

Nuclear Energy Agency



# WPEC/SG-39 Meeting, 16-17 May 2017

# **Revision of Actions**

O. Cabellos OECD/NEA Data Bank

**29th WPEC meeting, 16-17 May 2017** OECD Headquarters, Conference Centre, Paris, France

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Actions	Deliverables, reports, databases	
1. Action:	Finalize deliverables	
	<ul> <li>Action NEA: To publish the intermediate report on "Summary of Methodology" and "Comments on Covariance Data" before next meeting. Done! <u>Report number: NEA/NSC/R(2016)6</u> To advertise this report within the ND community interested in.</li> <li>Action NEA: To prepare H. Wu's report according with the OECD/NEA template. <u>Done!</u></li> <li>Action S. Pelloni: To finalize the report on PIA method</li> </ul>	
	utilization.	
	<ul> <li>Action E. Ivanov: To finalize the report on MC sensitivity coefficients. To include in the report the importance of correlations.</li> </ul>	





Actions	Deliverables, reports, databases	
2. Action:	Current activities: Methodologies and Experimental Benchmarks	
	<ul> <li>Action NEA: Rez's Benchmark on neutron spectra measurement in iron assemblies that could be used in SG39 if the complete information of the Benchmark will be available by February 2017. NEA will follow the status of this work.</li> <li><u>=&gt; Contact: Jansky Bohumil (Bohumil.Jansky@cvrez.cz)</u></li> </ul>	
	<ul> <li>Action M Hursin: Update HCLWR-PROTEUS documents and data for SG39 (received 09/01/2017). <u>Done, see website !</u></li> </ul>	
	<ul> <li>Action I. Kodeli/E. Ivanov: Provide MCNP inputs for SNEAK for intercomparison. <u>Done, see website !</u></li> </ul>	



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Integral data	
HCLWR-PROTEUS, last update 23 February 2017 (access to this file is restricted to SG39 members)	
Establishment of Benchmark Problems for TRU Fission Rate Ratios of FCA-IX Assemblies: FCA-IX report (access to this file is restricted to SG39 members)	
STEK and SEG	
• K. Dietze et al., Integral Test of Neutron Data and Comparison of Codes by Re-analysis of the SEG and STEK Experiments, JEF/DOC-861, May 2001.	
<ul> <li>K. Dietze et al., Integral test of JENDL-3.2 data by re-analysis of sample reactivity measurements at fast critical facilities, JNC Report TN9400 2001-043, February 2001.</li> </ul>	
<ul> <li>K. Dietze et al., Analysis of the Rossendorf SEF experiments using the JNC route for reactor calculation, JNC Report TN9400 99-089, November 1999.</li> </ul>	
NEA-1714 - Collection of STEK reports from CPS	
NEA-1713 - Collection of SEG reports from CPS	
IPPE sphere	
<ul> <li>S.P. Simakov et al., Benchmarking of Uranium-238 Evaluations against Spherical Transmission and (n,xn)-Reaction Experimental Data, International Conference on Nuclear Data for Science and Technology, Santa Fe, NM, USA, 2004, pp.67-70, CPD769 American Institute of Physics (2005).</li> </ul>	
BERENICE	
NEA-1759 - Collection of BERENICE documents from CPS	
Sensitivities Profiles: Flattop-Pu, SNEAK-7A, SNEAK-7B, ASPIS-FE88 (access to these files are restricted to SG39 members)	
Sensitivities profiles (last update 2 March 2017, see README.txt for more information)	
Reference of S&U in the effective delayed neutron fraction, I. Kodeli	
International databases	
Handbook of International Reactor Physics Benchmark Experiments (IRPhE)	
Handbook of the International Criticality Safety Benchmark Evaluation Project (ICSBEP)	
Radiation shielding experiments database (SINBAD)	
Benchmark results	





