

Monday 11 July 2016

8:30	9:00 Registration	
9:00	9:10 Welcome address from Manchester	TBC
9:10	9:20 Welcome address from NEA/ Chair of the SAC	TBC
9:20	9:30 Introductory presentation	J Marrow
9:30	10:00 Industrial Perspectives of Gen IV Nuclear Fission	M. Blat (EDF, France)
	SESSION I: OVERVIEW OF PROGRAMMES	CHAIR TBC
	The Joint Programme on Nuclear Materials of the European Energy Research Alliance: Coordinating	
10:00	10:20 Gen IV reactor materials research for a low carbon Europe	L Malerba (JPNM)
10:20	10:40 Materials' Innovations for a Safe and Sustainable nuclear in Europe (FP7 MatisSE project)	A. Michaux (MatisSE)
10:40	11:00 Overview of MEGAPIE	Y. Dai (PSI, Switzerland)
11:00	11:30 COFFEE	
	The main outcomes of the IAEA Coordinated Research Project "Accelerator Simulation and Theoretical	
11:30	11:50 Modelling of Radiation Effects" (CRP SMoRE)	M. Veshchunov (IAEA)
11:50	12:20 GIF VHTR materials	R. Wright (USA)
	Medium and Long-term RCC-MRx Code Evolution and associated R&D needs for Innovative Reactors	
12:20	12:40 (CEN WS-64 Phase 2, PG2)	K-F. Nilsson (JRC- Petten)
12:40	13:00 Discussion on Session I	
13:00	14:00 LUNCH	
	SESSION II: METAL ALLOYS	CHAIR TBC
	Development and characterization of diffusion-bonded Fe- and Ni-base alloys for the application in	
14:00	14:20 the advanced high temperature reactor systems	C. Jang (KAIST, Korea)
14:20	14:40 Development of Advanced Ferritic Steels for Fast Reactor Applications	S. Maloy (LANL, USA)
	The importance of the steel microstructure in the dissolution corrosion behaviour of 316L austenitic	
14:40	15:00 stainless steels in static LBE	K. Lambrinou (SCK-CEN, Belgium)
15:00	15:20 Testing and assessment methodologies for determining 1515-Ti fuel cladding material properties	K-F. Nilsson (JRC-Petten, EC)
15:20	15:40 COFFEE	
15:40	16:00 Phase Stability in an Ion Irradiated Haynes 230 at High Temperatures	O. Anderoglu (LANL, USA)
16:00	16:20 Corrosion resistance of 316H and Super304 austenitic steels in supercritical water	L. Nádherný (Rez, Czech Rep.)
16:20	16:40 A Swelling Model for Fast-Reactor Cladding Materials	A. Courcelle (CEA, France)
16:40	17:00 Discussion on Session II	

Tuesday 12 July 2016

	SESSION IIIa: NOVEL MATERIALS PATHWAYS	CHAIR TBC
9:00	9:30 ODS steels R&D for application to advanced nuclear systems	A. Kimura (Kyoto, Japan)
9:30	9:50 Influence of the plastic deformation on the recrystallization of Ferritic ODS alloys	B. Hary (CEA, France)
9:50	10:10 Report on creep and LCF-Data on ODS-Materials for GEN IV-Reactors	A. Hobt (Uni. Stuttgart, Germany)
10:10	10:30 Microstructural and mechanical behavior of ODS bars and tubes	E. Oñorbe (CIEMAT, Spain)
10:30	11:00 COFFEE	
11:00	11:30 Radiation Resistance of Several Novel Structural Materials Systems	S. Zinkle (Uni. Tennessee, USA)
11:30	11:50 MAX phase-based materials for advanced nuclear systems	T. Lapauw (KU Leuven, Belgium)
11:50	12:10 Ion irradiation-induced structural transitions and amorphization tolerance in Mn+1AXn phases	Y. Wang (Peking Uni., China)
12:10	12:30 Mo-alloys for Advanced Reactor System Applications	B. Cheng (EPRI, USA)
12:30	13:30 LUNCH	
	SESSION IIIb: NOVEL MATERIALS PATHWAYS	CHAIR TBC
13:30	13:50 PROCESSING AND JOINING OF Fe-Cr-Al ALLOYS FOR NUCLEAR APPLICATIONS	K. Field (ORNL, USA)
13:50	14:10 TMSR materials development: Carbide dispersed Strengthening Nickel based alloys	H. Huang (CAS, China)
14:10	14:30 Discussion on Session III	
	Session IV : Poster session on Metal Alloys & Novel Pathways	CHAIR TBC
14:30	15:30 Presentations (3 minutes each): 15 posters (allowing for change-over)	
15:30	16:00 COFFEE	
16:00	17:00 Presentations (3 minutes each): 15 posters (allowing for change-over)	
17:00	19:00 Poster Session and Drinks	

