お知らせ(そのI)

NNDENへの投稿

Contribution to Neutron Nuclear Data Evaluation Newsletter-28

Japanese Nuclear Data Committee (Nuclear Data Center, JAERI)

Work in Progress:

- i) Analysis of neutron elastic scattering from lithium and boron isotopes has been performed on the basis of the model which takes account of a loosely-bound cluster structure of a target nucleus. It is found that the angular distributions can be fairly well predicted at forward scattering angles in the energy range above 7 MeV. (from S. Komoda, Osaka Univ.)
- ii) Evaluation of neutron cross sections for natural Pb and four stable isotopes was performed in the energy region of thermal to 20 MeV.

 (from T. Asami, JAERI)
- iii) Evaluation of neutron data has been made for 228 Th, 230 Th, 233 Th and 234 Th in the energy region of thermal to 20 MeV. The quantities evaluated are total, elastic, inelastic, capture, fission, (n,2n) and (n,3n) cross sections and $\overline{\lor}$. (from T. Ohsawa, Kyushu Univ.)
- iv) Analysis of fission cross sections for actinide nuclides has been carried out with the double-humped barrier model, and the barrier parameters were obtained. (from T. Ohsawa, Kyushu Univ.)
- v) Evaluation of neutron data for 233 U has been completed in the energy range of 10^{-5} eV to 20 MeV. (from N. Asano, SAEI)
- vi) Simultaneous evaluation of neutron data for ²³⁵U, ²³⁸U, ²³⁹Pu, ²⁴⁰Pu and ²⁴¹Pu has been completed in the energy range from 100 eV to 20 MeV by Working Group on Heavy-Nuclide Nuclear Data of JNDC. Reliability of the evaluated data was examined by integral tests with the international benchmark cores of fast reactors. The preliminaly results were presented at Knoxville Conference in October, 1979. (from H. Matsunobu, SAEI)
- vii) Evaluation of neutron data for $^{2\,4\,2\text{M}}$ Am and $^{2\,4\,2\text{S}}$ Am has been performed in the energy range of 10^{-5} eV to 20 MeV. The quantities evaluated are total elastic, inelastic, (n,2n), (n,3n), fission and capture cross sections, angular distributions of elastically scattered neutrons and $\overline{\nu}$.

(from T. Nakagawa, JAERI)

S. Igarasi

Nuclear Data Center Tokai Research Establishment Japan Atomic Energy Research Institute Tokai-mura, Naka-gun, Ibaraki-ken, Japan

May 20, 1980