



International Atomic Energy Agency

Recent Nuclear Data Activities at the IAEA Nuclear Data Section

A. Trkov

WPEC Meeting, Aix-en-Provence, 26-28 May 2004

List of Relevant Activities

- **Software development**
- **Recently released products and other activities**

Software development

- **EXFOR, CINDA & ENDF relational database retrieval software (on web and on CD-ROM)**
- **EndVer – ENDF file verification package**
 - Integrated package with Java GUI and EXFOR relational
 - Primarily EXFOR data driven, curves from ENDF are reconstructed to correspond to measured data (in contrast JANIS is more ENDF data driven)
 - Differential and double-differential data display and comparison (several ENDF files), including neutron, photon and charged particle spectra
 - Elemental cross section reconstruction
- **ACE library utilities (conversion to ENDF, Doppler broadening of cross sections) to be packaged**

Products and Other Activities

- **Cross section standards file to be completed by Autumn 2004 (documentation in 2005)**
- **IRDF-2002 dosimetry library assembled; to be released in summer; documentation pending decision by publishing committee**
- **MedLib – cross sections for the production of diagnostic nuclides in ENDF-6 format (mainly charged particle files)**
- **Similar project for therapeutic nuclides in progress**
- **Technical meeting held on procedures to update the FENDL-2 library**

Products and Other Activities

- **Service agreement to re-calculate $S(\alpha,\beta)$ for H in H_2O , D_2O and Zr H_x ; new ENDF files available, report in preparation (M. Mattes)**
- **Paper on calculational benchmark to validate thermal scattering law data; INDC(USA)-107 report (D.E. Cullen)**
- **Service agreement to re-analyse the resonance parameters of ^{58}Fe ; INDC report in preparation (M. Moxon)**
- **Re-evaluation of ^{238}U thermal capture cross section 2.683 ± 0.012 barns (paper submitted for publication to NSE, A.Trkov *et al*)**

Co-ordinated Research Projects

