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Memo CP-D/457

Date: 9 March 2006
To: Distribution
From: O. Schwerer
Subject: Proposed new STATUS code (Dictionary 16): RCALC

For quite some time we had discussions about the problem of renormalizing old measurements to up-to-date standard values. No agreement could be reached about solutions such as consistent input of renormalized data by the compilation centres, because of manpower and other problems. As a partial solution to some cases in question, the following option is now proposed:

If the data were measured relative to a standard (with given source), but the authors quote only the cross section but not the ratio to the standard, and an expert such as an evaluator provides the **ratio** of the cross section to the standard to the data centre, this ratio, as recalculated, may be added to the compilation in addition to the cross section data published by the original authors, with a new STATUS code RCALC and appropriate explanation in free text.

Addition to Dictionary 16 (STATUS):

RCALC Ratio to standard calculated by other than author

(compare the existing code

RNORM Data renormalized by other than author)

It is important to note the following:

- If the authors published themselves both the cross section and the ratio to the standard, it is already now obligatory to compile both quantities (as multiple reactions).
- The proposed new formalism with the added ratio data is optional. There is no obligation for a data centre to go back to old entries and add these data, nor to make an effort in every new compilation to recalculate this ratio. It is an option for (important) cases where e.g. an evaluator can provide the ratio to the data centre.

- If this option is used, information must be given in free text from which source the ratio was obtained plus any other information needed to trace the procedure used.

Example:

Existing entry:

```
.....
....
REACTION    (91-PA-231(N,F),,SIG)
MONITOR     (92-U-235(N,F),,SIG)  VALUES TAKEN FROM ENDF/B-V.

..... .
STATUS      (APRVD)
```

New optional way of compilation:

```
REACTION    1(91-PA-231(N,F),,SIG)
             2((91-PA-231(N,F),,SIG)/(92-U-235(N,F),,SIG))
MONITOR     1(92-U-235(N,F),,SIG)  VALUES TAKEN FROM ENDF/B-V.
STATUS      1(APRVD)
             2(RCALC) Ratio to monitor recalculated by A. Trkov,
             2006-03-09
```

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