

# PATRICIA

## Technical review meeting of the 1<sup>st</sup> reporting period 29-30-31 March 2022

29/03/2022 9:00-12:30		Technical Coordination Board
<b>WP and Domain Leaders</b>		
Stéphanie Cornet	CEA	DM1
Andreas Geist	UHEI	WP1
Giuseppe 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
Vasile Radu	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

**27/10/2021 14:00-17:30****Technical Meeting Plenary session****Plenary Session** → [Click here to join the meeting](#)

<b>14:00</b>	0:10	Welcome		
14:10	0:15	Status of the project (Management)	Paul Schuurmans	SCK CEN
14:25	0:15	Education training communication data management	Philippe Planquart	VKI
14:40	0:30	Modelling and flowsheeting	Bruce Hanson	UNIVLEEDS
15:10	0:30	Conversion routes for transmutation target fabrication	Gregory Leinders	SCK CEN
<b>15:40</b>	<b>0:20</b>	<b>Coffee Break</b>		
16:00	0:30	MYRRHA case study	Simon Billiet	SCK CEN
16:30	0:30	Mechanical properties of corroded fuel pins	Stefan Holmström	SCK CEN
17:00	0:30	Coolant Chemistry modelling	Alessandro Marino	SCK CEN
<b>17:30</b>		<b>End of day 1</b>		

30/03/2022 9:30-12:25

Parallel sessions

**Parallel session Technical review Domain 1** → [Click here to join the meeting](#)

		Chair	Andreas Geist		
<b>9:30</b>	<b>0:10</b>	<b>Introduction WP1</b>		<b>Andreas Geist</b>	UHEI
		<b>Status and progress of work from each partner</b>			
9:40	0:10	POLIMI		Elena Macerata	POLIMI
9:50	0:10	FZJ		Andreas Wilden	FZJ
10:00	0:10	UHEI		Giana Baruth	UHEI
10:10	0:10	CHALMERS		Marcus Hedberg	CHALMERS
10:20	0:10	CEA		Cécile Marie	CEA
10:30	0:10	First steps of the radiolytic stability studies for the current reference AmSeL chemical system		Iván Sánchez-García	CIEMAT
<b>10:40</b>	<b>0:15</b>	<b>Coffee break</b>			
<b>10:55</b>	<b>0:10</b>	<b>Introduction WP2</b>		<b>Giuseppe Modolo</b>	FZJ
11:05	0:20	Modelling and flowsheeting		Bruce Hanson	UNIVLEEDS
11:25	0:20	Process validation		Andreas Wilden	FZJ
11:45	0:10	<b>Introduction WP3</b>		<b>Aurélie Gauthé</b>	CEA
11:55	0:15	Actinide containing matrix materials		Gregory Leinders	SCK-CEN
12:15	0:20	Settle up of co-precipitation methodologies for Zr oxide matrices fabrication		Ana Núñez	CIEMAT
12:25	1:05	<b>Lunch break</b>			

30/03/2022 13:30-16:25

Parallel sessions

**Parallel session Technical review Domain 2** → [Click here to join the meeting](#)

	Chair	Lelio Luzzi		
13:30	0:10	<b>Status of WP4: thermo-chemical properties and behaviour of Am-bearing fuels</b>	<b>Anna Smith</b>	TUDELFT
13:40	0:20	Modelling of U-Np-O system	Anna Smith	TUDELFT
14:00	0:20	Modelling of U-Pu-Am-O system	Christine Guéneau	CEA
14:20	0:10	<b>Status of WP5: improvement of modelling and fuel performance codes</b>	<b>Lelio Luzzi</b>	POLIMI
14:30	0:15	Derivation of correlations/databases for fuel performance codes based on new experimental data	Paul Van Uffelen	JRC
14:45	0:15	Development of SCIANTIX targeting Am-bearing fuels and helium behaviour	Alessio Magni	POLIMI
15:00	0:15	Benchmark/Assessment of the fuel performance codes	Marc Lainet	CEA
15:15	0:15	Towards multi-physics coupling of fuel performance, neutronics and thermal-hydraulics codes to simulate off-normal conditions	Janne Wallenius	KTH
15:30	0:15	<b>Coffee break</b>		
15:45	0:10	<b>Status of WP6: Simulation of normal and off-normal irradiation conditions</b>	<b>Marc Lainet</b>	CEA
15:55	0:15	Optimization of a fuel pin for transmutation in MYRRHA	Simon Billiet	SCK CEN
16:10	0:15	Simulation of an accidental scenario for assessment of the safety margins	Davide Pizzocri	POLIMI
16:25	0:15	Pre-design status of transient irradiation tests in HFR & BR2	Syriac Bejaoui	CEA
16:40	0:15	Evaluation of experimental capabilities and needs for code validation for off-normal conditions using in-pile and/or out-of-pile testing facilities	Daniel Freis	JRC
16:55	0:10	<b>Break</b>		
17:05	0:20	<b>Discussion and preparation for overview of domain 2</b>	<b>Lelio Luzzi, Anna Smith, Marc Lainet</b>	
17:25		<b>End of meeting</b>		

