

MEMO CP-A/103

12 Jul 2000

To: **Distribution**  
From: **F.E. Chukreev, S.Babykina**  
Subject: **Additions to Dictionaries,**

Add to dictionary 27

19-K-35	(123	)	
19-K-44	(123	)	
19-K-48	(123	)	
20-CA-37	(123	)	
38-SR-76	(123	)	
38-SR-77	(123	)	
39-Y-80	(123	1)	
39-Y-81	(123	)	
40-ZR-85	(123	1)	
41-NB-86	(123	1)	
41-NB-87	(123	1)	
42-MO-88	(123	)	
42-MO-89	(123	)	
43-TC-91	(123	1)	
	2 isomers	exist,	not known which one is ground state.
45-RH-94	(123	1)	
	2 isomers	exist,	not known which one is ground state.
45-RH-95	(123	1)	
45-RH-117	(123	)	
46-PD-97	(123	)	
47-AG-99	(123	1)	
47-AG-100	(123	1)	
48-CD-102	(123	)	
49-IN-104	(123	1)	
50-SN-106	(123	)	
50-SN-107	(123	)	
51-SB-109	(123	)	
51-SB-111	(123	)	
52-TE-111	(123	)	
52-TE-112	(123	)	
52-TE-113	(123	)	
52-TE-114	(123	)	
53-I-113	(123	)	
53-I-114	(123	1)	
53-I-115	(123	)	
53-I-116	(123	)	
53-I-117	(123	)	
55-CS-116	(123	1)	
	2 isomers	exist,	not known which one is ground state.
55-CS-117	(123	1)	
55-CS-118	(123	1)	
	2 isomers	exist,	not known which one is ground state.
56-BA-124	(123	)	
56-BA-125	(123	)	
63-EU-160	(123	)	
71-LU-158	(123	)	
71-LU-159	(123	)	
71-LU-160	(123	1)	
	2 isomers	exist,	not known which one is ground state.
71-LU-161	(123	)	

71-LU-162 (123 2)  
 3 isomers exist, not known which one is ground state.  
 71-LU-163 (123 )  
 71-LU-164 (123 )  
 71-LU-165 (123 )  
 71-LU-166 (123 2)  
 72-HF-167 (123 )  
 72-HF-169 (123 )  
 81-TL-182 (123 )  
 81-TL-183 (123 1)  
 87-FR-223 (123 )  
 88-RA-221 (123 )

**Add to Dictionary 36**

**,PY,,DT** Product yield per time unit.  
**(CUM),TTY,,DT** Thick target yield per time unit, assumed by compiler as cumulative  
**CUM,PY,,DT** Cumulative product yield per time unit  
**CUM,TTY,,DT** Cumulative thick target yield per time unit  
**CUM/UND,TTY,,DT** Cumulative thick target yield per time unit, undefined reaction  
 Cumulative thick target yield per time unit, including formation of product nucleus via radioactive decay and isomeric transition. Without defined reaction channel, outgoing particles represent only sum of emitted nucleons.  
 ===Not to be used with process codes 'X','F'  
 So far only used for charged particle data.

**FIS,AKE** Average kinetic energy of outgoing particle at high energy fission

**IND,PY,,DT** Independent product yield per time unit

**IND,TTY,,A/DT** Independent thick target yield per time unit. Data times natural isotopic abundance

**IND,TTY,,DT** Independent thick target yield per time unit

**IND/M+,PY** Independent product yield, including formation of the product nucleus via isomeric transition

**IND/M+,TTY,,DT** Independent thick target yield per time unit, including formation of the product nucleus via isomeric transition

**IND/UND,TTY,,DT** Independent thick target yield per time unit, without defined reaction channel, outgoing particles represent only sum of emitted nucleons.  
 ===Not to be used with process codes 'X','F'  
 So far only used for charged particle data.

**M+,TTY,,DT** Thick target yield per time unit, including formation of the product nucleus via isomeric transition

**M+/UND,TTY,,DT** Thick target yield per time unit including formation of the product nucleus via isomeric

transition, without defined reaction channel,  
outgoing particles represent only sum of  
emitted nucleons.  
===Not to be used with process codes 'X','F'  
So far only used for charged particle data

**UND,TTY,,DT** Thick target yield per time unit without defined  
reaction channel, outgoing particles represent  
only sum of emitted nucleons.  
===Not to be used with process codes 'X','F'  
So far only used for charged particle data.

### Add to Dictionary 30

**PI** Pions, unspecified

#### **Distribution:**

DUNFORD@BNLND2.DNE.BNL.GOV  
VML@BNL.GOV  
NORDBORG@NEA.FR  
KELLETT@NEA.FR  
MANOKHIN@IPPE.RSSI.RU  
MAEV@IPPE.RSSI.RU  
FELIKS@POLYN.KIAE.SU  
CHUKREEV@POLYN.KIAE.SU  
DUNAEVA@EXPD.VNIIEF.RU  
VARLAMOV@depni.NPI.MSU.SU  
CHIBA@EARTH.SGU.AC.JP  
KATO@NUCL.SCI.HOKUDAI.AC.JP  
TENDOW@POSTMAN.RIKEN.GO.JP  
YXZHUANG@MIPSA.CIAE.AC.CN  
CNDC@MIPSA.CIAE.AC.CN  
TARKANYI@ATOMKI.HU  
TAKACS-S@ATOMKI.HU  
HASEGAWA@CRACKER.TOKAI.JAERI.GO.JP  
VLASOV@KINR.KIEV.UA  
KALTCHENKO@KINR.KIEV.UA  
OGRITZAY@KINR.KIEV.UA