



**International Atomic Energy Agency**

# **Recent Nuclear Data Activities at the IAEA Nuclear Data Section**

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**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  $2.683 \pm 0.012$  barns (paper submitted for publication to NSE, A.Trkov *et al*)**

# Co-ordinated Research Projects

