

Oak Ridge National Laboratory



Oak Ridge, Tennessee 37830

Subject: Report on Foreign Travel to Paris

Date: 06/21/2022

To: Dr. Angela Chambers, Nuclear Criticality Safety Program Manager, National Nuclear Security Administration / NA-

511

From: Dorothea Wiarda

Meeting Title: WPEC Annual Meeting (May 2022)

Meeting Location: Paris, France

Meeting Date: 10-13 May 2022

Attendees on behalf of NCSP:

Dorothea Wiarda, Jesse Brown, Christopher Chapman, Kemal Ramic

Meeting Purpose:

Participate in the sub-group meetings for the OECD/NEA Working Party Evaluation Cooperation (WPEC), specifically: EG-GNDS, SG-46, SG-47, SG-48 and the WPEC annual meeting. EG-GNDS was established for the long-time governance of the ENDF/GNDS format, which also includes API and physics checks for the new ENDF format. The data processing code AMPX, used to generate cross section libraries for SCALE and the analysis code SAMMY, both of which are supported by NCSP, need to access, process and write data in the ENDF and/or GNDS format. Since the codes need to be kept current with the ENDF format and content, it is important that RNSD personnel is involved in the governance of the format as well as in the development of the API to ensure that our data needs are adequately addressed. In addition, influencing the physics checks that are applied to the data in any new ENDF library will ensure that the final library (after processing) can be used as is, as physics checks relevant to our transport codes are applied before the release of any updated ENDF library.

Meeting Benefits to the NCSP:

The WPEC is an international forum to discuss issues regarding nuclear data. It is important that ORNL has a seat at the table. This not only includes participation in the various sub-groups that are responsible to discuss specific topics in detail but also attending the annual WPEC meeting, open only to members, of which I am one. In order to show the continued support of the US in this forum it is advantageous that employees of several US labs participate in these meetings.

Purpose of Travel:

Participate in the WPEC Subgroup meetings as well as the annual meeting itself. Several talks were presented by ORNL people in the meetings

Persons Contacted at Meeting:

Michael Fleming and various subgroup members

Presentations, Chair Responsibilities, Etc.

Dorothea Wiarda: ORNL code updateChris Chapman: Isotope Effects in Thermal Neutron ScatteringKemal Ramic: The importance of phonon spectrum measurements for accurate prediction of thermal scattering laws

Distribution:

Angela Chambers, anagela.chambers@nnsa.doe.gov Doug Bowen, bowendg@ornl.gov Marsha Henley, henleym@ornl.gov



OECD/NEA Nuclear Science Committee

Working Party on International Nuclear Data Evaluation Co-operation (WPEC)

Meeting of Expert Group on the Recommended Definition of a General Nuclear Database Structure (EGGNDS)

Hybrid Meeting

Zoom / OECD Conference Center - Chateau de la Muette, Room E

AGENDA

	Paris			
Duration	CEST	Title	Person	
00:10	13:00	Introductions	D. Brown	
00:10	13:10	Overview of recent bugfixes for GNDS-2.0	D. Brown, C. Mattoon	
00:05	13:20	Cover images for 2.0 publication	M. Fleming	
00:25	13:25	Schema improvement efforts	G. Gert	
00:10	13:50	Status of FRENDY	K. Tada	
00:15	14:00	LANL code update	W. Haeck	
00:15	14:15	LLNL code update	B. Beck	
00:15	14:30	ORNL code update	D. Wiarda	
00:15	14:45	FUDGE 5.0 - TENDL-2021 & JEFF-4T1 trails	J-C. Sublet	
00:15	15:00	Coffee Break		
00:20	15:15	ENSDF modernisation	E. Richard-McCutchan	
00:10	15:35	NEA Data Bank eLearning and potential for GNDS training Discussion on post-GNDS-2.0 priorities and potential	M. Fleming	
00:55	15:45	roadmap	D. Brown	
00:10	16:40	Nomination of Chair	M. Fleming	
00:10	16:50	AOB		
	17:00	Close		

OECD/NEA Nuclear Science Committee

Working Party on International Nuclear Data Evaluation Co-operation (WPEC)

Meeting of the WPEC Subgroup 47 on the Use of Shielding Integral Benchmark Archive and Database for Nuclear Data Validation

Hybrid Meeting

Zoom / OECD Conference Center - Chateau de la Muette, Room E

AGENDA

Duration	Questions	CEST (Paris)	Topic	
00:15	00:05	09:30	Introduction and review of actions	I. Kodeli
00:15	00:05	09:50	New WPRS Task Force on SINBAD	O. Buss
00:20	00:05	10:10	Update on UKAEA SINBAD activities	A. Valentine
00:15		10:35	Coffee Break	
00:45		10:50	WPEC SG47 summary report and/or journal publication	I. Kodeli
00:10		11:35	AOB	
		11:45	Close	

OECD/NEA Nuclear Science Committee Working Party on International Nuclear Data Evaluation Co-operation (WPEC)

