

お知らせ(そのII)

Contribution to Neutron Nuclear Data Evaluation Newsletter-21

Japanese Nuclear Data Committee  
(Nuclear Data Center, JAERI)

Work recently completed and publication:

- i) Evaluation of the Neutron Data of  $^{241}\text{Am}$

T. Nakagawa, T. Fuketa and S. Igarasi, JAERI-M 6636 (1976)  
(reported in Japanese)

Evaluated values have been obtained for the neutron data of  $^{241}\text{Am}$ . First, the best values were adopted for the capture and fission cross sections at 0.0253 eV and for the resonance parameters. Then, the most probable values were obtained for the whole energy region of thermal to 15 MeV taking the previous evaluation for the region above 1 keV into consideration. The result of evaluation was compiled in JENDL-1.

- ii) Evaluation of  $^{241}\text{Pu}$  neutron cross sections has been completed. Unresolved resonance parameters were determined between 100 eV and 21.5 keV so as to reproduce the experimental data of the fission and capture cross sections. Above 21.5 keV, the fission cross section was obtained on the basis of the experimental data, most of which were reported as the ratio to the fission cross section of  $^{235}\text{U}$ . The capture cross section was obtained up to 250 keV from the experimental data of  $\alpha$ . Evaluated data obtained between  $10^{-5}\text{eV}$  and 15 MeV are stored in JENDL-1. (informed by Y. Kikuchi)

Work in Progress:

- i) New work on the evaluation for about 70 fission product nuclides is now in progress by a working group of the JNDC. All members of this working group are engaged in one or two works such as investigation of level schemes, study of systematic trends of the resonance parameters and of the neutron strength function, collection of cross-section data and theoretical calculation of the cross sections. For some nuclides, parameters and cross-section data have already been prepared. (informed by S. Iijima, NAIG)
- ii) Evaluation of total, inelastic scattering and charged particle emission cross sections for  $^{19}\text{F}$  is now in progress. (informed by K. Nishimura)

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