**Nuclear Data Section**

**International Atomic Energy Agency**

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

**Memo CP-D/1090**

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**To:** Distribution

**From:** N. Otsuka

**Subject: EXFOR/CINDA Dictionary in JSON**

**Reference:** CP-D/1086

As I briefly introduced in the NRDC 2023 meeting, I produced an EXFOR/CINDA Dictionary in JSON. Its main aim is to produce a TRANS dictionary without relying on the Fortran program DAN2X4. The first TRANS dictionary produced by this new procedure (TRANS.9928) was released on 30 June 2023 (c.f. Memo CP-D/1086) for your testing and comments. I plan to release one more trial version (TRANS.9929) in December 2023, and to adopt this new procedure for production of the official TRANS dictionary (TRANS.9930) in June 2024.

The JSON dictionary is currently just a scratch file to produce a TRANS dictionary for me. But it could be useful for some end users and/or programmers, and I decided to share the latest version of the JSON dictionary with the user community on the NRDC website (<https://nds.iaea.org/nrdc/file/dson.html>). It is a single plain text file.

You can easily extract the expansion or other dictionary field by some programming languages. Below is an example to extract the expansion of the quantity code CUM,FY,,FRC (Fractional cumulative yield) from the JSON dictionary dict\_arc\_all.9928.json by Python3:

$ python3

Python 3.9.9 (main, Jun 22 2022, 09:13:57)

>>> import json

>>> f=open("dict\_arc\_all.9928.json")

>>> json=json.load(f)

>>> print(json["236"]["CUM,FY,,FRC"]["expansion"])

Fractional cumulative fission product yield

>>>

Please visit the website (or report IAEA-NDS-0243) for more details.

**Distribution:**

a.koning@iaea.org

abhihere@gmail.com

aloks279@gmail.com

daniela.foligno@oecd-nea.org

dbrown@bnl.gov

dgremyachkin@ippe.ru

draj@barc.gov.in

exfor@oecd-nea.org

fukahori.tokio@jaea.go.jp

ganesan555@gmail.com

gezg@ciae.ac.cn

iwamoto.osamu@jaea.go.jp

jmwang@ciae.ac.cn

julia.sprenger@oecd-nea.org

kaltchen@ukr.net

kimdh@kaeri.re.kr

kimura.atsushi04@jaea.go.jp

l.vrapcenjak@iaea.org

manuel.bossant@oecd-nea.org

marina-03-08@yandex.ru

michael.fleming@oecd-nea.org

mvmikhaylyukova@ippe.ru

nicolas.soppera@oecd-nea.org

nomura@nucl.sci.hokudai.ac.jp

n.otsuka@iaea.org

nrdc@jcprg.org

nshu@ciae.ac.cn

odsurenn@gmail.com

ogritzay@ukr.net

otto.schwerer@aon.at

pikulina@expd.vniief.ru

pritychenko@bnl.gov

scyang@kaeri.re.kr

selyankina@expd.vniief.ru

sonzogni@bnl.gov

stakacs@atomki.mta.hu

stanislav.hlavac@savba.sk

sv.dunaeva@gmail.com

tada@nucl.sci.hokudai.ac.jp

taova@expd.vniief.ru

tarkanyi@atomki.hu

v.devi@iaea.org

v.zerkin@iaea.org

vidyathakur@yahoo.co.in

vsemkova@inrne.bas.bg

vvvarlamov@gmail.com

yolee@kaeri.re.kr

zholdybayev@inp.kz

**cc:**

amandalewis@lbl.gov

dneudecker@lanl.gov