Meeting of the WPEC Subgroup 48 on Advances in Thermal Scattering Law Analysis

Hybrid Meeting
Zoom / OECD Conference Center - Chateau de la Muette, Room E

AGENDA

Duration	Paris CEST	Topic		
00:10	13:00	Welcome	A. Hawari G. Noguère	
00:20	13:10	TSL activities for JEFF-4	G. Noguère	
00:20 00:20 00:20	13:30 13:50 14:10	Benchmark of Neutron Thermalization in Graphite Using a Pulsed Slowing-Down-Time Experiment TBD NNL TSL Verification and Validation Work	E. Lee I. Svajger M. Zerkle	
00:20	14:30	TBD	N.C. Fleming	
00:10	14:50	Break		
00:20	15:00	Update on Pulsed Neutron Die-Away Experiments at LLNL	D. Siefman	
00:20	15:20	TSL Evaluation for Advanced Nuclear Science and Engineering Applications	A. Hawari G. Noguère	
00:20	15:40	TBD	C. Chapman	
00:20 00:20	16:00 16:20	Neural Thermal Scattering (NeTS) Module for Beryllium Metal TBD Gaps and Inconsistency in Nuclear Data for MSR Applications	J. Crozier K. Ramic	
00:20	16:40	Relevant to Development of TSLs	D. Roubtsov	
00:20	17:00	Discussion		
	17:20	Close		

OECD/NEA Nuclear Science Committee

Working Party on International Nuclear Data Evaluation Co-operation (WPEC)

Meeting of the WPEC Expert Group on the High Priority Request List (EG-HPRL) Analysis

Hybrid Meeting

Zoom / OECD Conference Center - Chateau de la Muette, Room E

AGENDA

Duration	Paris CEST	Topic	Speaker	
00:20	09:00	Administrative items, members, Chair, updates	Chair, NEA	
00:40	09:20	Data needs for fast chloride molten salt reactors	T. Cisneros, T. Taylor	
00:20	10:00	Discussion on possible new entries	Chair, All	
00:30	10:20	Discussion on possible completed entries	Chair, All	
00:10	10:50	Break		
00:20	11:00	Presentation of the new JCMS-based HPRL	Chair, All	
00:10	11:20	Feedback and discussion	M. Bossant	
00:20	11:30	Mandate extension	Chair, NEA	
00:10	11:50	AOB		
	12:00	Close		

OECD/NEA Nuclear Science Committee Working Party on International Nuclear Data Evaluation Co-operation (WPEC)

Subgroup 46 on the Efficient and Effective Use of Integral Experiments for Nuclear Data Validation

Hybrid Meeting

Zoom / OECD Conference Center - Chateau de la Muette, Room E

AGENDA

	Paris		
Duration	CEST	Title	Person
00:30 13:00		Introduction / Review of SG46 activities	O. Cabellos,
00.50	13.00	introduction / Neview of 3040 activities	M. Hursin
		MSFRs: TARGET ACCURACY	
00:30	13:30	REQUIREMENTS, ADDRESSED AND NON-ADDRESSED DESIGN ASSESSMENT ISSUES	E. Ivanov
			C. Alfonso,
00:30	14:00	TAR Analysis for MYRRHA	P
			Romojaro
00:15	14:30	Break	
00:30	14:45	Depletion Perturbation Theory Sensitivity Coefficients in Monte Carlo Simulation	B. Murphy
00:30	15:15	WANDA2022: Summary Session on Nuclear Data	D.
		Adjustment and Impact on Applications	Neudecker
01:00	15:45	Discussion on SG46 report and future steps	All
00:10	16:45	AOB	
	16:55	Close	
00:45	17:00	SG45 finalisation discussion	W. Haeck
	17:45 Close		

OECD/NEA Nuclear Science Committee 34th Meeting of the Working Party on International Nuclear Data Evaluation Co-operation (WPEC)

Hybrid Meeting

Zoom / OECD Conference Center - Chateau de la Muette, Room E

AGENDA

		Paris		
Presentation	Questions	CEST	Title	Person
00:10		09:00	Introductions	D. Brown
00:05		09:10	Adoption of the agenda	D. Brown
00:05		09:15	Review of actions and reports	M. Fleming
00:20	00:05	09:20	Experiments in Japan	A. Kimura
00:20	00:05	09:45	Experiments in China	X. Ruan
00:20	00:05	10:10	Experiments in Europe	A. Plompen
00:20	00:05	10:35	Experiments in USA	Y. Danon
00:15	00:05	11:00	JENDL status and updates	O. Iwamoto
00:15	00:05	11:20	CENDL status and updates	Z. Ge
00:15	00:05	11:40	JEFF status and updates	A. Plompen
00:15	00:05	12:00	ENDF status and updates	D. Brown
00:20	00:05	12:20	IAEA NDS and TENDL updates	A. Koning
01:15		12:45	Lunch break	
			Report on Nuclear Science and Education	
00:15	00:05	14:00	activities	I. Hill
00:10	00:05	14:20	Status of EG-HPRL	D. Bernard
				D.Brown /
00:10	00:05	14:35	Status of EG-GNDS	C. Mattoon
				O. Cabellos /
00:10	00:05	14:50	Status of Subgroup 46	M. Hursin
00:10	00:05	15:05	Status of Subgroup 47	I. Kodeli /
				A.Hawari
00:10	00:05	15:20	Status of Subgroup 48	G. Noguère
				A.Lewis /
00:10	00:05	15:35	Status of Subgroup 50	D. Neudecker
			Discussion on potential new subgroup	
00:50		15:50	activities	D. Brown
				M.Fleming /
00:10		16:40	Proposal for ND 2025 host	A. Plompen
00:10		16:50	AOB	
		17:00	Close	