

PATRICIA

Annual technical review meeting November 2-4, 2022

Venue: [Geno-Hotel Karlsruhe](#)

Am Rüppurrer Schloß 40, 76199 Karlsruhe, Germany

Day 1 02/11/2022 09:00 – 12:30	Technical Coordination Board Domain & WP leaders
---	---

		Technical Review Meeting		
02/11/2022 14:00-17:30		Plenary Session 1		
14:00	0:10	Welcome	Paul Schuurmans	SCK CEN
14:10	0:15	Status of the project (Management)		
14:25	0:15	Education training communication data management	Philippe Planquart	VKI
14:40	0:30	Selective actinide(III) separation using PyTri-Diol in the innovative-SANEX process: laboratory scale counter current centrifugal contactor demonstration”	Andreas Wilden	FZJ
15:10	0:30	Accelerator reliability modelling: results	Lukas Felsberger	CERN
15:40	0:20	Coffee break		
16:00	0:30	Thermochemical and thermophysical properties of (U,Am)O ₂ from atomistic simulations	Marjorie Bertolus	CEA
16:30	0:30	CIRCE modelling	Pietro Stefanini (remote or presented by ENEA)	UNIPI
17:00	0:30	Thermodynamic measurements of corrosion products behavior in LBE as input for the CFD-GEM tool”	Giacomo Gregori	SCK CEN
17:30		End of day 1		

DAY 2**03/11/2022 am****Technical Review Meeting****Parallel session Technical review Domain 1****Chair****Stéphanie Cornet****9:00****0:05****Introduction WP1****Andreas Geist**

UHEI

Status and progress of work from each partner

09:05

0:15

POLIMI

Stéphanie Cornet on behalf of Elena Macerata

POLIMI

09:20

0:15

FZJ

Andreas Wilden

FZJ

09:35

0:15

UHEI

Patrik Wessling

UHEI

09:50

0:15

CEA

Vairanu Amaru

CEA

10:05

0:15

CIEMAT DM1 progress report WP1 and WP3

Hitos Galán (remote)

CIEMAT

10:20

0:20

Discussions WP1

10:40**0:20****Coffee break****11:00****0:05****Introduction WP2****Giuseppe Modolo**

FZJ

11:05

0:15

Modelling and flowsheeting

Bruce Hanson

UNIVLEEDS

11:20

0:15

Process validation

Andreas Wilden

FZJ

11:35

0:15

Flowsheet calculations for the AMSEL process

Vincent Vanel

CEA

11:50

0:20

Discussions WP2

12:10

0:05

Introduction WP3

12:15

0:15

Infiltration of porous uranium oxide microspheres for transmutation target preparation

Gamze Colak

SCK CEN

12:30

0:15

Discussions WP3

12:45**1:00****Lunch**

DAY 2**03/11/2022 am****Technical Review Meeting****Parallel session Technical review Domain 3****Chair****Karsten Litfin (replacing Rémi Delville)**

9:00	0:10	Introduction WP7	Alessandro Marino	SCK CEN
09:10	0:20	Experimental assessment of fuel clad corrosion damage and blockage phenomena in a wire wrapped heated fuel bundle under flowing LBE (SCK CEN)	Alessandro Marino	SCK CEN
09:30	0:20	Mechanical properties of corroded fuel pins	Stefan Holmström	SCK CEN
09:50	0:10	Introduction WP8	Vasile Radu	RATEN
10:00	0:20	PIE fuel transient test	Vasile Radu	RATEN
10:20	0:20	Fuel coolant interaction at elevated temperatures	Daniel Freis	JRC
10:40	0:20	Coffee break		
11:00	0:10	Introduction WP9	Karsten Litfin	KIT
11:10	0:20	Fuel bundle deformations & blocking experiments @ KIT	Karsten Litfin	KIT
11:30	0:20	Blockage experiments and simulations using multi-dimensional high fidelity velocity fields	Yassin Hassan	TAMUS
11:50	0:30	Discussion DM3		

DAY 2**03/11/2022 pm****Technical Review Meeting****Parallel session Technical review Domain 4****Chair****Ferry Roelofs**

