

**Nuclear Data Section  
International Atomic Energy Agency  
P.O.Box 100, A-1400 Vienna, Austria**

**Memo CP-D/578**

**Date:** 14 August 2009

**To:** Distribution

**From:** N. Otsuka

**Subject: Dictionary transmission 9099**

- Dictionary transmission 9099 is available in three formats (Trans, Archive and Backup) from the NDS open area: <http://nds121.iaea.org/ndsx4/trans/dicts/>.
- These dictionaries and ZVV formatted dictionaries in zipped form are also available: <http://www-nds.iaea.org/exfor-master/backup/dicts-2009-08-14.zip>.
- All memos submitted before 13 July (for dictionary 1, 2, 4, 16, 24-25, 30-35, 37, 236) and 13 August (for other dictionaries) are considered in this update.
- A new reaction type code is proposed for double differential fission neutron multiplicity which is used in a new quantity code PR,NU/DA/DE,N+LF/N proposed in Memo 4C-4/173(Rev.)

**Dictionary 213 (Reaction types)**

NAE (Neutron yield d/dAngle/dE')  
Independent variable family code: 3 (secondary energy) and 4 (angle)

- The following “trivial” corrections (not proposed in previous memos) are implemented.

**Dictionary 3 (Institutes)**

2JPNKTO (Expansion: “, Kyoto” added)  
2JAPKTO (Expansion: “, Kyoto” added)  
3ARGCNE (Expansion: “4 branches - Buenos Aires, San Martin (Laboratorio TANDAR), Ezeiza, Bariloche” added)  
3BANSAV (Expansion: “, Dhaka” added)

**Dictionary 7 (Conferences)**

2007NICE (Expansion: “(ND2007)” added)

**Dictionary 25 (Data Units)**

CM3/S/MOL (Conversion factor 1.66054E-24 to CM3/S added)

### **Dictionary 236 (Quantities)**

, IPA/DP (Unit family changed to DP)  
 , IPA/DA (Unit family changed to DA)  
 , MLT , , RES (Resonance flag removed, See also Memo CP-D/509)  
 DL , SPC (Unit family changed to FY)  
 PAR , DE (Reaction type changed to DEP)  
 PR , SPC (Unit family changed to FY)  
 PR/TER , SPC (Unit family changed to FY)

- All corrections (except trivial editorial corrections) are summarized below. “Status” gives alteration flags and status codes defined in EXFOR/CINDA Dictionary Manual.

<b>Dict</b>	<b>Status</b>	<b>Code</b>	<b>Expansion</b>	<b>Memo</b>
3	ATRA	1USABST	Boston University, Boston, MA	CP-D/551
3	MTRA	2ITYNAP	Univ.degli Studi di Napoli Federico II + INFN Napoli	CP-D/559
3	MTRA	2JPNKTO	Kyoto Univ., Kyoto	This memo
3	MOBS	2JANKTO	Kyoto Univ., Kyoto	This memo
3	MTRA	3ARGCNE	Comision Nacional de Energia Atomica, Buenos Aires	This memo
3	MTRA	3BANSAV	Inst.Nucl.Sci.and Tech., AERE, Savar, Dhaka	This memo
3	SOBS	3MORRAB	Lab.de Phys.Nucl., Faculte de Rabat, Univ. Mohammed V	CP-D/568
3	MEXT	3SAFNAC	National Accelerator Centre, Faure	CP-D/568
3	SEXT	3SAFSUN	Southern Universities Nuclear Insititute, Faure	CP-D/568
5	SOBS	JP/GL	Jour. of Physics, Part G, Letters to the editor	CP-N/069
5	SOBS	JP/S	Jour. of Physics, Part G, Supplement	CP-N/069
5	ATRA	NRP	J.Nucl.Radiat.Phys. Journal of Nuclear and Radiation Physics	CP-D/554
5	AEXT	NSD/BS	Nucl.Sci.Appl.B Sup.Nuclear Science and Applications, Ser. B Suppl.	CP-D/571
5	ATRA	PPN/L	Phys.Part.Nucl.Lett.Physics of Particles and Nuclei Letters	CP-D/556
6	SEXT	SJPN	Sov.J.Part.Nucl. Soviet Journal of Particles and Nuclei	CP-D/556
6	MTRA	A-JCL-	RIKEN Accelerator Progress Report	Cp-E/141
7	SOBS	2001DUBNA	Interaction of Neutrons with Nuclei, Dubna 200	CP-D/548
7	SOBS	2002DUBNA	Int.Sem.Interaction of Neutrons w.Nuclei,Moscow,2002	CP-D/548
7	MTRA	2006MANGAL	Nucl.Data f.Adv.Nucl.Systems, Mangalore, India, 2006	CP-D/547
7	ATRA	2007LUXOR	6th Int.Nat.Conf.Nucl.& Part.Phys.,Luxor,Egypt 2007	CP-D/554
7	MTRA	2007NICE	Conf.on Nucl.Data for Sci. and Technology, Nice 2007	This memo

