COLLOQUIUM ON ADVANCED MATERIALS SIMULATION

Monday, May 6

9:30-10:30	Opening and Welcome Addresses	Opening
	L Steinbach ICAMS	
	E. Weiler Ruhr-University Bochum	
	H. Fischer ThyssenKrupp Steel Europe AG	
10:30-11:00	Break	Break
11:00-11:40	H.D.K.H. Bhadeshia	
	INON-CUDIC TERRITE	
11.40-12.20	V. Vitek	
	Bond-order potentials for bcc transition metals with attraction determined by bond integrals	Chair
	deduced from DFT and repulsion from the overlap of p electrons of closed-shell atoms of argon	I. Steinbach
12:20-12:50	J. Neugebauer	
	Materials design based on predictive ab initio thermodynamics	
12:50-2:00	Lunch break	Break
2.00 2.40		
2.00-2.40	Development of a magnetic bond-order potential for Mn phases	
2:40-3:00	G.K.H. Madsen	M2
2.00 2.20	Simplified models of electronic structure	M. Finnis
3.00-3.20	Bond-order potentials for large-scale atomistic simulations	
3:20-3:40	J. Rogal Atomistic modelling of phase transformation kinetics	
3:40-4:10	Break	Break
4:10-4:50	G. Henkelman	
	LD.a.	
4.50-5.10	R. Janisch	M3
	Modelling and understanding the strength of grain boundaries based on ab-initio results	Chair
5:10-5:50	BJ. Lee Computational process design of high value-added {100} textured steel sheet	J. Neugebauer
5:50-6:10	G. Sutmann	
6:10-6:15	t.b.a.	
6:15-9:00	Poster session	Poster

LITERDISCRUNARY COLLOQUIUM ON ADVANCED MATERIALS SIMULATION COLLOQUIUM

Tuesday, May 7

9:00-9:40	M.W. Finnis Progress in the theory of oxide scale growth	
		T1 Choir
9:40-10:10	G. Eggeler	
	Using advanced ingot metallurgy to contribute to a better understanding of NiTi shape-memory alloys	Bhadeshia
10:10-10:30	U. Preiss	
	A DFT informed phase filed model for electrochemical systems	
10:30-11:00	Break	Break
11:00-11:20	S.G. Fries	
	The Sapiens project: A four years trajectory inside thermodynamics	
11:20-12:00	H.J. Seifert	
	Thermodynamic assessment and modeling of ternary Ti–AI systems	T2
		Chair
12.00-15.40	Y. Wang	R. Drautz
	Unique properties of ferroelastic systems having nanodomain structures	
12:40-2:00	l unch brook	Brook
12.40-2.00	Luich break	Dieak
2.00-2.40	E Russo	
2:00-2:40	A coupled diffusion-phase-field crystal-plasticity framework	
	to study grain boundary cavitation in irradiated materials	
		T3
2:40-3:00	A. Hartmaier	V Vitek
	Scalebridging descriptions of mechanical properties of multiphase materials	V. VILER
3:00-3:20	A. Ma	
2.20.2.50	Micromechanical modelling of plasticity and phase transformation in multi-phase polycrystalline metals	Dreek
3:20-3:50	Break	вгеак
3:50-4:30	D. Raabe	
	Nanoscale phase transformations at martensite interfaces	
4.00 5.00	W Black	T4
4:30-5:00	VV. BIECK	A Hartmaie
5:00-5:20	F. Varnik	
	Multiscale modeling of solidification phenomena	
5:20-5:30	Concluding remarks	