

# Subgroup-C

*Arjan Plompen*  
*EC-JRC-IRMM, SN3S unit*

[www.jrc.ec.europa.eu](http://www.jrc.ec.europa.eu)

# Content

1. Status
2. Needs for new requests
3. Feedback
4. Enhancements
  - a) Proposal Simakov SPA/IRDFF
5. Mandate
6. Membership

# Status

1. Since its renewal in 2004 the High Priority Request List for nuclear data has been very successful at
  - a) establishing a new list with priorities based on current interests in nuclear energy,
  - b) mobilizing the community at tackling these requests.
2. From close by I have seen several European projects use the HPRL to motivate their research and I know from what I have seen reported at various meetings including the WPEC meetings, that many of the requests still generate new activity also elsewhere. In the European context I mention the EC funded projects EUROTRANS/NUDATRA, EFNUDAT, NUDAME, CANDIDE, EUFRAT, ERINDA, ANDES and the recently started CHANDA, some of the jointly funded projects of the n\_TOF collaboration and the nationally funded projects GEDEPEON, NEEDS (France) and TRAKULA (Germany).

# Needs for requests

- Several issues raised recently or in recent years that even deserve subgroups but have no entries on the list.
- The list should be a point of reference for real needs.
- We should work on requests for
  - Pu-239 fission cross section (Low-E range covered by G)
  - Pu-239 nu-prompt
  - PFNS U-235, Pu-239
  - Np-237 fission cross section

# Feedback

With the aid of experts in the field we should provide feedback with each request documenting,

1. its current interest,
2. what was done since its publication and
3. what remains to be done.

# Feedback

1. We (Subgroup-C/WPEC) should nominate one or two persons per request to summarize activities since the request was published (there are 36 requests).
2. These experts should come up with a standardised summary by mobilizing the community.
3. The activity should be completed by the end of 2014.
4. This will be in the form of
  - a) a report (if needed to achieve by later implementation...)
  - b) modified web pages.

# Feedback (content)

This summary must include the following items:

1. A list of experiments that were carried out with references to publications.
2. A list of new benchmark data/integral experiments.
3. A list of new evaluations.
4. A list of new supporting sensitivity analyses and/or other support documentation for the request showing its current interest.
5. A short summary indicating accuracy achieved and what remains to be done (0.5 page at most).
6. A list of references for 1-5 with full titles may be sufficient (add measured/evaluated/validated quantities).

# Feedback

Feedback coordinators per area.  
Experiment  
Evaluation  
Benchmark

Europe:  
Plompen, Leconte, De Saint-Jean

Japan: H. Harada and Y. Watanabe, ...

USA: Y. Danon, LANL, ORNL, NNDC?

Russian Federation: V. Pronyaev

Korea: Y.O. Lee

China: Z. Ge

We must include feedback from requesters, SG-31, CIELO project, ...

Open questions:

A contract to convert SG-31 results to feedback?

Take this as start to expand SG-C for the purpose?

## Feedback (timing)

1. Nominate coordinators (next week, WPEC/SG-C)
2. Clarify the goals to the coordinators (following week, AP).
3. Distribution of the requests to consultants by the coordinators mid-June
4. Deadline for first input: October 15.
5. Meeting before next WPEC? Satellite meeting to CSWEG/CIELO?

## Enhancements (SPQ)

We have had several expressions of interest for requests in the categories:

- 'spectrum averaged cross sections',
- 'thermal scattering laws',
- 'decay data',
- 'fission yields',
- 'gas production',
- 'dpa data',
- 'gamma yields',
- 'standards'.

Each of these categories typically have their own list of priorities.

## Enhancements (SPQ)

These categories have requests for which individually it would be very difficult to find the backup by a sensitivity analysis demonstrating high priority, but where it is otherwise evident that they have generic value and that it would be important to stimulate new activity in the field.

## Enhancements (SPQ)

To accommodate such requests I propose to have

HPRL Special Purpose Quantities.

*The SPQ will be subdivided in categories.*

*Each SPQ category would be one of the subjects for which we have had an expression of interest.*

*Each category will have its own list of requests.*

Starter category:

*"Spectrum averaged dosimetry cross sections"*

*Request by S. Simakov of the IAEA (see doc.).*

Next: "Decay Data". Message Prof. Golashvili T.V. to K. Matsumoto (received 14-5-2014) for consideration.

# Enhancements (SPQ)

Criteria to adopt a request

1. *Specified Material*
2. *Specified Quantity*
3. *Specified Target Uncertainty*
4. *Well motivated need for an application in nuclear energy*
5. *Documentation*

## Enhancements (other)

1. Support to requesters, developers and feedback.
2. Provide support (SG-C) to formulating new requests or updating existing requests.
3. Link on webpage to SG-C mailing list.

*Improved reach out to interested parties and stakeholders.*

# Mandate

1. Expires June 2014.
2. Renewal seems of obvious interest.
3. The text should be modernized (see proposal).
4. Completion of modifications by end of next week.

# Membership (current)

## FRANCE

Dr Gerald RIMPAULT CADARACHE gerald.rimpault@cea.fr

## JAPAN

Dr Tokio FUKAHORI JAEA fukahori.tokio@jaea.go.jp  
 Dr Tomohiko IWASAKI Univ. TOHOKU tomohiko.iwasaki@qse.tohoku.ac.jp

## RUSSIAN FEDERATION

Prof. Anatoly V. IGNATYUK IPPE ignatyuk@ippe.ru  
 Dr Vladimir N. KOSHCHEEV IPPE abbn@ippe.ru  
 Dr Gennadii MANTUROV IPPE mant@ippe.ru  
 Prof. Mark N. NIKOLAEV IPPE bnab@ippe.ru

## UNITED STATES OF AMERICA

Dr Yaron DANON RPI danony@rpi.edu  
 Dr. Donald L. SMITH ANL donald.l.smith@anl.gov  
 Dr. R.D. McKnight ANL (vacancy, reactor physics)

## International Organisations

Dr Arjan PLOMPEN EC arjan.plompen@ec.europa.eu  
 Dr Emmeric DUPONT NEADB emmeric.dupont@oecd.org

# Membership

Present mandate allows 2 members per data project:  
1 data developer and 1 data user.

SG-C would like to extend this to 3 members:  
1 experimenter, 1 evaluator and 1 user.

Presently included projects:  
JEFF, ENDF/B, JENDL, BROND

New participants?  
Korea?

via JEFF or eliminate the need for a data project?

IAEA?  
China?