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**MEMO CP-N/34**

**DATE:** 5 Oct 2005  
**TO:** See distribution list below  
**FROM:** H. Henriksson  
**SUBJECT:** New conference code and update of dictionary 36

Dear All,

Below follows a suggested addition to the conference dictionary (dictionary 7):

2005SANTA ICANS-XVII, 17th Meeting of the International Collaboration on Advanced Neutron Sources, April 25-29, 2005, Santa Fe, New Mexico.

I also propose the addition to the codes in dictionary 36, for bound and free atom temperature-dependent cross sections:

BA,,SIG/TMP  
FA,,SIG/TMP

Now exists only BA,,SIG and FA,,SIG. See example of possible use below.

Best regards,  
Hans Henriksson

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ENTRY	22878	20051004	22878	0	1
SUBENT	22878001	20051004	22878	1	1
BIB	8	31	22878	1	2
TITLE	.Measured total cross sections of slow neutrons scattered by gaseous and liquid deuterium molecules		22878	1	3
AUTHOR	(F. Atchison, K. Bodek, B. van den Brandt, T. Brys, M. Daum, P. Fierlinger, P. Geltenbort, M. Giersch, P. Hautle, R. Henneck, S. Heule, M. Hino, M. Kasprzak, K. Kirch, J. Kohlbrecher, J.A. Konter, G. Kuehne, M. Kuzniak, A. Pilchmaier, M. Utsuro, A. Wokaun, J. Zmeskal)		22878	1	5
INSTITUTE	(2SWTPSI) F. Atchison, B. van den Brandt, T. Brys, M. Daum, K. Kirch, P. Fierlinger, P. Hautle, R. Henneck, J. Kohlbrecher, G. Kuehne, J.A. Konter, A. Pilchmaier, A. Wokaun, and experimental site		22878	1	11
	(3POLUJK) K. Bodek, M. Kasprzak, M. Kuzniak		22878	1	12
	(2FR ILL) P. Geltenbort and experimental site		22878	1	13
	(2AUSAUS) M. Giersch, J. Zmeskal, Institute of Medium energy physics, Astrian Academy of Science		22878	1	14
	(2JPNKTO) M. Hiro, M. Utsuro)		22878	1	15
REFERENCE	(J, PRL, 94, 212502, 20050603) Main reference, graphs are given		22878	1	20
	(C, 2005SANTA,, 200504) ICANS-XVII, Meeting of the International Collaboration on Advanced Neutron Sources, April 25-29, 2005, Santa Fe, New Mexico.		22878	1	21
	Tables of cross section		22878	1	22
	(J, NIM/A, 533, 491, 2004) Experimental details		22878	1	23
FACILITY	(REAC, 2FR ILL) VCN and UCN at the PF-2 instrument of the Institute Laue-Langevin		22878	1	24
	(SELVE, 2SWTPSI) Velocity selector, SANS-1 instrument of the SINQ facility at Paul Scherrer Institute		22878	1	25
METHOD	(TOF) Time of flight		22878	1	26
ERR-ANALYS	(DATA-ERR) Not specified		22878	1	27
HISTORY	(20051004C) HH		22878	1	28
ENDBIB	31	0	22878	1	29
NOCOMMON	0	0	22878	1	30
ENDSUBENT	34	0	22878	1	31
SUBENT	22878002	20051004	22878	2	1
BIB	3	9	22878	2	2
REACTION	(1-H-DXX(N, TOT), FA, SIG/TMP) Gaseous molecular deuterium at 25 grad K		22878	2	3
SAMPLE	.2-H-2 has purity 99.95%, orto-deuterium concentration is 98.6% +/- 0.4%. Density is 1.63 +/- 0.04 dm3/mol. Sample cell was connected to the warm gas tank at pressure (1.09+-0.02)E+5 pascal. Thickness of the cell varied from 10 to 11.1 mm		22878	2	4
STATUS	.From table 1 of reference 2. Obtained from K. Kirch, 2005-09-01 via E-mail		22878	2	5
ENDBIB	9	0	22878	2	6
COMMON	2	3	22878	2	7
TEMP	TEMP-ERR		22878	2	8
K	K		22878	2	9
25.0	0.3		22878	2	10
ENDCOMMON	3	0	22878	2	11
DATA	3	43	22878	2	12
EN	DATA	DATA-ERR	22878	2	13
EV	B	B	22878	2	14
5.61E-05	47.2	9.4	22878	2	15
4.28E-05	68.7	5.3	22878	2	16
...			22878	2	17
			22878	2	18
			22878	2	19
			22878	2	20
			22878	2	21
			22878	2	22