7	ATRA	2007TOKYO	23rd International Nuclear Physics Conf., Tokyo 2007	CP-D/549
7	ATRA	2007SANIB	Conf.Fiss.Prop.Neutron-Rich Nucl.,Sanibel Island 2007	4C-4/174
7	ATRA	2008AOMORI	16th Pacific Basin Nuclear Conference, Aomori 2008	CP-E/139
7	ATRA	2008INTLAK	Int.Conf. on the Phys. of Reactors, Interlaken, 2008	CP-D/547
7	ATRA	2008MACKIN	10th Symp.on Nucl.in the Cosmos, Mackinac Island 2008	CP-D/570
7	ATRA	2008VILLIG	1 Int.Worksh.on Acc.Radat.Ind.Activ., Villigen, 2008	CP-D/550
17	ATRA	I	Reference to experimental instruments	CP-D/565rev
17	ATRA	M	Reference to experimental technique	CP-D/565rev
18	ATRA	NGEN	Neutron generator	CP-D/572
23	ATRA	ERCSN	Extracted from Ericson fluctuation	CP-D/558
24	ATRA	ANG-RL-DN	Relative angle for reaction ratio denominator	CP-D/541
24	ATRA	ANG-RL-NM	Relative angle for reaction ratio numerator	CP-D/541
24	ATRA	E-RL-MAX	Upper limit of relative energy of outgoing part.in Lab.	CP-N/076
24	ATRA	E-RL-MIN	Lower limit of relative energy of outgoing part.in Lab.	CP-N/076
25	MTRA	CM3/S/MOL	centimeters**3 per second per Mol B*V 1.66054E-24	This memo
25	ATRA	NB/SR2MEVC	nanobarns / (sr**2 * MeV/c)	CP-E/139
25	ATRA	P/FS/MEVSR	particles/fission/MeV/sr	CP-D/541
25	MTRA	PRT/FIS/SR	particles per fission per sterad	CP-D/541
26	AINT	DA2P	cross section per sol. angle-sq. per lin. momentum	CP-E/139
26	AINT	FYAE	per-cent per fission per solid angle per energy	CP-D/541
26	AINT	FYDA	per-cent per fission per solid angle	CP-D/541
31	ATRA	PRV	Provisional	CP-D/569
33	ATRA	K0	Kaons,neutral	CP-E/139
34	ATRA	RAB	times nat.abund.div.by abund.of targ.of 1st term	CP-D/546
35	SOBS	EXP	Experimental data	CP-D/552
207	ATRA	LEDERER-6	C.M.Lederer,Table of Isotopes, 6th Ed., 1967	CP-D/555
209	ATRA	1-H-ARM	Aromatic compounds	CP-D/545
213	ATRA	NAE	Neutron yield d/dAngle/dE'	This memo
236	ATRA	,DA/DA/DP,*/*+*/**+	triple-diff cs dA(*)/dA(*+*)/dP(*+*)	CP-E/139
236	MTRA	,IPA/DP	Double-diff.cs d2/dp/dA int.over part.ang.range	This memo
236	MTRA	,IPP/DA	Double-diff.cs d2/dp/dA int.over part.mom.range	This memo
236	SOBS	,KE/CRL,LF/HF	Total kinetic energy of light/heavy frag. pair	CP-D/553
236	ATRA	,KE,LF+HF	Tot.kin. energ.of light/heavy frag.pair specified	CP-D/553
236	SOBS	,MLT/DA,G/FF	Gamma multiplicity as fct.of fiss.fragm.angle	CP-D/563
236	MTRA	,MLT,,RES	Multiplicity at resonance	This memo
236	ATRA	,POL/DA/DA/DP,*/*+*/**+,VAP	Vector analyzing power	CP-E/139

