of the target sample preparation.

4.D.6-7 The energy region should be revised from “10 MeV – 100 keV” to “10 meV – 100 keV”.

4.D.11 Priority “2” is not indicated in the table. The experiment is difficult, because of the target sample preparation.

4.F.3-7 Requester’s name “Takizuki” should be revised as “Takizuka”.

4.F.8-9 Measurements have been done by Kyoto Univ. from several tens of eV to 1 keV and by TIT from 10 to 300 keV within 5% accuracy.

4.F.10 Requester’s name “Takizuki” should be revised as “Takizuka”.

4.F.20-21 Requester’s name “Takizuki” should be revised as “Takizuka”.

4.F.23 Requester's name "Takizuki" should be revised as "Takizuka".

4.F.27-29 Requester's name "Takizuki" should be revised as "Takizuka".

4.F.32-33 Requester's name "Takizuki" should be revised as "Takizuka". Requester's name "K. Tsujimoto (JAERI)" should be added.

4.F.35 Requester's name "Takizuki" should be revised as "Takizuka". Requester's name "K. Tsujimoto (JAERI)" should be added.

4.G.9 Requester's name "T. Yoshida (Musashi Institute of Technol.)" should be added.

4.G.10 Requester's name "Takizuki" should be revised as "Takizuka".

4.H.20-34 Requester's name "T. Yoshida (Musashi Institute of Technol.)" should be added.

7.A.1-31 Requester's name "T. Sasa and T. Takizuka (JAERI)" should be added.

7.A.10,13 Requester's name is changed to "M. Teshigawara (JAERI)".

7.A.27 Requester's name "M. Teshigawara (JAERI)" should be added.

4. New Recommendations from Japan

The TIT group in Japan has potential for measurements of neutron capture cross sections of fission products and minor actinides with error of about 5 % in the neutron energy region 10-600 keV. In fact, the group has already measured the capture cross sections of 17 stable fission products and Np-237. The group is very interested in the measurement of capture cross sections of long-lived fission products and minor actinides, and would perform the measurements if capture samples of about 1g are provided for the group. At Tohoku University, measurements can also be made, if suitable sample is available, for example, B-10 (n,alpha) (1.A.3-5) and Si(n,p),(n,alpha) (4.A.18).

Similar cases also exist at the other laboratories. Therefore, it is recommended to create the list of available sample materials for rent. It is very useful to let experimentalists know what they can measure and to enhance the important measurements.