

お知らせ (そのII)

NNDENへの投稿

Contribution to Neutron Nuclear Data Evaluation Newsletter-27

Japanese Nuclear Data Committee  
(Nuclear Data Center, JAERI)

Work recently completed and publication:

- (i) Evaluation of Neutron Nuclear Data for  $^{242}\text{Cm}$   
S. Igarasi and T. Nakagawa (JAERI)  
JAERI-M 8342 (in Japanese)

Evaluation of neutron nuclear data for  $^{242}\text{Cm}$  was completed in the energy region of thermal to 20 MeV. Resonance parameters were given in the region below 275 eV. Statistical and optical model calculations were performed with the potential parameters which reproduce fairly well the recent experimental data of  $^{241}\text{Am}$  total cross sections. Fission cross-section systematics was used to estimate the data of  $^{242}\text{Cm}$  cross sections.

Work in progress:

(i) Comprehensive neutron nuclear data for vanadium has been evaluated from thermal region to 20 MeV, and the results are to be filed in the ENDF/B format as an elemental component in JENDL-2. The file includes the neutron total cross sections, all significant partial cross sections of neutron induced reactions and the resonance parameters of vanadium. Particular attention has been paid to higher energy processes having an impact on FBR and CTR. (from S. Tanaka, JAERI)

(ii) Study on mutual consistency of the nuclear data for  $^{235}\text{U}$ ,  $^{238}\text{U}$ ,  $^{239}\text{Pu}$ ,  $^{240}\text{Pu}$  and  $^{241}\text{Pu}$  has been almost completed recently in Working Group on Heavy-Nuclide Nuclear Data of JNDC. The final check of these preliminary results is in progress in the energy range from 100 eV to 20 MeV. (from H. Matsunobu, SAEI)

(iii) Evaluation of neutron cross sections for Cr, Fe and Ni was performed in the energy range  $10^{-5}$  eV  $\sim$  20 MeV for JENDL-2. A brief description on the evaluation was presented at NEANDC topical discussion held at Geel, 24  $\sim$  28 Sept. 1979. (from T. Asami, JAERI)

(iv) Evaluation of  $^{235}\text{U}$ ,  $^{238}\text{U}$ ,  $^{239}\text{Pu}$ ,  $^{240}\text{Pu}$  and  $^{241}\text{Pu}$  resonance parameters was almost completed. Part of the results was stored in the JENDL-2 library. (from A. Asami, JAERI)

Work planned for the near future:

- (i) Evaluation of  $^{242}\text{Am}$  and  $^{242\text{M}}\text{Am}$  shall be started.  
(from S. Igarasi, JAERI)

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