

DE LA RECHERCHE À L'INDUSTRIE



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

www.oecd-nea.org/dbdata/hprl

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① Administrative items

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- ✧ Mailing lists
- ✧ Website
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- ✧ Entry status

② Review of the status of HPRL entries

- ✧ Recent entries
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④ Mandate extension

① Administrative items: 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: H. Harada (JAEA), O. Iwamoto (JAEA), T. Iwasaki (Tohoku), A. Kimura (JAEA), K. Yokoyama (JAEA)
 - BROND: V. Pronyaev (IPPE), V. Koscheev (IPPE)
 - CENDL: Zhigang Ge (CNDC), Xichao Ruan (CIAE), Sun Weili (IAPPCM)
 - IAEA: R. Capote, A. Koning, A. Trkov
 - Korea: Young-Ouk Lee (KAERI)
 - Romania: A. Negret (IFIN-HH)



① Administrative items: Mailing lists

- Two mailing lists managed by NEA
 - wpec-sgc@oecd-nea.org: SG-C members + former members + anyone interested in SG-C activities (25 members in total); more at <https://www.oecd-nea.org/sympa/arc/wpec-sgc> (password protected)
 - hpri@oecd-nea.org: ND community, mainly ND producers (113 members); more at <https://www.oecd-nea.org/sympa/arc/hpri> (no password)
- Please review these lists and inform NEA/me if an update is required

① Administrative items: Website

- Hosted by NEA at www.oecd-nea.org/dbdata/hprl
 - New features and layout implemented in July 2017
 - Direct access to the lists for High Priority, General, and Special Purpose Quantity requests (in addition to the Search engine)
 - Form and guidelines for SPQ requests
 - SG-C members, mailing lists and documents
 - New features and layout to implement
 - Split the SPQ webpage into “SPQ-dosimetry” and “SPQ-standards”
 - Add list of relevant publications and activities
 - Fields for “Status” and “Status date” in the database and search output
- Support from NEA IT is appreciated



① Administrative items: Procedures

- Rationale for the current HPRL established about 15 years ago
[D. Smith et al., ND2004, AIP Conf. Proc. 769 (2005) 545; <http://doi.org/10.1063/1.1945067>]
- Requests are reviewed and screened by Subgroup C
- Requests are driven by applications
- Requests are targeted to improvement of evaluated nuclear data
- Few categories without internal ranking:
 - High Priority (HP), General request (GR) since 2004
 - Special Purpose Quantities (SPQ) since 2014
- HPRL is a reference tool in support to experimental, theoretical and evaluation projects aiming at improving nuclear data
- SG-C is a forum for nuclear data producers and nuclear data users

① Administrative items: Procedures

■ New requests

- Can be submitted online or by email to NEA or to the SG-C coordinator
- Are reviewed by SG-C using the “wpec-sgc” mailing list within a few weeks
- Are uploaded by NEA/Coordinator and advertise to the “hpri” mailing list

■ Monitoring of activities related to HPRL entries

- Is made by the requesters and any SG-C member who should inform NEA/Coordinator of new relevant publications and activities
- The online list of publications is updated on a regular basis by NEA/Coordinator who should inform all SG-C members of this update

■ Decisions on entry status

- Are made by SG-C (and WPEC) at their annual meeting

① Administrative items: Entry status

■ Proposal for entry status

- (1) Work in progress
covers all experimental and theoretical activities
- (2) Pending new evaluation or validation
for entries that have already stimulated a lot of activities, but are not completed yet because of the lack of new evaluation or validation
- (3) Completed
for entries that have been satisfied (consensus required)
- (4) Archived
for entries that are no longer relevant or didn't stimulate any significant activities (consensus required)

■ Caution: keep in mind impact on activities when closing an entry

② Review of the status of HPRL entries

■ Recent entries (2017-2018)

- 4 High priority requests
 - K-39(n,p),(n,np); Cr-50,53(n, γ); Pu-239 nubar; Gd-155,157(n, γ)
- 52 Special Purpose Quantities
 - 51 SPQ-dosimetry and 1 SPQ-standards (U-235,238 HE fission)
- Status
 - A priori (1) Work in progress
 - Or (2) Pending new evaluation or validation

■ Old entries (< 2017)

- 27 High priority requests
- 10 General requests
- Status to be decided on a case-by-case basis (during this meeting)



③ Additional entries

- Requests already sent to SG-C (but not yet discussed/approved)
 - Pu-239 (possibly U-233) alpha xs ratio between thermal and 5 eV,
*which is overlapping with request #11 by L. Leal for Pu-239
(and request #9 by A. Bidaud for U-233)*
 - U-233 nubar between thermal and 5 eV,
which is overlapping with request #9 by A. Bidaud
 - High-energy tail of the Pu-239($n_{th,f}$) PFNS (in SPQ-dosimetry)
- Possible additional requests
 - Fission reactors and criticality-safety: data that should be improved are known, but users seem to have difficulties to select priority requests
 - ADS (MYRRHA): a few data identified by A. Stankovski (TBC)
 - Fast-range nubar of Pu-239,241 and U-233,235 (but no request so far...)

④ Mandate extension

- SG-C current mandate until June 2018

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”.
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- Two-year extension (of the same mandate) requested in order to
 - write a report summarizing the SG-C review of current activities, which first conclusions can already be reflected in the online HPRL,
 - formalize ongoing discussions with users into new HPRL entries,
 - maintain a standing point of reference for ND users and producers

Thank you for your attention!

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