30/03/2022 9:30-12:25

Parallel sessions

**Parallel session Technical review Domain 3** → [Click here to join the meeting](#)

	Chair	Remi Delville		
<b>9:30</b>	<b>0:10</b>	<b>Introduction WP7</b>	<b>Rémi Delville</b>	SCK CEN
9:40	0:20	Experimental assessment of fuel clad corrosion damage and blockage phenomena in a wire wrapped heated fuel bundle under flowing LBE	Alessandro Marino	SCK CEN
<b>10:00</b>	<b>0:10</b>	<b>Introduction WP8</b>	<b>Vasile Radu</b>	RATEN
10:10	0:20	PIE fuel transient test	Vasile Radu	RATEN
10:30	0:20	Fuel coolant interaction at elevated temperatures	Daniel Freis	JRC
<b>10:50</b>	<b>0:15</b>	<b>Coffee break</b>		
<b>11:05</b>	<b>0:10</b>	<b>Introduction WP9</b>	<b>Karsten Litfin</b>	KIT
11:15	0:20	Fuel bundle deformations & blocking experiments @ KIT	Karsten Litfin	KIT
11:35	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
<b>12:25</b>	<b>1:05</b>	<b>Lunch break</b>		

30/03/2022 13:30-17:40

Parallel sessions

**Parallel session Technical review Domain 4** → [Click here to join the meeting](#)

	Chair	Ferry Roelofs		
<b>13:30</b>	0:10	<b>Introduction WP10</b>	<b>Jan Uythoven</b>	CERN
13:40	0:20	Accelerator reliability modelling	Lukas Felsberger	CERN
14:00	0:20	Beam window failure impact	Kris Rosseel	SCK CEN
<b>14:20</b>	0:10	<b>Introduction WP11</b>	<b>Mariano Tarantino</b>	ENEA
14:30	0:10	Experimental investigation of the transition between natural circulation modes in CIRCE	Ivan Di Piazza	ENEA
14:50	0:20	CIRCE modelling	Andrea Pucciarelli	UNIPI
15:10	0:20	Numerical investigation of the transition between natural circulation modes in CIRCE	Vincent Moreau	CRS4
15:00	0:10	Experimental investigation of the transition from forced to natural circulation in E-SCAPE	Julio Pacio	SCK CEN
15:10	0:20	Numerical investigation of the transition from forced to natural circulation in E-SCAPE	Silvania Lopes Dirk Visser	VKI NRG
15:45	0:20	Heat Transport Modelling in Computational Fluid Dynamics	Jure Oder Akshat Mathur	VKI NRG
<b>16:05</b>	0:15	<b>Coffee break</b>		
<b>16:20</b>	0:10	<b>Introduction WP12</b>	<b>Jörg Neuhausen</b>	PSI
16:30	0:20	Radionuclide release experiments	Borja Gonzalez	SCK CEN
16:50	0:20	Sample preparation, Radionuclide Analytics and Radionuclide release experiments	Ivan Zivadinovic	PSI/JRC
17:10	0:20	Status of Matrix isolation of TeOxHy/KEMS	Ondrej Beneš	JRC
17:30	0:20	Status of calculations on volatile Te/Po molecules	Stefaan Cottenier	UGent
17:50		<b>End of meeting</b>		

31/03/2022 9:30-12:15		Technical Meeting Plenary session		
<b>Plenary Session</b> → <a href="#">Click here to join the meeting</a>				
<b>9:30</b>	0:05	<b>Welcome</b>		
9:35	0:30	Progression in the interpretation of SPHERE experiment	Marc Lainet	CEA
10:05	0:30	Implementation of the implicit AHFM in OpenFOAM	Jure Oder	VKI
<b>11:05</b>	<b>0:15</b>	<b>Coffee break</b>		
11:20	0:10	Overview of Domain 1	Stéphanie Cornet	CEA
11:30	0:10	Overview of Domain 2	Lelio Luzzi	POLIMI
11:40	0:10	Overview of Domain 3	Rémi Delville	SCK CEN
11:50	0:10	Overview of Domain 4	Ferry Roelofs	NRG
12:00	0:20	Feedback from the IAG		
12:20	0:20	Concluding remarks, next meeting	<b>All</b>	
<b>12:40</b>		<b>End of TRM</b>		

31/03/2022 13:30-16:00		Governing board meeting		
<b>Governing board members</b>				
Agenda distributed to governing board members				