

“Prompt” Summary of the joint discussion on Compiling/Storage of Neutron Spectra in EXFOR

1. First Alternative: usage of REACTION string for incident spectrum

creation of the new special SubEntry with coding of the incident Spectrum as Reaction string:

REACTION (U-238-SRC(0,0),,DE,,SPD)

which will specify Spectrum for the existing SubEntry with reaction SPA cross section coded by proper spectrum code in SF8 = MXA, EPI, FIS, FSR, BRA, SPA:

REACTION (6-C-12(N,TOT) , , , ,SPA

2. Second Alternative: put spectrum in INC-SPECT

INC-SOURCE (REAC) {or (P-LI7) or (AM-BE) ... }

free text description of facility

INC-SPECT {or INC-SPECT(DE,...) for searching, plotting etc. ?}

free text description of how spectrum was obtained

E Sp or (E, Sp, Npoints) to read by retrieving system

eV 1/eV

10000. .0001

.....

19999 .0009

or **link to or text explaining where data could be found, e.g.:**

- **File with Spectrum** if spectrum array is longer than say 50 lines

- **IRDF-2002 research reactor Spectra database**

https://www-nds.iaea.org/irdf2002/data/irdf2002_spectra.dat:

ISNF spectrum - [G.P.Lamaze 13153](#), [B.M.Oliver 13752](#)

Sig-Sig spectrum - [A.Fabry 20948](#), [A.Hannan 20950](#), [I.Garlea 30452](#), [30568](#)

CFRMF spectrum - [Y.Harker 10218](#), [E.P.Lippincott 13756](#)

YAYOI spectrum - [K.Kobayashi 21589](#), [K.Kobayashi 20693](#)

- **ENDF or Standards for the case of Cf, U(n,f) source**

- **ICSBEP** <https://www.oecd-neo.org/science/wpncs/icsbep/>,

e.g.. Benchmark **FUND-IPPE-FR-MULT-RRR-001** for Entry **A.Zvonarev 41068**

3. Current status: Examples of Neutron Spectra available in EXFOR

Reactor facility

REAC Triga 31733 <http://www-nds.iaea.org/EXFOR/31733.002>

REAC Yayoi 23075 <http://www-nds.iaea.org/EXFOR/23075.002>

REAC Idaho 31686 <http://www-nds.iaea.org/EXFOR/31686.002>

Radioactive source

AM-BE 31724 <http://www-nds.iaea.org/EXFOR/31724.002>

Accelerator driven

P-LI7 TIT 22850 <http://www-nds.iaea.org/EXFOR/22850.005>

P-LI7 KFK O1963 <http://www-nds.iaea.org/EXFOR/O1963.002>

(this source was used in many (n,g) SPA measurements: <http://www-nds.iaea.org/EXFOR/22996.003>,
should be a link include in such Entries to O1963 ?)

D-BE9 Julich many SPA data of S. Qaim et al. – spectra are not included