

WPEC-31: Review of the Status of Subgroup Reports

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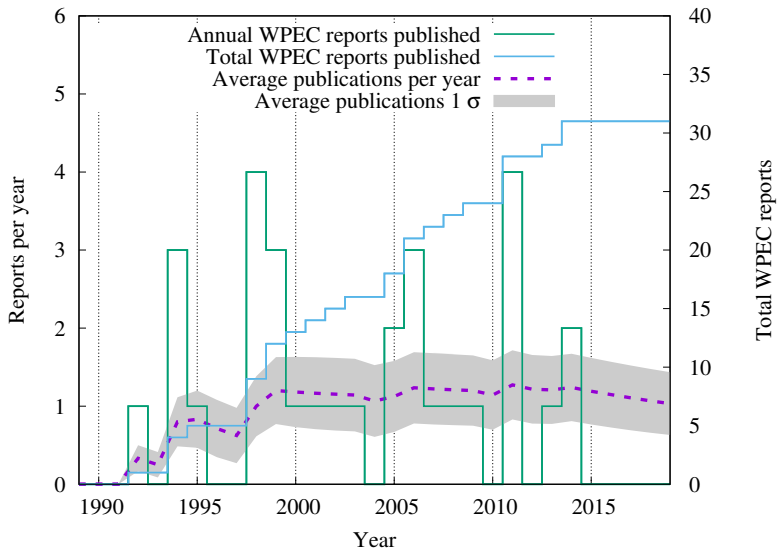
OECD Nuclear Energy Agency
Division of Nuclear Science

27-28 June 2019

OECD-NEA Headquarters, Boulogne-Billancourt, France

Introduction

- WPEC established 1989 and first report in 1992 following 3 year subgroup
- Since then, 47 subgroups established, one cancelled and 42 completed
- Reports constitute one of the primary deliverables of the subgroups and provide a coherent record of what was done
 - These are highly appreciated by the parent Nuclear Science Committee and its members
- Average of slightly more than 1 report published per year with some variability



Subgroup 27

Prompt photon production from fission products

Co-ordinator: R. Jacqmin, CEA

- Original co-ordinator passed away during the time of the subgroup
- R. Jacqmin kindly took over this responsibility
- NEA Secretariat looking forward to assisting in report drafting

Subgroup 28

Processing of covariance data in the resonance region

Co-ordinator: M. Dunn, Spectra Tech

- Draft report found with assistance from participants
- Few outstanding sections were left to be completed
- All sections (bar one) have been contributed (thank you!) and the draft is ready for review by Secretariat and subgroup

Subgroup 35

Scattering angular distribution in the fast energy range

Co-ordinator: T. Kawano, LANL

- Draft shared amongst participants
- Feedback is being addressed with a revised draft
- Co-ordinated through NEA GitLab

Subgroup 36

Evaluation of experimental data in the resolved resonance region

Co-ordinator: P. Schillebeeckx, JRC-Geel

- Activity completed with progress in methods and evaluations directly or indirectly generated
- NEA Secretariat looking forward to assisting in report drafting

Subgroup 37

Improved fission product yield evaluation methodologies

Co-ordinator: R. Mills, NNL

- Many outputs from this subgroup, including covariances and new evaluations included in the JEFF-3.3 library
- Data (e.g. covariances) stored on the NEA GitLab as of 2018
- Report drafting has started through NEA GitLab with participants actively contributing
 - Current draft at 24 pages with many sections awaiting contributions

Subgroup 38

Beyond the ENDF format: A modern nuclear database structure

Co-ordinator: D. McNabb

- The start of the GNDS project has generated a tremendous amount of material
- Drafting of the GNDS specifications and other documents being finalised on NEA GitLab (current drafts have around 400 pages)
- We have a nice problem, there is so much that we have to down-select what to include as the final report

Subgroup 39

Methods and approaches to provide feedback from nuclear and covariance data adjustment for improvement of nuclear data files

Co-ordinators: G. Palmiotti, M. Salvatores, INL, CEA

- Many contributions already received and compiled as a report which was shared at the November 2018 meeting
- Various corrections made by NEA Secretariat and now in the NEA publications pipeline
- At around 200 pages this will take some months to review and revise with multiple iterations

Subgroup 40

Collaborative International Evaluated Library Organisation (CIELO) Pilot Project

Co-ordinator: M. Chadwick, LANL

- Publication of high-impact Nuclear Data Sheets summary in Q1 2018
- Extended summary report has been drafted and sent to NEA publications in Q4 2018
- Iterations between publications and Secretariat are complete with finalisation in near future

Subgroup 41

Improving nuclear data accuracy of Am-241 and Np-237 capture cross-sections

Co-ordinator: H. Harada, JAEA

- Great progress made and contributions to evaluations
- NEA Secretariat looking forward to assisting in report drafting

Subgroup 42

Thermal Scattering Kernel $S(\alpha, \beta)$: Measurement, Evaluation and Application

Co-ordinator: G. Nogère, CEA

- Explosion of activity in TSL in the recent past with collaboration through SG42
- 33 new or revised evaluations generated and included in JEFF-3.3 and/or ENDF/B-VIII.0
- Subgroup report drafted and submitted to NEA publications in Q2 2019, before the next WPEC meeting
- New subgroup proposal in WPEC-31 to follow on these successes

Status levels for reports



1. In preliminary draft

2. Substantial partial draft completed

3. Complete draft to NEA Secretariat

4. Revised complete draft to NEA Publications

5. Publication reviewed and finalised by NEA

Status as of WPEC-30 (2018)

SG-27, R. Jacqmin	1	
SG-28, M. Dunn	1	2
SG-35, T. Kawano	1	2
SG-36, P. Schillebeeckx	1	
SG-37, R. Mills	1	
SG-38, D. McNabb	1	2
SG-39, G. Palmiotti	1	2
SG-40, M. Chadwick	1	2
SG-41, H. Harada	1	
SG-42, G. Noguère	1	2

Status as of WPEC-31 (2019)

SG-27, R. Jacqmin	1				
SG-28, M. Dunn	1	2	3		
SG-35, T. Kawano	1	2	3		
SG-36, P. Schillebeeckx	1				
SG-37, R. Mills	1	2			
SG-38, D. McNabb	1	2	3		
SG-39, G. Palmiotti	1	2	3	4	
SG-40, M. Chadwick	1	2	3	4	5
SG-41, H. Harada	1				
SG-42, G. Noguère	1	2	3	4	