**Nuclear Data Section**

**International Atomic Energy Agency**

**P.O.Box 100, A-1400 Vienna, Austria**

**Memo CP-D/998**

**Date:** 20 July 2020

**To:** Distribution

**From:** N. Otsuka

**Subject: Dictionary transmission 9122**

Dictionary transmission 9122 is available in three formats (Trans, Archive and Backup) from the NDS open area: <http://www-nds.iaea.org/nrdc/ndsx4/trans/dicts/>. These dictionaries in zipped form (dicts-2019-12-21.zip) are also available: <http://www-nds.iaea.org/exfor-master/backup/?C=M;O=D>.

All memos submitted no later than 20 June (for dictionary 1, 2, 4, 16, 24-25, 30-35, 37, 236) or 19 July (for other dictionaries) are considered in this update.

I also propose to make the following four quantity codes obsolete:

* ,AKE,\*F and ,AKE,LF+HF: After this dictionary update, we can use (SEC),AKE,\*F and (SEC),AKE,LF+HF when it is not clear if the quantity is for the fragment before or after prompt neutron emission.
* PAR/PRE,AKE,LF+HF and PAR/PRE,KE: These have been always used for kinetic energy of the fissioning nuclide at a specific excitation energy and not explicitly seen in REACTION. For this purpose, ISP must be used instead of PAR. These quantity codes are used only in two entries: C0608.002-003 (under revision) and C2436.002-003 only.

Two new headings E-EXC-RES and E-EXC-R-ER are used in O2437.003 (transmitted in TRANS.O075), but Nicolas Soppera found only E-EXC-RES is proposed in Memo CP-N/155. I believe we accept E-EXC-R-ER along with E-EXC-RES, and added both headings in Dictionary 24.

Additional changes introduced in this memo are summarized below:

**Dictionary 3 (Institutes)**

3ALGUHB Universite Sci. et Tech. Houari Boumediene, Algiers

3HKGUHK The University of Hong Kong

3INDBGL Bangalore University, Bengaluru

**Dictionary 5 (Journals)**

BAP (“Ser. II” added at the end of the expansion)

CJR/A (Expansion changed to “Canadian Journal of Research, Part A”)

CJR/B (Expansion changed to “Canadian Journal of Research, Part B”)

JINS Journal of Instrumentation

MSA/S Memorie della Societa Astronomica Italiana Supplement

YK (“Yaderno-Reaktornye” replaced “Yadernye” in expansion)

**Dictionary 7 (Conferences)**

77TOKYO (“TRA” replaced “OBS” for papers not publisher in a report/journal)

2005ULAANB 3rd Int. School on Contemporary Phys., Ulaanbaatar, 8-15 Aug. 2005

**Dictionary 24 (Data headings)**

E-EXC-R-ER (Error in excitation energy of initial compound nucleus on resonance)

**Dictionary 33 (Particles)**

PN (*Obsolete*. N must be used for prompt neutrons.)

**Dictionary 213 (Reaction types)**

LP (*Delete*. Not in use.)

**Dictionary 236 (Quantities)**

,AKE,\*F (*Obsolete*. PRE, SEC or (SEC) must be in SF5)

,AKE,LF+HF (*Obsolete.* PRE, SEC or (SEC) must be in SF5)

FA/PAR,AMP (*Delete.* Not in use.)

PAR/PRE,AKE,LF+HF (*Obsolete*)

PAR/PRE,KE (*Obsolete*)

PRV,FY (Expansion changed to “Fission product yield for a provisional mass specified”)

All changes are summarized below. “Status” gives alteration flags and status codes defined in EXFOR/CINDA Dictionary Manual.

