

PATRICIA

1st Annual technical review meeting

27-28-29 October 2021

27/10/2021 9:00-12:30		Technical Coordination Board
WP and Domain Leaders		
Stéphanie Cornet	CEA	DM1 & WP13
Andreas Geist	UHEI	WP1
Guiseppe Modolo	FZJ	WP2
Aurélie Gauthé	CEA	WP3
Lelio Luzzi	POLIMI	DM2 & WP5
Anna Smith	TU Delft	WP4
Marc Lainet	CEA	WP6
Rémi Delville	SCK CEN	DM3 & WP7
Radu Vasili	RATEN	WP8
Karsten Litfin	KIT	WP9
Ferry Roelofs	NRG	DM4
Jan Uythoven	CERN	WP10
Mariano Tarantino	ENEA	WP11
Jörg Neuhausen	PSI	WP12
Paul Schuurmans	SCK CEN	Coordinator, DM5, WP13
Philippe Planquart	VKI	WP14

Plenary Session

14:00	0:10	Welcome		
14:10	0:20	Status of the project (Management)	Paul Schuurmans	SCK CEN
14:30	0:25	Education training communication data management	Philippe Planquart	IVKDF
14:55	0:35	DM1 Partitioning Background & Overview	Andreas Geist	Uhei
15:30	0:35	Experimental assessment of fuel clad corrosion damage and blockage phenomena in a wire wrapped heated fuel bundle under flowing LBE	Alessandro Marino	SCK CEN
16:05	0:15	Coffee Break		
16:20	0:35	Towards a meso-scale model for helium behaviour in nuclear fuels	Davide Pizzocri	POLIMI
16:55	0:35	Impact of availability requirements for the accelerator (DM4)	Lukas Felsberger	CERN
17:30		End of day 1		

28/10/2021 9:30-12:25			Parallel sessions	
Parallel session Technical review Domain 1				
Chair		Stéphanie Cornet		
9:30	0:10	Introduction WP1	Andreas Geist	UHEI
		Status and progress of work from each partner		
9:40	0:10	POLIMI	Elena Macerata	POLIMI
9:50	0:10	FZJ	Andreas Wilden	FZJ
10:00	0:10	UHEI	Patrik Wessling	UHEI
10:10	0:10	CHALMERS	Marcus Hedberg	CHALMERS
10:20	0:10	CEA	Cécile Marie	CEA
10:30	0:10	CIEMAT	Hitos Galán	CIEMAT
10:40	0:15	Coffee break		
10:55	0:10	Introduction WP2	Giuseppe Modolo	FZJ
11:05	0:20	Modelling and flowsheeting	Bruce Hanson	UNIVLEEDS
11:25	0:20	Process validation	Andreas Wilden	FZJ
11:45	0:10	Introduction WP3	Aurélie Gauthé	CEA
11:55	0:15	Actinide containing matrix materials	Gregory Leinders	SCK-CEN
12:10	0:15	Inert matrices	Hitos Galán	CIEMAT
12:25	1:05	Lunch break		

28/10/2021 9:30-12:25			Parallel sessions	
Parallel session Technical review Domain 3				
Chair		Remi Delville		
9:30	0:10	Introduction WP7	Remi Delville	SCK CEN
9:40	0:20	Mechanical properties of corroded fuel pins	Stefan Holmström	SCK CEN
10:00	0:10	Introduction WP8	Vasili Radu	RATEN
10:10	0:20	PIE fuel transient test	Vasili Radu	RATEN
10:30	0:20	Fuel coolant interaction at elevated temperatures	Daniel Freis	JRC
10:50	0:15	Coffee break		
11:05	0:10	Introduction WP9	Karsten Litfin	KIT
11:15	0:20	Fuel bundle deformations & blocking experiments @ KIT	Karsten Litfin	KIT
11:35	0:10	Fuel bundle deformations modelling	Heleen Uitslag-Doolgaard	NRG
11:45	0:20	Blockage experiments and simulations using multi-dimensional high fidelity velocity fields	Yassin Hassan	TAMUS
12:05	0:20	Fuel assembly blockages modelling	Akshat Mathur	NRG
12:25	1:05	Lunch break		

Parallel session Technical review Domain 2

	Chair	Lelio Luzzi		
13:30	0:40	Status of WP4: thermo-chemical properties and behaviour of Am-bearing fuels	Anna Smith	TUDELFT
		Common presentation with contributions from Sander van Til (NRG) and Marjorie Bertolus (CEA)		
14:10	0:50	Status of WP5: improvement of modelling and fuel performance codes	Lelio Luzzi	POLIMI
		Common presentation with contributions from Paul Van Uffelen (JRC), Marc Lainet (JRC) Sara Bortot (KTH) Janne Wallenius (KTH)		
15:00	0:15	Coffee break		
15:15	0:30	Status of WP6: Simulation of normal and off-normal irradiation conditions	Marc Lainet	CEA
		Common presentation with contributions from Daniel Freis (JRC)		
15:45	0:20	Optimization of a fuel pin for transmutation in MYRRHA	Diego Castelliti / Gregory Leinders / Simon Billiet	SCK CEN
16:05	0:10	Break		
16:15	0:40	Discussion and preparation fo overview of domain 2		
16:55		End of meeting		

Parallel session Technical review Domain 4

	Chair	Ferry Roelofs		
13:30	0:10	Introduction WP10	Jan Uythoven	CERN
13:40	0:20	Accelerator reliability modelling	Lukas Felsberger	CERN
14:00	0:20	Beam window failure impact	Alex Aerts	SCK CEN
14:20	0:10	Introduction WP11	Mariano Tarantino	ENEA
14:30	0:20	Experimental investigation of the transition between natural circulation modes in CIRCE	Ivan Di Piazza	ENEA
14:50	0:20	Numerical investigation of the transition between natural circulation modes in CIRCE	Vincent Moreau	CRS4
15:10	0:20	Experimental investigation of the transition from forced to natural circulation in E-SCAPE	Julio Pacio	SCK CEN
15:30	0:20	Numerical investigation of the transition from forced to natural circulation in E-SCAPE	Silvania Lopes Dirk Visser	VKI NRG
15:50	0:15	Coffee break		
16:05	0:20	Heat Transport Modelling in Computational Fluid Dynamics	Lilla Koloszar Akshat Mathur	VKI NRG
16:25	0:10	Introduction WP12	Jörg Neuhausen	PSI
16:35	0:20	Coolant Chemistry modelling	Alessandro Marino	SCK CEN
16:55	0:20	Radionuclide release experiments	Borja Gonzalez	SCK CEN
17:15	0:20	Sample preparation studies and Radionuclide release experiments	Ivan Zivadinovic	PSI/JRC
17:35	0:05	Status of Radionuclide release calculations	Stefaan Cottenier	Ugent
17:40		End of meeting		

Plenary Session

9:30	0:10	Welcome		
9:40	0:30	Overview of Domain 1	Stéphanie Cornet	CEA
10:10	0:30	Overview of Domain 2	Lelio Luzzi, Anna smith, Marc Lainet	POLIMI, TUDelft, CEA
10:40	0:15	Coffee break		
10:55	0:30	Overview of Domain 1	Remi Delville	SCK CEN
11:25	0:30	Overview of Domain 1	Ferry Roelofs	NRG
11:55	0:20	Concluding remarks, next meeting	All	
12:15	0:35	End of day 3		