

Report of the Working Group on Fission Yields

(Changes to the proposed text are underlined)

Memo CP-C/246, *Subject: Delayed neutron yields; neutron groups and units.*

The following significant changes in coding rules are proposed in Memo CP-C/246:

- the branch code PAR (SF5) should not be used; instead, the code GRP should be used;
- the delayed neutron group yields should be given preferably with the decay constant or half-life; only if neither are given in the publication, the group number should be coded;

The proposed coding rules and additions to dictionaries 24 and 31 were adopted with the following modification:

Instead of the proposed units N/FIS (Dict.25), the more general code 'PART/FIS' (=outgoing particle per fission) was adopted.

Accordingly, the following changes to the proposed wording of the LEXFOR entry were adopted:

- a) **Delayed neutron Groups:** coded using the average half-life of the group(heading HL), the decay constant (heading DCNST), or the group number (heading GRP-NUM) as an independent variable. The group number should only be used if no information on the half-life or decay constant is given.

REACTION Coding: (...(N,F),DL/GRP,NU)

·

- Absolute group yield: coded with units PART/FIS (outgoing particles per fission) or PC/FIS (neutron per 100 fissions).

Memo CP-D/298, *Subject: EXFOR coding of “mass yields”*

The explanation and use was adopted;

the new code **SF5=MAS** and all associated new dictionary entries were approved

Memo 4C-4/82 (reference: EXFOR40420)

1.: The code PR,NU,FF was adopted as proposed.

1a: Among the proposed codes, PR,NU/DE,FF was adopted for prompt neutrons emitted by fission fragments as function of fragment mass and kinetic energy.

2.: The code PRE,FY/DE was adopted as proposed.

Total kinetic energies of fragment pairs (reference: EXFOR41109):

Whenever data for fragment pairs are given, the parameter (SF6) CRL should be used. Hence the total kinetic energy of a fragment pair (i.e. the sum of kinetic energies of both fragments) should be coded as: PRE,KE/CRL,LF/HF (ref.: subentry 41109007).

The data can be given as function of the light or the heavy fragment mass or both. If the mass of one fragment is given, it is sufficient to use just 'MASS' in the data table, or MASS1 and MASS2 is to be used for the masses of both fragments. Along these lines, ELEM or ELEM1 and ELEM2 are to be used, if the product (pair) is identified.

EXFOR41303:

ACTION on Maev: to read the article carefully and write an explanation of the physics behind it when/before coding these polarization data in EXFOR and proposing new codes.