30 posters in total?

Wednesday 13 July 2016

SESSION IV: FUSION MATERIALS		CHAIR TBC	
9:00	9:30	Cryogenic structural materials of the ITER Toroidal Field Coil structure	M. Igushi (JAEA, Japan)
9:30	10:00	Predicting the behaviour of tungsten as a structural material for fusion	D Mason (CCFE, UK)
10:00	10:20	Discussion on Session	
10:20	10:50	COFFEE	
SESSION V: CERAMICS AND CERAMIC COMPOSITES		Chair TBC	
10:50	11:10	Joining of Silicon Carbide Assemblies for Application in High Temperature Power Engineering	W. Lippmann (Uni. Dresden, Germany)
11:10	11:30	In-service enhancement of nuclear nanoceramics	F. Garcia-Ferré (Istituto Italiano do Tecnologia, Italy)
11:30	11:50	In situ observation of mechanical damage in a GFR SiC-SiCfibre ceramic composite	J. Marrow (Uni. Oxford, UK)
11:50	12:10	Characterising the mechanical properties of SiC fibre-SiCCVI composites	N. Robheck (Uni. Manchester, UK)
12:10	12:30	Discussion on Session	
12:30	13:30	LUNCH	
SESSION VI: FUNDAMENTALS and IONS VS NEUTRONS		CHAIR TBC	
13:30	13:50	Cold brittleness and fracture of metals with different crystal lattices	V. Chernov (Bochvar Institute, Russia) CANCELLED
13:50	14:10	Ab initio trained neural-network driven kinetic Monte Carlo simulations of microstructure evolution of irradiated iron alloys	L. Messina (KTH, Sweden)
14:10	14:30	Multi-scale simulation of the experimental response of ion-irradiated zirconium carbide: role of interstitial clustering	J-P. Crocombette (CEA, France)
14:30	14:50	Microstructural similarities and differences between neutron, ion and electron irradiation of Fe-Cr	C. Pareige (CNRS, France)
14:50	15:10	Investigation into neutron and ion irradiated tungsten	R. Abernethy (Uni. Oxford, UK)
15:10	15:30	Discussion on Session	
15:30	16:00	COFFEE	
Session VII : Poster session on Fundamentals & Ceramics & Ions vs Neutrons		CHAIR TBC	15 posters in total?
16:00	17:30	Presentations (3 minutes each): 22 posters (allowing for change-over)	
17:30	19:00	Poster Session and Drinks	

Thursday 14 July 2016

SESSION VIII: Discussion on Ion vs. Neutron Irradiation		CHAIR TBC	
9:00	9:30	Accelerated Irradiation for Emulation of Radiation Damage in Reactor	G. Was (Uni. Michigan, USA)
		Neutron-ion correlation/Use of self-ion irradiation to forecast the void swelling behavior of candidate ferritic-martensitic	F. Garner (DSL Extreme, USA)
9:30	10:00	electron irradiation as a simulation of neutron irradiation	J. Henry (CEA, France)
10:00	10:30	COFFEE	
10:30	10:45	COFFEE	
10:45	12:15	Panel Discussion	
12:15	13:00	Meeting Summary from the session chairs	CHAIR TBC
13:00	13:30	Open discussion	
13:30	13:45	Closing speech (10 mins)	J. Marrow/ G Burke?