



EMUG

11th Meeting of the European MELCOR and MACCS User Group (EMUG)

3-5 April 2019

Paul-Scherrer-Institute, Switzerland

Meeting Location: Technical University FHNW, Klosterzelgstrasse 2, Windisch

Day 1: 3rd of April – MELCOR Workshop, COR Package

Time	Title	Speaker
8:00 AM	Registration	
8:30 AM	Welcome and introduction	B. Jäckel, L. Humphries
9:00 AM	COR package overview	L. Humphries
10:00 AM	Fuel fission product release	L. Humphries
10:30 AM	Break	
11:00 AM	COR heat transfer	L. Humphries
12:00 PM	Eutectic model	L. Humphries
12:30 PM	Lunch	
2:00 PM	Oxidation models	L. Humphries
2:30 PM	Nodalization	L. Humphries
3:00 PM	Lower head modeling	L. Humphries
3:30 PM	Break	
4:00 PM	COR plot/CF variables	L. Humphries
4:30 PM	SNAP/PTFREAD	L. Humphries
5:00 PM	Code coupling	L. Humphries
5:30 PM	Wrap-up	L. Humphries



Day 2: 4th of April – EMUG Meeting

Time	Title	Speaker
8:30 AM	Registration	
Session 1: Welcome and Introduction		Chair: Bernd Jäckel
9:00 AM	Welcome PSI	A. Pautz
9:25 AM	Welcome and approval of agenda	B. Jäckel
9:30 AM	MELCOR Code Development Status - EMUG 2019	L. Humphries
10:30 AM	Group Photo and Break	
Session 2a: LWR related Presentations		Chair: Martina Adorni
11:00 AM	Study on the nodalization effect of MELCOR for simulation of Nordic BWR	Y. Chen
11:15 AM	MELCOR analyses for Loviisa NPP: Results and effect of steel oxidation	T. Räihä
11:45 AM	UPM Research with MELCOR 2.x . PWR-W Applications	K. Fernández-Cosials
12:10 PM	Details of the Accident Progression in 1F1	M. Braun
12:30 PM	Lunch	
Session 2b: LWR related Presentations		Chair: Ali Tehrani
2:00 PM	Containment modeling strategy and results	M. Adorni
2:20 PM	Analysis of Severe Accident in Safety Upgraded Krško NPP with MELCOR 2.2	M. Uršič
2:45 PM	ENEA Activity in the field of severe accident	F. Mascari
3:15 PM	MELCOR and Level 2 PRA State of the Art and State of the Practice	A. Torri
3:40 PM	Break	
4:00 PM	MELSIM: A MELCOR Driven Severe Accident Simulator and Visualization Package	A. Torri
4:25 PM	MELSIM-Chart: A MELCOR Driven System for Dynamically Modeling EOP and SAMG Procedures	A. Torri
4:50 PM	Adjourn	
5:30 PM	Social Event	

Day 3: 5th of April – EMUG and MACCS Meeting

Session 2b: Non LWR Applications and SFP		Chair: Bernd Jäckel
8:30 AM	Recent experience with the latest MELCOR 2.2 releases - namely related to the CAV package	M. Kotouč
Session 3: Non LWR Applications and SFP		Chair: Fulvio Mascari
8:50 AM	Physical models necessary to be implemented in MELCOR_2.2 for fusion reactor safety analyses and the current model already implemented in MELCOR fusion	F. Mascari
9:20 AM	ALLEGRO Gas Cooled Fast Reactor Severe Accident Processes using MELCOR 2.2	G. Horváth
9:40 AM	Coupling of MELCOR with GEMS computational thermodynamic package	S. Nichenko
10:05 AM	Comparative SA calculations for SFP with different MELCOR versions	O. Kotsuba
10:30 AM	Break	
11:00 AM	Partial implementation of nitriding model in MELCOR 1.8.6	B. Jäckel
Session 4a: MACCS Code Applications		Chair: Jonathan Barr
11:30 AM	Overview of MACCS Status and Development	N. Bixler
12:00 PM	MACCS2 preliminary analysis to evaluate the impact on Italy of a severe accident at Krsko NPP	A. Guglielmelli
12:30 PM	Lunch	
Session 4b: MACCS Code Applications		Chair: Nathan Bixler
2:00 PM	MACCS Code Development Plans for Non-LWRs	J. Barr
2:30 PM	Full-Scope PSA Level3 of NPP Gösgen	B. Askari
3:00 PM	RASCAL: A 3-D Alternative to MACCS	A. Torri
3:30 PM	Break	
Session 4c: MACCS Code Applications		Chair: Jonathan Barr
4:00 PM	Atmospheric Transport Results for BSAF Phase 2	N. Bixler
4:30 PM	Practical Aspects of Performing a Multi-Unit Level 3 PSA with MACCS	N. Bixler
Closure of the Meeting		Bernd Jäckel
5:00 PM	Anouncement of EMUG 2020	G. Horváth
5:15 PM	Adjourn	