

DE LA RECHERCHE À L'INDUSTRIE



WPEC Subgroup C —— HPRL —— High Priority Request List for Nuclear Data

www.oecd-neo.org/dbdata/hpml

Emmeric DUPONT for EG-HPRL (SG-C)

www.cea.fr



- ① Governance, Membership
- ② Progress report since June 2019
- ③ Deliverables and mandate extension

① Governance, Membership

- Expert members: experimentalists, evaluators, and (too few) users
- Representatives of nuclear data evaluation projects or countries
 - ENDF: Y. Danon (RPI)
 - JEFF: E. Dupont (CEA), A. Plompen (EC-JRC-Geel), G. Rimpault (CEA)
 - JENDL: O. Iwamoto (JAEA), N. Iwamoto (JAEA), T. Iwasaki (Tohoku), A. Kimura (JAEA), [K. Yokoyama (JAEA)]
 - BROND: V. Pronyaev (IPPE), V. Koscheev (IPPE)
 - CENDL: Zhigang Ge (CIAE), Xichao Ruan (CIAE), Sun Weili (IAPCM), Haicheng Wu (CIAE)
 - IAEA: R. Capote, A. Koning, [A. Trkov]
 - Korea: Young-Ouk Lee (KAERI)
 - Romania: A. Negret (IFIN-HH)
 - NEA: M. Fleming

- ① Governance, Membership
- ② **Progress report since June 2019**
- ③ Deliverables and mandate extension

② Progress report – Outreach



ND2019, Beijing, China, 19-24 May 2019

- HPRL paper submitted to the conference LOC in July 2019
- Publication expected in EPJ Web of Conferences (2020)

② Progress report – HPRL database/tools

HPRL website at www.oecd-nea.org/dbdata/hprl

New features implemented since June 2019

- Archiving of one more “Completed” entry: U-235(n, γ)
- Addition of justifications for all (9) HPRL entries with “Completed” status
- Improvements of the CMS-based HPRL prototype
 - Filtering fields (Type, Target, Reaction, Quantity, Status) for the list of entries

Implementation of additional features depends on

- NEA website upgrade with Content Management System (CMS)
- NEA manpower to develop a CMS-based HPRL or to implement requested features in the current HPRL system

② Progress report – Follow-up of HPRL entries

Updates of the list of publications related to HPRL entries

- 4 updates: August, December 2019, and February, May 2020
- Addition of a total of 16 references to about as many entries plus numerous dosimetry entries

② Progress report – New and completed entries

No new entries since June 2019

Requests in preparation for improving the quantification of the delivered therapeutic dose in proton beam therapy (R. Capote, IAEA)

- Gamma production ($p, x \gamma$) on C-12, N-14, O-16
- Production of positron-emitters C-10,11, N-12,13, and O-15 in (p,x) reactions on C, N, O
- ➡ Possible new SPQ category on Medical Applications

No additional completed entries yet

- U-235(n, γ) ➡ as agreed in June 2019
- (TBC) Pu-239 and U-235 PFGS

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- ③ **Deliverables and mandate extension**

③ Deliverables and mandate extension

EG-HPRL (SG-C) current mandate runs until June 2020

Deliverables

- ✓ A report on the status of all requests describing completed activities and outlook.
- ✓ An up-to-date online version of the “High Priority Request List for Nuclear Data”.

The HPRL status report was completed in September-October 2019

- The first part of the report is based on an update of the ND2019 paper
- + comprehensive appendices extracted from the online HPRL

NEA is considering using this material for a high-level official publication.

③ Deliverables and mandate extension

EG-HPRL (SG-C) current mandate ends in June 2020

Deliverables

- ✓ A report on the status of all requests describing completed activities and outlook.
- ✓ An up-to-date online version of the “High Priority Request List for Nuclear Data”.

Two-year extension (same mandate) requested in order to

- Finalize the NEA high-level publication and the CMS-based HPRL
- Finalize discussions with users for new HPRL entries for medical applications, and hopefully for nuclear energy applications
- Contribute to the analysis of SG46 TAR outcome, when available
- Maintain a standing point of reference for ND users and producers

Thank you for your attention!

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