

Memo CP-D/207

5 October 1990

To: Distribution

From: O. Schwerer and H.D. Lemmel  
*O. Schwerer*      *H.D. Lemmel*

Subject: 1990 Technical NRDC Meeting

Some time ago you should have received the invitations to the Technical Meeting of the Nuclear Reaction Data Centers, Vienna, 13-15 November 1990, and we hope to see many of you.

The meeting will be in the Vienna International Centre to be reached by the underground line U1, station Kaisermühlen. The meeting will be in building A, floor 23, room A2340 (NDS Library), starting on Tuesday at 9:30 hrs. It is advisable to be in the building a bit earlier, because the registration procedures require some time.

Please find attached the tentative agenda for the meeting.

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Kindly study the conclusions and actions from the 1989 meeting in Vienna (see CP-D/200), and try to fulfil a few more of them, if not yet done. For the discussion of Exfor coding rules, please bring very specific examples with you, including a copy of the reference where the measured quantity is described plus a copy of the corresponding Exfor entry.

As with the last Technical NRDC Meeting, it is not intended to publish the Minutes as an INDC report but rather only as a CP-Memo. Consequently, written progress reports by the Centers are not required (though, if wanted, such reports could be issued as separate CP-Memos). A brief oral progress report under agenda item 2 will be sufficient.

Attached to this memo is a working paper on pending Exfor matters to be discussed at the meeting. 3 items of the working paper require clarification by one of the centers (item 1a: CDFE, 1b: NEA-DB, items 2 and 3: CAJaD).

For those centers who cannot be represented at the meeting, we would appreciate receiving a brief progress report in writing in time for the meeting.

Technical NRDC Meeting, Vienna, 13-15 November 1990

TENTATIVE AGENDA

1. Opening, adoption of agenda, announcements, etc.
2. Brief reports
  - 2.1 Progress reports by the Centers
  - 2.2 Report on the 1990 INDC Meeting
3. General situation
  - 3.1 What is possible with the reduced manpower available?
  - 3.2 What can be done to improve the manpower situation?
4. CINDA
  - 4.1 Review of actions
  - 4.2 CINDA coding rules and Manual: pending memos
  - 4.3 CJD integration into full 4-center exchange system
  - 4.4 Area 1 CINDA entries
  - 4.5 Future CINDA publications
5. EXFOR
  - 5.1 Review of actions (including "general" actions)
  - 5.2 Exfor coding rules, Manual and dictionaries: pending memos
  - 5.3 Exfor check programs and TRANS tapes
    - a. Summary of disturbing mistakes in TRANS tapes
    - b. Exfor Test File: comparison of output diagnostics
    - c. Response to requested retransmissions
  - 5.4 Exfor completeness
  - 5.5 Fission Product Yield data
    - Review of actions on FPY
  - 5.6 Special CPND matters
    - Review of actions on CPND
  - 5.7 Special Photo ND matters
    - Review of actions on PhotoND
6. ENDF formatted data files
7. Computer matters
  - 7.1 On-line services
  - 7.2 Computer links, exchange of codes (incl. ENSDF), etc.
  - 7.3 PC matters
8. Miscellaneous
  - 8.1 Joint paper for the Jülich Conference
  - 8.2 Date of next NRDC meeting

WP agenda 5.2: Pending Exfor matters

1. Legendre coefficients for double-differential data

a) Quantity code, DA/DE,,LEG/RDE

This code for dictionary 36 was proposed in CP-M/11. It was not yet included (see CP-D/201) because

- RDE is a new modifier which has to be defined and added to dictionary 34, and
- we are not sure how to interpret the formula given in the expansion in CP-M/11. An entry for LEXFOR 'Fitting coefficients' (see attached copy of the relevant page) is required from CDFE.

A possible interpretation of CP-M/11 would be:

$$\frac{4\pi}{d^2\sigma(E,E',\Theta)} \frac{dE'd\Omega}{dE'd\Omega} = \sum_l a_l(E,E') P_l(\cos \Theta)$$

with  $a_l$  having the new unit type 1/DAE (e.g.  $\frac{\text{MEV*SR}}{\text{MB}}$ )

b) Quantity code, DA/DE,,LEG

This code was proposed recently (September 1990) in 4C-2/151 and was not yet added to dictionary 36.

$$\frac{d^2\sigma(E,E',\Theta)}{dE'd\Omega} = \sum_l a_l(E,E') P_l(\cos \Theta)$$

NEA-DB is asked to confirm that

- the coefficients  $a_l$  are a function of both E and E'
- $a_l$  has the dimension (unit type) DAE (e.g. MB/SR/MEV)

The code and the above information have to be added to Lexfor 'Fitting coefficients'.

2. Report code HH87-01

This code was used in entry A0399 of TRANS A022. We could not identify this report series but found a series HH-IEP-issued by the Univ. of Hamburg. Clarification was requested in CP-D/202.

So far no code was added to the report dictionary.

3. Institute code 4CCPBIO

This code was used in entry A0436 of TRANS A023. Explanation was requested in CP-D/204 of July 1990. So far it is not in the institute dictionary.

4. List of dictionaries as dictionary 99

For convenience a list of dictionaries was transmitted in Rev. 1 of dictionary-TRANS 9061 (CP-D/205). For programming reasons we could not place this list on top of the dictionary file but had to introduce it as "dictionary 99". The other centres are asked whether this creates any disturbances or inconveniences for them.

|                     |                              |               |
|---------------------|------------------------------|---------------|
| <u>Attachments:</u> | CP-M/11 p. 2                 | CP-D/202 p. 1 |
|                     | CP-D/201                     | CP-D/204 p. 1 |
|                     | 4C-2/151                     | CP-D/205      |
|                     | LEXFOR page F.16 (July 1988) |               |

| Dictionary | Code             | Comment   |
|------------|------------------|---|
| 34         | S2T              | MODIFIER FOR COEFFICIENTS OF CS IN THE FORM $D-SIG/D-OMEGA = A(0) + A(1)*SIN**2(THETA) + A(2)*SIN**2(2*THETA)$  |
| 36         | PRE,DA,FF        | (ANGLE-DEPENDENT PRIMARY FISSION PRODUCT YIELD)   |
|            | ,DA,FF,S2T       | (ANGULAR DISTRIBUTION OF FISSION FRAGMENTS, COEFFICIENTS OF CS IN THE FORM $D-SIG/D-OMEGA = A(0) + A(1)*SIN**2(THETA) + A(2)*SIN**2(2*THETA)$ )               |
|            | ,DA,FF,SN2/RS0   | (ANGULAR DISTRIBUTION OF FISSION FRAGMENTS, COEFFICIENTS OF CS IN THE FORM $(D-SIG/D-OMEGA) / (D-SIG/D-OMEGA AT 0 DEGREE) = 1 + SUM(A(L)*SIN**2(L)(THETA))$ ) |
|            | ,DA/DE, ,LEG/RDE | (DOUBLE-DIFF. CROSS SECTION * $4PI / (D-SIG/D-ENERGY)$ , LEGENDRE-COEFFICIENTS OF THE FORM $(4PI / (D-SIG/D-ENERGY)) * (D-SIG / D-OMEGA) = SUM(A(L)*P(L))$ )  |