Actions	Deliverables, reports, databases
3. Action:	<ul> <li>Starting from CIELO new files (without uncertainties) attempt new adjustment         <ul> <li>Action K. Yokoyama/G. Palmiotti: Review CIELO adjustments, and more complete feedback for CIELO</li> <li>All: Final adjustment for CIELO and comments-description to be included in the Final Report</li> <li>All/NEA: Checking/provide NJOY inputs for CIELO files</li> <li>=&gt; <u>NOTES on: "An NJOY Processing Caution when Doppler Broadening", Feb. 2017</u></li> <li>=&gt; <u>Contact: A.Trkov@iaea.org</u></li> <li>All/NEA: Checking/provide inputs used in the SG39 benchmarks</li> <li>=&gt; <u>JEF/DOC-1797: "Overview of NEA activities on ICSBEP input verification", Ippei ENOKIDA, NEA</u></li> </ul> </li> <li>All/NEA: For any new adjustment it is underlined the importance of updated covariance data (including cross- correlation between isotopes). Update SG39 website with</li> </ul>
	papers or reports on verifying covariance data



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Actions	Deliverables, reports, databases	
4. Action	Provide feedbacks from CIELO	$\checkmark$

	Joint Session SG38+SG39+SG40 Wednesday, May 17, 2017. Autitorium	
15:00 - 18:00	Perspectives and Future of WPEC	Massimo SALVATORES Mark CHADWICK Dave Brown





WPEC/SG-39		
Tuesday, May 16, 2017. Room CC 18		
14:00 – 14:45	"Welcome and actions review"	Massimo SALVATORES Giuseppe PALMIOTTI Oscar CABELLOS
	Methods	
14:45 – 15:20	Comparison of PIA sequences by using the UR U238 capture cross- section as a standard	Sandro PELLONI
15:20 - 15:30	Preliminary results (a priori and a posteriori) on using the asymptotic PIA methodology in conjunction with data generated on the basis of Total Monte Carlo (TENDL-2014)	Sandro PELLONI
15:30 - 16:15	Continuous Energy Cross Section Adjustment: recent advances in the method development and verification	Manuel AUFIERO (by G. Palmiotti)
16:15 – 16:30	Coffee Break	
	Adjustments, experiment analysis and tools	
16:30 - 16:50	Nuclear data adjustments based on MAESTRO and ERMINE reactivity worth experiments from MINERVE	Pierre LECONTE
16:50 - 17:10	Correlations between integral experiments in the same series, and the impact of these correlations on adjustments	lan HILL
17:10 - 17:30	Status of NEA tools DICE (sensitivity coefficients) and NDaST (propagate proposed adjustments, or ND covariances, to integral experiment results via the DICE sensitivities)	lan HILL James DYRDA
17:30	Adjourn	





	WPEC/SG-39	
Tuesday, May 16, 2017. Room CC 18		
9:00 – 9:30	Adjustments, experiment analysis and tools	
9:30 - 10:00	Updated adjustment result by adding HCLWR-PROTEUS and SNEAK on the basis of the SG33 benchmark )	Kenji YOKOYAMA
10:00 - 10:45	Impact of CIELO evaluation on C/E of a large integral experiments data base	Giuseppe PALMIOTTI
10:45 - 11:00	Coffee Break	
11:00 - 11:20	Am241 data issues in the frame of criticality safety assessment	Andrew BARNES
11:20 - 11:30	Some notes on covariance evaluation process for CIELO and ENDF/B- VIII files	Patrick TALOU
	Discussion on perspectives and actions	
11:30 - 10:45	Overview of the SG44 kick-off meeting	Vladimir SOBES
11:45 - 12:00	The new subgroup "Efficient and Effective Use of Integral Experiments	Massimo SALVATORES
	for Nuclear Data Validation" proposal	Giuseppe PALMIOTTI
12:00 - 12:30	Discussion	All
12:30 - 12:35	Deliverables	Oscar CABELLOS
12:35 – 13:00	Future actions and next meeting	All
13:00	End of the Meeting	