




# Introduction and Goals for WPEC SG-50 Kick-off Meeting

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WPEC SG50  
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# WPEC SG50: Developing an Automatically Readable, Comprehensive and Curated Experimental Reaction Database

- Approved at the May 2020 WPEC meeting
  - 57 members (and counting) from 11 countries and the NEA and IAEA, representing 5 libraries
  - Our goal is to create a new database for experimental data that will build on EXFOR and will allow the data users to make objective and subjective corrections
  - Coordinators: A. Lewis (Naval Nuclear Laboratory), D. Neudecker (LANL)
  - Monitor: A. Koning (IAEA)
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# Agenda for Monday September 14th

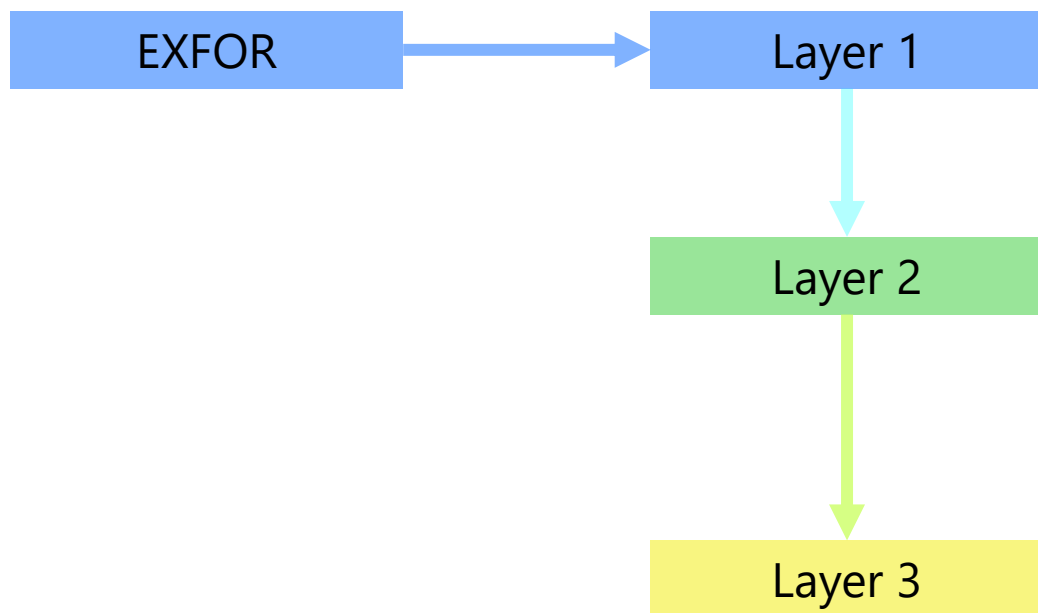
Duration	PDT	CEST	JST	Title	Speaker
0:10	5:00	14:00	21:00	Introduction	A. Lewis
0:20	5:10	14:10	21:10	EXFOR and machine readability	B. Pritychenko
0:10	5:30	14:30	21:30	Concept for the new database	S. Okumura
0:20	5:40	14:40	21:40	EXFOR Systems	V. Zerkin
0:10	6:00	15:00	22:00	An EXFOR JSON database and its potential for nuclear data	G. Schnabel
0:10	6:10	15:10	22:10	x4i Program	D. Brown
0:10	6:20	15:20	22:20	Needs and Contributions to a future EXFOR	I. Thompson
0:10	6:30	15:30	22:30	Short break	
0:10	6:40	15:40	22:40	Using measurement features for ML of experiments	D. Neudecker
0:10	6:50	15:50	22:50	Machine-readability for LOFI covariances	K. Wendt
0:10	7:00	16:00	23:00	Uppsala experience of automatic data retrieval and covariance interpretation	H. Sjöstrand
0:10	7:10	16:10	23:10	Co-operation between SG50 and SG49	M. Herman
0:10	7:20	16:20	23:20	Features needed for traditional evaluation methods	R. Xu
0:10	7:30	16:30	23:30	Short break	
0:10	7:40	16:40	23:40	Lessons learned from GNDS	C. Mattoon
0:20	7:50	16:50	23:50	Object-oriented databasing for nuclear data	A. Hayes
0:10	8:10	17:10	0:10	Towards a modern and comprehensive database of experimental fission yields, starting with U-238	A. Mattera
0:20	8:20	17:20	0:20	EXFORTABLES: An analysis of EXFOR + Determination of isotopes, energy range and observables	A. Koning
0:30	8:40	17:40	0:40	Discussion	All
	9:10	18:10	1:10	Close day 1	

# Agenda for Tuesday September 15th

Duration	PDT	CEST	JST	Title	Speaker
0:05	5:00	14:00	21:00	Introduction	A. Lewis
0:10	5:05	14:05	21:05	Capture and total fast region templates	A. Lewis
0:10	5:15	14:15	21:15	Evaluation needs for cross sections	O. Iwamoto
0:15	5:25	14:25	21:25	Suggestions for SG-50 Layer-1 Templates of (n,f) Cross Sections, PFNS and Average Prompt-fission Neutron Multiplicities and Evaluation Needs	D. Neudecker
0:15	5:40	14:40	21:40	Experimental Neutron Cross Section Measurements in the Fast Range	D. Smith
0:30	5:55	14:55	21:55	Discussion on fast range	All
0:15	6:25	15:25	22:25	Short break	
0:15	6:40	15:40	22:40	Reporting Time-Of-Flight cross section data in EXFOR	P. Schillebeeckx
0:10	6:55	15:55	22:55	Providing RRR data and uncertainties	Y. Danon
0:05	7:05	16:05	23:05	Data Formats for the URR and Covariance	J. Brown
0:10	7:10	16:10	23:10	Resonance region uncertainty templates	A. Lewis
0:10	7:20	16:20	23:20	Evaluation needs for the RR	V. Sobes
0:30	7:30	16:30	23:30	Discussion on resonance range	All
0:10	8:00	17:00	0:00	Short break	
0:30	8:10	17:10	0:10	Finalization on the scope of SG50	A. Lewis
0:20	8:40	17:40	0:40	Actions and AOB	A. Lewis
	9:00	18:00	1:00	Close day 2	

# Subgroup proposal

- Create a format and structure for a 3-layer experimental reaction database
- Produce example files for each layer and publish conversion codes



Automatically readable format

“Objective” Corrections –  
updating standards, flagging  
missing uncertainty sources and  
outliers

“Subjective” Corrections –  
including expert judgement,  
updating uncertainties, expanding  
on the current correction system