

Report on WPEC Meeting'2003

Working Party on International ND Evaluation Cooperation
Coronado/San Diego, May 13-15, 2003

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Annual Meeting of the Cross Section Evaluation Working Group

BNL, November 4-6, 2003

WPEC Meeting'2003: Highlights

■ Experimental activities in Europe

- N-TOF facility at CERN: started, mostly capture and fission cross sections
- Geel: mostly transmutation applications
- Facilities: Uppsala Neutron Center, PTB Braunschweig, D-T source Dresden

■ Evaluation Projects

- ENDF
 - Workshop on Nuclear Data Needs for Generation-IV Nuclear Energy Systems, April 2003, BNL → importance of covariances highlighted; CD available
- JENDL
 - 5-year project started on JENDL-4, focus on advanced reactors, astrophysics, medical
- JEFF
 - JEFF-3.1 release planned for December 2004
- IAEA
 - Reference Input Parameter Library RIPL-2 released
- BROND and CENDL representatives were not present due to visa problems



WPEC Meeting'2003: Highlights ctn'd

■ WPEC Long-term Subgroups

- Nuclear Model Codes, Chadwick chair
 - Procedures for creation of modular library ModLib discussed
- Formats and Processing, Trkov chair
 - Mandate discussed and procedures agreed for submittal of proposals to CSEWG
- High Priority Request List, Fukahori chair
 - Meeting proposed in Paris, October 2003 (report by D. Smith)

■ WPEC Short-term Subgroups

- SG7: Nuclear Data Standards, Carlson
 - Role of IAEA CRP standards project emphasized (report by A. Carlson)
- SG9: Fission Neutron Spectra, Madland
 - Prompt spectra from $n+^{235}\text{U}$, final results reported, measurement at E_{ther} proposed
- SG19: Activation Cross Sections, Plompen
 - Measurements & comparison with calculations, final results reported



WPEC Meeting'2003: Highlights ctn'd

■ WPEC Short-term Subgroups ctn'd

- SG20: Covariance Matrix Evaluation and Processing in Resonance Region, Kawano
 - Objective discussed: recommendation to generate covariances with examples for U or Pu
- SG21: Assessment of Neutron Cross Sections for Bulk of Fission Products, Oblozinsky
 - 107 materials out of 211 reviewed, interest from ENDF/B-VII and JEFF-3
- SG22: Data for Improved LEU-LWR Reactivity Predictions, Courcelle
 - Impact of evaluations on under-prediction of reactivity, focus on $^{235,238}\text{U}$, H and ^{16}O
 - In near future: investigate possible over-estimation of ^{238}U capture and test new evaluations

■ Ideas for New Subgroups

- Follow-up for SG21, produce files, validate subset of recommended FP evaluations
- Optimal combination of integral and differential data

■ New WPEC Chair

- Akira Hasegawa elected, then promoted in JAERI → stepped down
- Pavel Oblozinsky agreed to serve