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334-F4.11.1

August 1, 1988

MEMO CP-A/58

334-F4.11.1

From: Chukreev F.E.

To: Distribution

Subject: 1. Implementation of Action Items 9th NRDC Meeting,  
Action 52.

2. Reply to MEMO CP-A/52, Item 1.

*4.7* COPY

1. In the course of preparing compilations about cross-sections for formation of nuclear reaction products the publications are rather often encountered wherein the authors give their result not in barns (or in its derived units), but in units directly involving the stopping power of a matter. Among these units are, for example,  $\mu\text{Ci}/\mu\text{A}/\text{MeV}$  (see A0190).

In our opinion, the tendency to the unlimited expansion of units of measurement in the EXFOR compilations is absolutely unacceptable. Following such a way scientists which use this system, will begin to expend their strength not for analysis of experimental data, but for conversion of these data to a common system of units.

It is much more useful to perform the conversion to barns in the course of compilation just as it was made in ENTRY A0190.

Clearance  
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ACTION

SEP 02 1988

ACTION OFFICER:	<i>Lemmel</i>	
FORM OF ACTION	DATE OF ACTION	SIGNATURE
REPLY:		
OTHER ACTION:		
NO ACTION:		
INTERIM REPLY: ATTACH M-32		
ENCLOSURES	0: <i>as attached</i>	

*Hashizume*

cc. *de Moraes*  
*Gaudasias*  
*Goulo*  
*Kyi*  
*Lemmel*  
*Lemmel*  
*Ohamoto*

*Ozorio*      *Hang Dao*  
*Schmidt*    *Zhang Dongming*  
*Schweser*  
*Spito*  
*Nang Dahai*

1.1. Two columns MiSC were introduced in BIB-section.

1.1.1. MiSC1 involves experimental data in units used in a paper.

1.1.2. MiSC2 contains data on stopping powers used by a compiler for conversion of authors' units to millibarns.

1.2. The relationship used for conversion of  $\mu\text{Ci}/\mu\text{A/MeV}$  to millibarns is given in BIB-section in COMMENT.

1.3. Data described in MiSC1 and MiSC2 are introduced into DATA-section after columns DATA and DATA-ERR and represent the result of conversion of authors' data to millibarns (see item 1.2).

In my opinion, with such an approach we "kill two birds with one stone": store authors' data and present them in more convenient units. If the stopping powers are defined more accurately (at present they are poorly known for heavy ions), then it will be possible to easily correct DATA-section refining data in it.

2. During the 9th NRDC Meeting I reported the MEMO CP-A/52 content on coding the formation of isomeric states. There was a single objection from Dr. H.Lemmel as to that the adoption of my point of view will make difficult compilation in the neutron EXFOR. A decision was adopted (for some reason or other unfortunately it was not included in Action Items 9th NRDC Meeting) about that the participants of the Meeting would send me by January 15, 1988 the examples of publications the compilation of which would be difficult in conforming to the rules proposed by me.

I have received no reply up to now. Can I think that my offer is accepted and may I write the proposals on the new sections for LEXFOR?