



**International Atomic Energy Agency**

# **WPEC Format Proposals - 2003**

**Andrej Trkov**

**Presented to the CSEWG**

**Brookhaven, 4-6 November 2003**

# Overview of WPEC contributions

## Contributions were received from:

- Japan
- Europe (Bulgaria)
- IAEA

## No contribution/comments from:

- JEFF
- BROND
- CENDL

# 1. Energy-dependent decay constants

*Proposer:*

Dr. Tsuneo NAKAGAWA

(nakagawa@ndc.tokai.jaeri.go.jp)

*Reference:*

None.

*Purpose:*

Allow energy-dependent decay constants ( $\lambda$ ) and abundances ( $A_{\text{p}}^{\text{h}}$ ) in the delayed neutron data section.

## 2. Increase the limits on parameters

*Proposer:*

Mr. Kazuaki KOSAKO (kosako@sae.co.jp)

*Reference:*

None.

*Purpose:*

Increase the limits of the number of angular points for tabulated probability distributions NP in MF4 and the number of reaction products NK in MF6.

### 3. Expand the options of the LCT flag

*Proposer:*

Mr. Kazuaki KOSAKO (kosako@sae.co.jp)

*Reference:*

None.

*Purpose:*

Expand the interpretation of the LCT flag in MF6.

LCT=4      center-of-mass system used for  
energy and angle for all  
particles.

## 4. Clarify the convention for NLIB parameter

*Proposer:*

Andrej Trkov (A.Trkov@iaea.org)

*Reference:*

IAEA-NDS-76 Rev.6, April 2001

*Purpose:*

Clarify the convention for assigning the NLIB number (add text as in NDS distribution)

## 5. Citation instructions

*Proposer:*

Andrej Trkov (A.Trkov@iaea.org)

*Reference:*

IAEA-NDS-76 Rev.6, April 2001

*Purpose:*

Add citation instructions (add text as in NDS distribution)

## 6. New format for unresolved resonance representation

*Proposer:*

Natalia Janeva (pripesho@inrne.bas.bg)

*Reference:*

A.A.Lukyanov, private communication

N.Koyumdjieva, N.Janeva and A.A.Lukyanov,  
*Z. Phys.*, **A 353** 31 (1995)

N.Koyumdjieva, N.Janeva and K.Volev, *NSE*  
**137(2)** 194 (2001)

## 6. New format for unresolved resonance representation (cont.)

### *Purpose:*

Include a new method based on Reich-Moore formalism for calculation of neutron cross-sections and their functionals (cross-section moments, self-shielding factors etc.).

Only one new parameter  $L_{NEW}$  is introduced to flag new procedures.

Layout of the actual parameters is unchanged.

## **6. New format for unresolved resonance representation (cont.)**

*Note:*

The proposers are willing to contribute coding and help to prepare patches to implement the new procedures into existing codes.

# Conclusions

Six proposals for ENDF format changes and extensions are offered to CSEWG for consideration