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DATE: October 27, 1988

TO: Distribution

FROM: N. E. Holden

SUBJECT: Critique of the revised CINDA manual

I have completed a review of the revised CINDA manual and enclose my comments. In some cases, the comments are trivial amounting to a failure to add in, by hand, Greek symbols but I have noted these omissions of the off-chance that the present revision might be used as a master copy to proofread against. There are two sections for which I am committed to provide writeups, dealing with (N,X) reactions and bremsstrahlung production. These will be handled in a separate 4C memo.

Page I.1.4 -The order of the upper and lower energy limits should be reversed. As written, it implies that you begin coding with the upper limit.

Page I.1.5 - the last sentence on abbreviations should refer the reader to pages II.11.2→II.11.4 for some typical examples.

Page II.1.2 - HE004 should be denoted as nearly monoisotopic, (*), not monoisotopic.

Page II.2.2 - The example should include the resonance integral for the (n,p) reaction also.

Page II.2.8 - The last paragraph should read (n,γ).

Page II.2.9 - Reaction under DEL should read $\sigma_{n,n}(E,\theta)$.

Page II.2.13 - Second reaction under NEM should read $\sigma_{nM}(E,\theta)$.

Page II.2.15 - CINDA book expansion under DNG should read Inelastic γ and under NEG should read Nonelastic γ.

Page II.2.16 - Under charged particle production, there should be a comment that resonance integrals for charged particle production are coded under the appropriate reaction and not under resonance integrals.

For emission cross sections, reaction should read $\sigma n,p(\theta)$

Page II.2.17 - Reaction under ALF should read $\alpha = \frac{\sigma n,\gamma}{\sigma n,f.}$

Page II.2.18 - Reaction under ETA should read $\eta = \frac{\bar{\nu}\,\sigma_{n,f}}{\sigma_{n\gamma} + \sigma_{nf}}$

Page II.2.21 - Text under TOT should read σ_t in two locations. Text under ABS should read $\sigma_{nA} = \sigma_{nT} - \sigma_{ns}$ and σ_{nA}. The sigmas are missing in each case.

Page II.2.22 - There should be an explicit comment under the text for RIA that charged particle production resonance integrals should be coded under the charged particle reaction and not under RIA.

Page II.2.23 - The text under STF should read $\frac{\langle \Gamma \rangle}{D} = \frac{\Sigma\, \Gamma i}{\Delta E}$ where Γ_i etc.

Page II.4.1 - If the old restriction on the range of block numbers is going to be removed, should the comment of block numbers within a <u>different</u> range be changed?

Page II.7.2 - Should the no book flag hierarchy code "N", be included for consistency with all the other designations?

Page II.10.4 - Under Conference Proceedings, NNDC has a problem with using a blank entry when no page numbers or paper numbers have been assigned. This implies that the conference proceedings are not yet available and probably the meeting has not yet been held. We consider this information not very useful. A better procedure would be either to refer to the entry as a private communication from the author if it is a preprint of a conference paper or the respective center should assign a paper number to which a user can refer in order to obtain the paper from the center.

In either case, a new entry must be made when the conference proceedings are published and the present method defeats any attempts by a checking code to determine if an entry has erroneously been added with the necessary page numbers or paper numbers missing. We strongly recommend leaving the section as specified requiring a page or a paper number.

Page II.11.4 - A question as to the reason why "cs" is not an acceptable abbreviation for cross section. I have often inadvertantly used this abbreviation to save a space in a long comment field.

Charles L. Dunford

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