			$d/dA^{(*)}/dA^{(*+*)}/dp^{(*+*)}$	
236	ATRA	, POL/DA2/DE2, * / *	Polarization $d/dA1^{(*)}/dA2^{(*)}/dE1^{(*)}/dE2^{(*)}$	CP-E/139
236	ATRA	, SIG, , RAB	Cs * abund.(nat)/abund.(nuclide of 1st term)	CP-D/546
236	ATRA	, WID/STR, , RM	Reich-Moore resonance strength	CP-N/075rev
236	MTRA	DL, SPC	Intensity of delayed gammas	This memo
236	ATRA	LL, POL/DA2/DE2, * / *, D	Spin rot.param $D(LL)/dA^{(*)}/dA^{(*)}/dE^{(*)}/dE^{(*)}$	CP-E/139
236	ATRA	LS, POL/DA2/DE2, * / *, D	Spin rot.param $D(LS)/dA^{(*)}/dA^{(*)}/dE^{(*)}/dE^{(*)}$	CP-E/139
236	ATRA	NN/PAR, POL/DA, *, ANA	Tensor analyzing power $A(yy)/dA^{(*)}$ , partial	CP-D/560
236	ATRA	NN, POL/DA2/DE2, * / *, D	Spin rot.param $D(NN)/dA^{(*)}/dA^{(*)}/dE^{(*)}/dE^{(*)}$	CP-E/139
236	MTRA	PAR, DE	Spectrum of outgoing particles for specif.level	This memo
236	ATRA	PAR, FY/DA, G/G+FF	Par.diff.fis.frag.gam.yields $d/dA(g+fis.frag.)$	CP-D/563
236	SOBS	PAR/IND, FY, G	Abs.yield of pr.fiss.gammas of def.energy	CP-D/543
236	ATRA	PR, AKE/DA, N/N+LF	Av.E of pr.neutr.at given ang.(n+light frag.)	4C-4/173rev
236	ATRA	PR, AKE/DA, N	Av.E of pr.neutr.at given angle(neutron)	CP-N/077
236	MTRA	PR, DA, N	Angular distribution of prompt fission neutrons	CP-D/563
236	MTRA	PR, DA, N+LF	Diff.prompt fis.neut.mult $d/dA(n+light frag.)$	4C-4/173rev
236	ATRA	PR, KE, N	Av.kin.energ.of prompt ntr.f.fis.frag.specified	CP-N/075rev
236	ATRA	PR, NU/DA/DE, N+LF/N	Diff. prompt neutron mult. $d/dA(n+light frag.)$	4C-4/173rev
236	MTRA	PR, SPC	Intensity of prompt fission gammas	This memo
236	ATRA	PR/PAR, MLT, G	Partial prompt gamma multiplicity	CP-D/542
236	MTRA	PR/TER, DA, N	Ang.dist.of prompt fission neuts,ternary fiss.	CP-D/563
236	MTRA	PR/TER, SPC	Prompt gamma-spectrum from ternary fission	This memo
236	ATRA	PRV, AP, HF	Most prob.provisoinal mass for heavy frag.	CP-D/569
236	ATRA	PRV, AP, LF	Most prob.provisoinal mass for light frag.	CP-D/569
236	ATRA	SEC, KE, FF	Av.kin.energ.of post-n- emiss.frag.specified	CP-N/077
236	ATRA	SEC, KE, LF+HF	Tot.kin.energ.of light/heavy post-n-emiss. frag. pair	CP-D/553
236	ATRA	SL, POL/DA2/DE2, * / *, D	Spin rot.param $D(SL)/dA^{(*)}/dA^{(*)}/dE^{(*)}/dE^{(*)}$	CP-E/139
236	ATRA	SS, POL/DA2/DE2, * / *, D	Spin rot.param $D(SS)/dA^{(*)}/dA^{(*)}/dE^{(*)}/dE^{(*)}$	CP-E/139
236	ATRA	SS/PAR, POL/DA, , ANA	Tensor analyzing power $A(xx)/dA$ , partial	CP-N/076
236	ATRA	SS/PAR, POL/DA, *, ANA	Tensor analyzing power $A(xx)/dA^{(*)}$ , partial	CP-D/560
236	ATRA	TER, KE, FF	Kin.energ.of fiss.frag.specified,ternary fis.	CP-N/075rev
236	ATRA	TER/PAR, FY	Partial fission yield in ternary fission	CP-N/078
236	ATRA	TP/PAR, DP	Part.Diff.cs w.resp.to transv.sec.momentum	CP-E/141

**Distribution:**

blokhin@ippe.ru  
chiba@earth.sgu.ac.jp  
claes.nordborg@oecd.org  
ganesan@barc.gov.in  
gezg@ciae.ac.cn  
hasegawa@nea.fr  
henriksson@near.fr  
hongwei@ciae.ac.cn  
jhchang@kaeri.re.kr  
kaltchenko@kinr.kiev.ua  
katakura.junichi@jaea.go.jp  
kato@nucl.sci.hokudai.ac.jp  
kirarlyb@atomki.hu  
l.vrapcenjak@iaea.org  
manuel.bossant@oecd.org  
manokhin@ippe.ru  
mmarina@ippe.ru  
mwherman@bnl.gov  
nicolas.soppera@oecd.org  
nklimova@kinr.kiev.ua

n.otsuka@iaea.org  
nrdc@jcprg.org  
oblozinsky@bnl.gov  
ogritzay@kinr.kiev.ua  
otto.schwerer@aon.at  
r.forrest@iaea.org  
samaev@obninsk.ru  
s.babykina@polyn.kiae.su  
scyang@kaeri.re.kr  
s.dunaeva@iaea.org  
stakacs@atomki.hu  
stanislav.hlavac@savba.sk  
taova@expd.vniief.ru  
tarkanyi@atomki.hu  
varlamov@depni.sinp.msu.ru  
vlasov@kinr.kiev.ua  
vmclane@optonline.net  
v.pronyaev@iaea.org  
v.zerkin@iaea.org  
yolee@kaeri.re.kr