MatISSE Third Project Plenary Meeting

4-6 October 2016

Day 1: Tuesday 4th October 2016 *ENEA BRASIMONE*	
Optional – visit of the technical facilities at ENEA Brasimone	
08:00-09:00 Transportation to ENEA Brasimone *09:00-13:00 Technical visit*	
13:50-14:30 Lunch at ENEA Brasimone	
1. 15:00 Welcome by the project coordinator, agenda review and approval	P.F. Giroux (CEA)
2. 15:15 The MatISSE project after three years - overview • Objectives achieved • Activities carried out • The project timing	P.F. Giroux (CEA)
3. WP5 - Support to Design, Selection and Qualification of Materials and Components for the ESNII Reactors (RTD) 14:30 - 15:20: **Creep-fatigue: cyclic softening and crack growth** o 5.1.1a: Cyclic softening F/M steels; modelling o 5.1.1b: Cyclic softening F/M steels: experiments o 5.1.2c Creep crack growth rate tests for Gr.91 steel 15:20 - 16:10: **Functional coatings and modified surface layers**	**15:30 – 17:10** M. Sauzay (CEA) U. Führer (KIT) H-Y Lee (KAERI) A. Weisenburger (KIT)
17:10 - 17:30 Coffee break	
WP5 - Support to Design, Selection and Qualification of Materials and Components for the ESNII Reactors (RTD) 17:30 - 18:20: **Fuel-cladding interaction** 18:20 - 19:10: **Investigation of Env. Assisted Degradation of materials in liquid lead alloys**	**17:30 – 19:10** E. D'Agata (JRC) E.Sterger (SCK•CEN)
19:10 End of 1st day	

Transport from ENEA Braasimone to Bologna train station (19:10-20:10)

Day 2: Wednesday 5th October 2016 *ENEA Arcoveggio, Via Martiri di Montesole 4, Bologna (It)* *Meeting Venue Aula Magna*	
4. 8.30 WP1 - Coordination and Support for an Integrated Research Programme on Nuclear Materials (COORD)	**8:30 - 9:10** A. Bohnstedt (KIT)

09:10- 10:40 Coffee break	
5. WP2 - Modelling of irradiation-induced hardening and creep in F/M alloys (RTD) 09:10 - 09:30: **Status of WP2** 09:30 - 09:40: **Status of activities in MEFISTO** • Dataset from DFT calculations on solute/solute and defect/solute interaction • Fe-Ni-Cr potential and its validation • OKMC simulation in FeCrX alloys • PAS and NI characterisation of ion irradiated FeCrX alloys • APT characterization of electron and ion FeCrX alloys	**09:10 – 10:40** L. Malerba (SCK●CEN) M. Nastar (CEA) G. Bonny (SCK□CEN) N. Castin (SCK□CEN) C. Heintze (HZDR) C. Pareige (CNRS)
10:40- 11:00 Coffee break	
11:00 - 12:15: **Status of activities in MOIRA** • Interaction/absorption of defects with/by dislocations lines/loops under stress • Molecular dynamics studies of possible influence of slip band interaction with nanostructural defects on irradiation creep in F/M alloys • Stability and mobility of radiation defects under applied stress • Design of irradiation experiments to study irradiation creep	**11:00 - 12:15** D. Terentyev (SCK·CEN) V. Borodin (KIT) E. Clouet (CEA) J. Chen (PSI)
6. WP3 - Characterization of ceramic composites for GFRs and LFRs (RTD) 12:15 – 12:30: **Ceramic composites for GFRs and LFRs and Matisse WP3 objectives** 12:30 – 12:50: **Processing and RT tensile mechanical characterizations of SiC/SiC and sandwich cladding produced for MATISSE program** 12:50 – 13:10: **Literature review of SiC/SiC corrosion and erosion in GFR**	**12:15 - 13:10** C. Mingazzini (ENEA) J. Braun (CEA) K. Fitzgerald (NNL)
13:10 - 14:20 Lunch	
WP3 - Characterization of ceramic composites for GFRs and LFRs (RTD) 14:20 – 14:40: **Thermal properties of SiC/SiC and sandwich clads** 14:40 – 15:00: **Assessments about sandwich clad compatibility with impure, flowing helium coolant** 15:00 – 15:20: **Corrosion and erosion tests of SiC/SiC clad sections in expected working conditions** 15:20 – 15:40: **Processing and characterization of MAX phase-based cermets**	**14:20 – 15:40** J.C. Chen (PSI) M. Steinbrück (IAM) J. Kalivodova (CVRez) K. Lambrinou (SCK.CEN)
15:40 - 16:00 Coffee break	
7. WP4 - Characterization of ODS alloys for LFR and SFR cladding (RTD) 16:00 – 16:30: **WP4 - Overview** 16:30 - 17:00: **Role of the microstructure on the mechanical behaviour** 17:00 - 17:30: **Characterization of ODS cladding tubes** 17:30 - 18:00: **Characterization of ODS under safety-related operating conditions** 18:00 - 18:30: **Characterization of ODS under safety-related operating conditions**	**16:00 - 18:30** M. Serrano (CIEMAT) E. Altstadt (HZDR) U. Ehrnsten (VTT) M. Serrano (CIEMAT) M. Serrano (CIEMAT)
18:30 End of the 2nd day	
20:00 Dinner (restaurant " C'era una volta" – Hotel Roma srl via M. D'azeglio,9 Bologna)	

Day 3: Thursday 6th October 2016 *ENEA Arcoveggio, Via Martiri di Montesole 4, Bologna (It)* *Meeting Venue Aula Magna*	
8. **09:00 WP7- Consortium Management** (MGT) - **WP6 - Dissemination, communication, E&T** (OTHER) Admin. and fin. management, periodic reporting Dissemination, Organization of workshops and cooperation	**09:00 - 10:00** P.F. Giroux (CEA), T. Virban (LGI)
10:00 Questions and conclusions	
10:30 End of the Plenary Meeting	
10:30 – 13:00 General Assembly Meeting (for GA members only)	GA
13:00 - 14:30 Lunch	
14:30 – 16:30 Executive Committee meeting (for ExCom members only)	ExCom