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| --- | --- | --- | --- | --- |
| **Dict.** | **Status** | **Code** | **Expansion** | **Remark** |
| 003 | MTRA | 2JPNIPC | Inst.of Physical and Chemical Res. (RIKEN), Wako | Editorial |
| 003 | ATRA | 3ALGUHB | Universite Sci. et Tech. Houari Boumediene, Algiers | This memo |
| 003 | MTRA | 3CHFNTU | National Taiwan Univ., Taipei | Editorial |
| 003 | MTRA | 3CHFSHI | Institute of Nuclear Energy Research, Lung-Tan | Editorial |
| 003 | MTRA | 3CPRIHP | Inst.of High Energy Physics, Acad. Sinica, Beijing | Editorial |
| 003 | ATRA | 3HKGUHK | The University of Hong Kong | This memo |
| 003 | ATRA | 3INDBGL | Bangalore University, Bengaluru | This memo |
| 003 | MTRA | 3POLUJK | Jagiellonian University, Krakow | Editorial |
| 005 | MTRA | BAP | Bulletin of the American Physical Society Ser.II | This memo |
| 005 | MEXT | CJR/A | Canadian Journal of Research, Part A | This memo |
| 005 | MEXT | CJR/B | Canadian Journal of Research, Part B | This memo |
| 005 | ATRA | JINS | Journal of Instrumentation | This memo |
| 005 | ATRA | MSA/S | Mem.Soc.Ast.It.Supp.Memorie della Societa Astronomica Italiana Supp. | This memo |
| 005 | MTRA | YK | Vop.At.Nauki i Tekhn.,Ser.Yaderno-Reak.Konstanty | This memo |
| 007 | STRA | 77TOKYO | Int.Conf.on Nuclear Structure, Tokyo, 5-10 Sep 1977 | This memo |
| 007 | ATRA | 2005ULAANB | 3rd Int.School on Contemp.Physics, Ulaanbaatar, 2005 | This memo |
| 018 | SOBS | MESON | Meson facility | CP-D/997 |
| 019 | ATRA | COULX | Coulomb excitation | CP-D/996 |
| 024 | ATRA | DATA-AP-CM | Approx.value of quant.specif.under REACTION, c.m. sys. | CP-C/480 |
| 024 | ATRA | E-EXC-C-ER | Error in excitation energy of initial compound nucleus | CP-D/991 |
| 024 | ATRA | E-EXC-RES | Exc. energy of initial compound nucleus on resonance | CP-N/155 |
| 024 | ATRA | E-EXC-R-ER | Error in exc. energy of initial comp.nucl.on resonance | This memo |
| 024 | MTRA | ELEM-NRM | Atomic number of nuclide used for normalization | Editorial |
| 024 | MTRA | EN-CM-NRM | Inc.proj. energy (in c.m.) used for normalization | Editorial |
| 024 | MTRA | EN-NRM | Incident projectile energy used for normalization | Editorial |
| 024 | ATRA | ERR-17 | 17th partial uncertainty, defined under ERR-ANALYS | CP-D/992 |
| 024 | ATRA | ERR-18 | 18th partial uncertainty, defined under ERR-ANALYS | CP-D/992 |
| 024 | MTRA | MISC-MAX | Upper limit of miscellaneous value | Editorial |
| 024 | MTRA | MISC-MIN | Lower limit of miscellaneous value | Editorial |
| 024 | MTRA | TOF-MAX | Upper boundary of time-of-flight | Editorial |
| 024 | MTRA | TOF-MIN | Lower boundary of time-of-flight | Editorial |
| 031 | ATRA | (SEC) | Compiler uncertain if secondary | 4C-4/224 |
| 033 | SOBS | PN | Prompt Neutrons | This memo |
| 213 | DTRA | LP | Partial length or amplitude | This memo |
| 236 | ATRA | (CUM),FY,,FRC | Fractional fission product yield (uncertain if cumulative) | CP-C/483 |
| 236 | ATRA | (SEC),AKE,\*F | Average kinetic energy of fission fragments (uncertain if secondary) | CP-C/484 |
| 236 | ATRA | (SEC),AKE,LF+HF | Avg.tot.kin.energy of light and heavy fission fragment unc.if secondary | 4C-4/224 |
| 236 | SOBS | ,AKE,\*F | Average kinetic energy of specified fragment | This memo |
| 236 | SOBS | ,AKE,LF+HF | Avg.tot.kin.energy of light and heavy fiss.frag. | This memo |
| 236 | ATRA | ,POL/DA,\*,ASY | Asymmetry of polarized particles specified | CP-D/992 |
| 236 | ATRA | CUM,PY,,TT | Cumulative product yield for a thick target | CP-C/482 |
| 236 | DOBS | FA/PAR,AMP | Partial free-atom scattering amplitude | This memo |
| 236 | MTRA | INC,AMP | Incoherent scattering amplitude | Editorial |
| 236 | ATRA | ISP/PRE,AKE,LF+HF | Ave. Tot. kin. energy of primary fragm., partial for intermediate prod. | CP-C/477 |
| 236 | ATRA | ISP/PRE,FY | Pre-neutron-emission fission yield, partial for intermediate product | CP-C/477 |
| 236 | ATRA | ISP/PRE,KE,LF+HF | Tot. kin. energy of spec.primary fragm., partial for intermediate prod. | CP-C/477 |
| 236 | ATRA | ISP/SEC,FY | Post-neutron-emission fission yield, partial for intermediate product | CP-C/477 |
| 236 | MTRA | PAR,PY,,TT/CH | Partial product yield for thick target per electric charge | Editorial |
| 236 | ATRA | PAR/CUM,SIG,G | Partial cumulative gamma production cross section | CP-C/481 |
| 236 | ATRA | PAR/ICL,DA | Partial diff. c.s. d/dA uncor. for other channels emit.the same part. | CP-M/039 |
| 236 | ATRA | PAR/ICL,DA,,4PI | Part.diff. c.s. d/dA uncor. for other channels emit.the same part. \*4pi | CP-M/039 |
| 236 | SOBS | PAR/PRE,AKE,LF+HF | Avg.tot.kin.energy of prim.frag for gvn exc.en. | This memo |
| 236 | SOBS | PAR/PRE,KE | Primary fragm.kinetic.energy for givn sec.energ | This memo |
| 236 | MTRA | PRV,FY | Fission product yield for a provisional mass specified | This memo |
| 236 | ATRA | PRV,KE,LF+HF | Total kinetic energy of fission fragments, provisional mass specified | CP-D/992 |

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