12:00	0:10	Introduction WP10	Jan Uythoven	CERN
12:10	0:20	Beam window failure impact	Borja González-Prieto	SCK CEN
12:30	0:15	WP10 Discussion		
12:45	1:00	Lunch		
13:45	0:10	Introduction WP11	Mariano Tarantino	ENEA
13:55	0:20	Experimental investigation of the transition between natural circulation modes in CIRCE	Ivan Di Piazza	ENEA
14:15	0:20	Numerical investigation of the transition between natural circulation modes in CIRCE	Manuela Profir	CRS4
14:35	0:20	Experimental investigation of the transition from forced to natural circulation in E-SCAPE	Julio Pacio	SCK CEN
14:55	0:10	Numerical investigation of the transition from forced to natural circulation in E-SCAPE	Lilla Koloszar on behalf of Silvania Lopes	VKI
15:05	0:10	Numerical investigation of the transition from forced to natural circulation in E-SCAPE	Dirk Visser (remote)	NRG
15:15	0:10	Heat Transport Modelling in Computational Fluid Dynamics @ VKI	Jure Oder	NRG
15:25	0:10	Heat Transport Modelling in Computational Fluid Dynamics	Victor Habiyaemye	NRG
15:35	0:10	Discussion WP11		
15:50	0:15	Coffee break		
16:05	0:10	Introduction WP12	Jörg Neuhausen (remote)	PSI
16:15	0:15	Mass transport modelling	Alessandro Marino	SCK CEN
16:30	0:20	Sample preparation, Radionuclide Analytics and Radionuclide release experiments	Ivan Zivadinovic	PSI/JRC
16:50	0:20	Radionuclide release experiments	Borja González-Prieto	SCK CEN
17:10	0:20	Status of calculations on volatile Te/Po molecules	Okan Köksal	UGent
17:30	0:10	Discussion WP12		
17:40		End of meeting		

DAY 2**03/11/2022 pm****Technical Review Meeting****Parallel session Technical review Domain 2****Chair****Lelio Luzzi**

13:45	0:10	Status of WP4: thermo-chemical properties and behaviour of Am-bearing fue	Anna Smith	TU Delft
13:55	0:20	Helium, fission gases and fission products behaviour in Am-bearing fuel under irradiation	Alexander Fedorov	NRG
14:15	0:20	Experimental measurements of the thermochemical properties on (U-Pu-Am-Np-O) system	Morgane Rochedy	TU Delft/JRC
14:25	0:10	Status of WP5: improvement of modelling and fuel performance codes	Lelio Luzzi	POLIMI
14:35	0:15	Modelling of Am-bearing fuels, state of the art and interactions with WP4	Paul Van Uffelen	JRC
14:50	0:15	SCIANTIX 2.0 code for inert gas behaviour modelling	Davide Pizzocri	POLIMI
15:05	0:15	Benchmark/Assessment of the fuel performance codes	Marc Lainet	CEA
15:20	0:15	Towards multi-physics coupling of fuel performance, neutronics and thermal-hydraulics codes to simulate off-normal conditions	Alejandría Pérez / Janne Wallenius	KTH
15:35	0:15	Coffee break		
15:50	0:10	Status of WP6: Simulation of normal and off-normal irradiation conditions	Marc Lainet	CEA
16:10	0:15	Optimization of a fuel pin for transmutation in MYRRHA	Simon Billiet (remote)	SCK CEN
16:15	0:15	Simulation of an accidental scenario for assessment of the safety margins	Davide Pizzocri	POLIMI
16:30	0:15	Pre-design status of transient irradiation tests in HFR & BR2	Syriac Bejaoui (remote)	CEA
16:45	0:15	Evaluation of experimental capabilities and needs for code validation for off-normal	Daniel Freis (tbc)	JRC
17:00	0:10	Break		
17:10	0:20	Discussion and preparation for overview of Domain 2	Lelio Luzzi, Anna Smith, Marc Lainet	JRC
17:30		End of meeting		

Social dinner

Day 3		Technical Review Meeting		
04/11/2022 09:30 -10:55		Plenary Session 2		
09:30	0:05	Welcome		
09:35	0:15	Overview of Domain 4	Ferry Roelofs	NRG
09:50	0:15	Overview of Domain 3	Karsten Litfin	KIT
10:05	0:15	Overview of Domain 2	Lelio Luzzi	POLIMI
10:20	0:15	Overview of Domain 1	Stéphanie Cornet	CEA
10:35	0:20	Concluding remarks, next meeting	ALL	
10:55		End of Technical Review Meeting		

04/11/2022 pm	TECHNICAL VISITS
----------------------	-------------------------