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EXFOR Completeness for Neutron Data Published in Phys. Rev. C

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Completeness of EXFOR was checked for neutron data published in Phys. Rev. C. About 70 articles are identified as articles missing in EXFOR.

Eight articles were then excluded from the list according to the feedback from Victoria McLane because of data in EXFOR compiled from other articles, data in continuous curve, optical analysis of data in EXFOR etc. Publications of some major quantities (SIG, DA, DAP, DAE) are italicized.

The Table enclosed in Memo CP/D-513 is updated accordingly.

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Memo CP-D/513

Date: 20 August 2008
To: Distribution
From: N. Otsuka, S. Dunaeva, V. Zerkin, B. Goh, A. Mengoni,
Subject: **EXFOR completeness for neutron data published in Phys. Rev. C**

Motivated by the activity of the WPEC SG-30, we started a systematic analysis of the EXFOR coverage for data published in major journals. A full account of the present status of the EXFOR database coverage as compared to the published literature has been presented at the SG-30 meeting of 4-6 June 2008 at JAEA, Tokai-mura, Japan (slides are enclosed in Appendix).

From this analysis, a list of missing compilations (papers published, data not compiled into EXFOR) has been prepared in the case of:

Journal : PR/C
 Period : 1970 – 2005
 Reaction : n-induced

In order to reach **full coverage** for n-induced reactions published in PR/C the following papers should be compiled into EXFOR:

(Note that the table is updated after the distribution of CP-D/513 according to comments from V.McLane – 2008-09-14.)

Vol.	No	Page	Published	Lab	Quantity	Entry	Remark
1	4	1221	1970-04	3CROBZ	DA2		
2	4	1554	1970-10	1USACOL	FY		
2	4	1579	1970-10	1USALRL	DAA		
3	1	373	1971-01	1USAORL	MLT, KE		
3	2	849	1971-02	1CANMCM	FY		Upper limit
4	1	223	1971-07	3ISLSOR	KE		
4	1	267	1971-07	1USACOL	MLT		
6	3	801	1972-09	1USAGRT	CS		
6	3	1023	1972-09	1USAORL	FY, MLT, KE		
6	6	2252	1972-12	1USAANL	FY		
7	1	419	1973-01	1USABNL	SPC		
7	3	1173	1973-03	1USAIRT	MLT		
7	6	2598	1973-06	1USAORL	CS	---	Continuous line, compiled to CINDA at NDS (2008-08-23).

8	3	1035	1973-09	1USABNL	SPC		
9	6	2252	1974-06	2NEDKVI	CS		
15	3	1171	1977-03	2SWTBAS	DA		
16	2	588	1977-08	1USABNL	SPC		
16	2	716	1977-08	3INDTRM	KE		
16	4	1389	1977-10	2GERHAM	CS		,SIG,,SS
18	4	1745	1978-10	3INDTRM	FY,KE		
20	4	1244	1979-10	2ITYBAU	DAP		
21	3	998	1980-03	1CANTMF	POL		Table
22	1	337	1980-07	2ITYBAU	DAP		
24	2	796	1981-08	1USALAS	POL		
24	4	1419	1981-10	1USALAS	LDP		
24	5	2331	1981-11	2ITYMIL	DE,DAE		
27	1	245	1983-01	1USALAS	FY		
28	6	2212	1983-12	1USATNL	DA	---	Optical model analysis to data compiled in 10550 (9Be), 10707 (6Li, 7Li), 10819 (10B, 11B), 10859 (16O), 12716 (13C) and 12890 (12C).
30	6	1795	1984-12	2FR BRC	DA		
33	3	969	1986-03	2INDTRM	FY		
33	5	1826	1986-05	1USAOHO	DA	---	Optical model analysis to data compiled in 10965 (24 MeV) and 13194 (18, 20, 22, 26 MeV). Source of 24.6 MeV data is unknown. Compiled to CINDA at NDS (2008-08-27).
34	1	218	1986-07	2GERKFK	FY,NU,KE		
35	1	81	1987-01	1USABNL	SPC		CPND part is in C0204. A part of neutron data are from 2FR ILL.
35	2	402	1987-02	2BLGLVN	DA		
36	5	1749	1987-11	3SAFDWU	DAP		
38	3	1270	1988-09	2FR ILL	CS		ratio to U-235(n,f)
38	4	1649	1988-10	2FR GRA	DE		
39	4	1633	1989-04	1CANMCM	CS		
39	5	1736	1989-05	1USAORL	CSP		
40	6	2527	1989-12	2FR BRC	DA,DAP		
43	2	521	1991-02	1USALAS	CSP	---	Compiled in 14169 (TRANS.1348)
43	3	1099	1991-03	1CANTMF	DAE	---	Compiled in 14168 (TRANS.1348)
43	4	1932	1991-04	3POLIPJ	DE		
44	1	506	1991-07	2GERKFK	CS		
44	1	523	1991-07	1USABNL	SPC		
44	6	2419	1991-12	1USALAS	CS	---	Compiled in 14170 (TRANS.1348)
45	5	2343	1992-05	1USALAS	DAE,DAE,P,CS		
45	2	R500	1992-02	1USALAS	DAE	---	Continuous line, should be added to

							CINDA
46	6	2283	1992-12	1USABNL	SPC		
47	3	1033	1993-03	1USALAS	CS	---	Compiled in EXFOR 13569 from PR/C 47 1033 (1993) (as seen in CINDA)
48	1	109	1993-07	1USABNL	SPC		
48	3	1158	1993-09	1USALAS	DAP, DAE		DAE: Continuous line
51	1	379	1995-01	2GERKFK	CS		
51	3	1540	1995-03	2GERKFK	CS		
51	6	3127	1995-06	3INDTRM	MLT		
51	6	3363	1995-06	2GERMUN	CS		
51	6	3465	1995-06	2GERKFK	CS		
52	2	495	1995-08	1CANTMF	DA		
53	1	459	1996-01	2GERFZK	CS		MACS
53	2	977	1996-02	2GERFZK	CS		MACS
53	3	1397	1996-03	2GERFZK	CS		MACS
56	3	1424	1997-09	2AUSIRK	DAE, DE, DA		
56	6	2941	1997-12	2GERBON	POL		
57	2	484	1998-02	2GERBON	POL		
58	2	1325	1998-08	2GERBON	POL		
60	4	045502	1999-10	1USALAS	RP		
64	1	015501	2001-07	1USALAS	RP		
64	1	015502	2001-07	1USALAS	RP		
65	5	057603	2002-05	?	CS		
67	3	034610	2003-03	2FR ILL	KE, FY		FY: relative?
68	2	024604	2003-08	2FR ILL	DAE, DE, CS		
70	4	044610	2004-10	2FR ILL	FY		
71	5	055803	2005-05	2JPNTIT	CS		