

J. STEFAN INSTITUTE NUCLEAR DATA BANK

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Nuclear data bank has been organized at IJS recently. It contains over 1.500.000 computer records on nearly 60 magnetic tapes. The main source of the basic data are the evaluated libraries ENDF/B, KEDAK, UKNDL and SOKRATOR disseminated by International Atomic Energy Agency, Vienna⁽¹⁾. Each of these libraries has its own format. Cross sections for several neutron reactions, scattering data, dosimetry data, photon production and interaction data, and general data for all important reactor and shielding materials are included in these libraries. The energy range covered extends from 10^{-4} eV to 20 MeV. The data are combination of experimental and theoretical results. Reliability of the data is continually tested and corrected. They are primarily intended for reactor core and shielding calculations. Actinides and fission products data included in the bank can also be used in the spent fuel processing design. Dosimetry data are intended for reactor dosimetry research. To prepare multigroup constants for reactor core and shielding calculations from any of above libraries, the computer code FEDGROUP-C^(2,3) was implemented on CYBER 72 computer and tested. Sets of multigroup constants for some important reactor materials have been obtained.

- (1) CINDU-11, March 1976, Report of the IAEA, Vienna
CINDU-11, Suppl. 1, April 1977, Report of the IAEA, Vienna
Nuclear Data Newsletter, 1 (Sept. 1979), 2 (Oct. 1980),
3 (March 1981), IAEA
- (2) P. Vertes, INDC(HUN)-13/L+Sp, INDC(HUN)-15/L
- (3) A. Trkov, A. Perdan, M. Budnar, P. Vertes, FEDGROUP-C, to be published