10th Meeting of the European MELCOR User Group (EMUG)

25-27 April 2018

University of Zagreb, Faculty of Electrical Engineering and Computing – FER,

Unska 3, Zagreb

Day 1 - Wednesday, April 25, 2018 – MELCOR Users' Workshop

Time	Presentation Title	Speaker
08:30 am	**REGISTRATION**	
09:00 am	Greetings Croatia	Davor Grgić, FER
09:05 am	Greetings SNL	Larry Humphries, SNL
09:15 am	Introduction to the RN package	Jesse Phillips, SNL
10:00 am	RN and decay heat	Jesse Phillips, SNL
10:30 am	**BREAK**	
10:45 am	Fission product release modeling	Larry Humphries, SNL
11:15 am	Aerosol physics	Larry Humphries, SNL
11:45 am	Deposition/resuspension Modeling	Larry Humphries, SNL
12:30 pm	**LUNCH**	
01:30 pm	ESF Models	Jesse Phillips, SNL
02:00 pm	Fission Product Chemistry & Chemisorption	Jesse Phillips, SNL
02:30 pm	Hygroscopic/Jet Impaction Models	Jesse Phillips, SNL
03:30 pm	**BREAK**	
03:45 pm	Activity Models	Larry Humphries, SNL
04:15 pm	RN and SNAP	Jesse Phillips, SNL
04:45 pm	*Wrap-up and Q/A*	Larry Humphries, SNL
05:30 pm	**WELCOME RECEPTION**	

Day 2 - Thursday, April 26, 2018

Time	Presentation Title	Speaker
Session 1: Welcome and Intoduction		**Chair: Davor Grgić**
08:30 am	Welcome – FER	Gordan Gledec, FER
08:40 am	Welcome – DZRNS	Saša Medaković, DZRNS
08:50 am	Welcome and Approval of agenda	Davor Grgić, FER
Session 2: Model development and applications		**Chair: Bernd Jaeckel**
09:00 am	MELCOR Code Development Status	Larry Humphries, SNL
10:00 am	**PHOTO SESSION and BREAK**	
10:30 am	NRC MELCOR Activities	Esmaili Hossein, NRC
11:30 am	MELCOR assessment, applications, and guidance	Jesse Phillips, SNL

12:20 pm	LUNCH	

Session 3: LWR Applications		Chair: Martina Adorni
01:10 pm	Conversion of MELCOR 1.8.5 model to MELCOR 2.1 for WWER-1000/V 320 reactor and containment system. Problems identified during conversion. Comparative SA calculations with different MELCOR versions	Oleksandr Kotsuba, SSTC-NRS
01:40 pm	VVER-440 simulations using MELCOR 2.2: degraded core reflood and boric acid transport in the primary	Petr Vokáč, ÚJV Řež
02:05 pm	Analysis of Severe Accident in Safety Upgraded Krško NPP	Matjaž Leskovar, IJS
02:25 pm	MELCOR Simulation of Fukushima Daiichi Unit 1	Matthias Braun, Framatome
03:00 pm	Wet storage pool under loss of cooling conditions	Bernd Jaeckel, PSI
03:20 pm	BREAK	
		Chair: L. Gabor Horvath
03:40 pm	Accident Progression and Consequence Calculations for Low Power and Shutdown PSA Level 2 of Mühleberg Nuclear Power Plant	Tobias Szabo, BKW Energy
04:10 pm	Bel V model development and assessment with MELCOR 2.2	Martina Adorni, Bel V
04:30 pm	Source Term evaluation with MELCOR Code in the EU-FASTNET project framework	Fulvio Mascari, ENEA
05:00 pm	FER MELCOR activities	Davor Grgić, FER
07:00 pm	CONFERENCE DINNER	

Day 3 - Friday, April 27, 2018

Time	Presentation Title	Speaker
Session 4: GEN IV and Fusion Applications		Chair: Fulvio Mascari
08:30 am	MELCOR-Fusion: Loss of Vacuum Accidents on JET	Samuel Ha, UK Atomic Energy Authority
09:00 am	Simulation of transients of a lithium loop with MELCOR fusion 1.8.6	Gianluca D'Ovidio, CIEMAT
09:25 am	Accident analyses for the Cryostat-building interface components	Emili Martínez Saban, IDOM
09:45 am	Melcor modeling of modular pebble bed HTGR	Jarmo Kalilainen, PSI
10:05 am	Thermal-hydraulic benchmark on ALLEGRO (GFR) - results and issues	Petr Vácha, ÚJV Řež
10:30 am	BREAK	
11:00 am	Beyond Design Basis Accident Calculations for ALLEGRO Gas Cooled Fast Reactor - MELCOR experience	L. Gabor Horváth, NUBIKI
Session 5: Tools and Programming		Chair: Martin Turner
11:20 am	Using MELCOR on Linux and Open Source tools	Petr Vokáč, ÚJV Řež
11:45 am	VINSAP - a visualization tool for MELCOR	Petr Vácha, ÚJV Řež
12:05 pm	Experience with MELCOR user defined extensions in C and Lua	Paul Boneham, Jacobsen Analytics
12:30 pm	Use of Artificial Neural Network for criticallity calculation in severe accident	Thibaut Helman, Tractebel Engie
12:50 pm	LUNCH	
02:00 pm	Announcement of the 11th EMUG meeting in Switzerland	Bernd Jaeckel, PSI
02:10 pm	Final discussion and conclusions	All
03:00 pm	CLOSURE OF THE MEETING	