

DE LA RECHERCHE À L'INDUSTRIE



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

[www.oecd-nea.org/dbdata/hprl](http://www.oecd-nea.org/dbdata/hprl)

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## ① Administrative items

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- ✧ Mailing lists
- ✧ Website
- ✧ Procedures
- ✧ Entry status

## ② Review of the status of HPRL entries

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- ✧ Old entries

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## 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](mailto: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](mailto: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](http://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, $\gamma$ ); Pu-239 nubar; Gd-155,157(n, $\gamma$ )
- 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. Stankovskiy (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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