Location:

Schlosshotel Pommersfelden

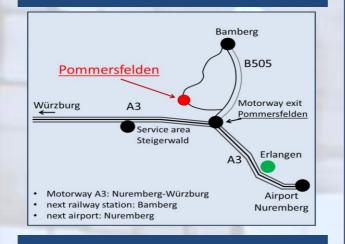
Schloss 1 96178 Pommersfelden Bavaria, Germany Phone: +49 9548 680 Fax: +49 9548 68100 E-mail: hotelhaag@aol.com www.schlosshotel-pommersfelden.de



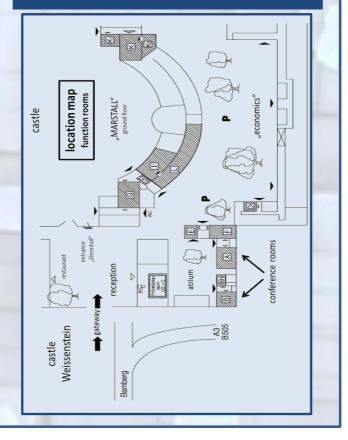
Further information and registration:

Institute: General Materials Properties University of Erlangen-Nuremberg Martensstraße 5 91058 Erlangen Phone: +49 9131 85 27502 Fax: +49 9131 85 27504 E-mail: steffen.neumeier@ww.uni-erlangen.de

Directions:



Site map:





International Workshop on Advanced Cobalt-Base Superalloys

July, 22nd - 23rd, 2013

Organizing Committee:

Prof. Dr. Mathias Göken (FAU Erlangen-Nürnberg, DE) Prof. Dr. Tresa M. Pollock (UC Santa Barbara, USA) Prof. Dr. Kiyohito Ishida (Tohoku University, Japan) Dr. Steffen Neumeier (FAU Erlangen-Nürnberg, DE) Dr. Suzana G. Fries (RUB Bochum, DE)

Local Organizers:

Prof. Dr. Mathias Göken (FAU Erlangen-Nürnberg) Dr. Steffen Neumeier (FAU Erlangen-Nürnberg)



Sunday, 21st July

Registration and sightseeing Guided tour through Bamberg (UNESCO world heritage site), departure 14:00



Posters (Poster session, Monday, 16:15 to 17:30) P.Terberger et al., FZ Jülich, Germany: Interaction of vacuum plasma-sprayed protective bond coats with γ/γ' -strengthened Co-base superalloys during thermal treatment I.Lopez-Galilea et al., RU Bochum, Germany: Effect of heat treatments on thermal stability of intermetallic compounds of a SX Co-base superalloy K.Demtröder et al., RU Bochum, Germany: RUS – an innovative technique for characterization of the elastic constants of solids A.Epishin et al., TU Berlin, Germany: Temperature dependence of tensile properties of a single crystal Co-based alloy with γ/γ' microstructure T.Lorenz et al., FAU Erlangen, Germany Diffusion Brazing of γ '-hardened Cobalt-Base Superalloys A.Janghorban et al., RU Bochum, Germany: Investigation of the Co-Ti-W system by means of thin-film combinatorial synthesis and high-throughput analysis A.Bhowmik et al., Univ. Cambridge, UK Structural instabilities upon alloying in Co-based superalloys A.Bauer et al., FAU Erlangen, Germany: Influence of Iridium on high temperature properties of γ/γ' Cobase superalloys H.Rehman, FAU Erlangen, Germany: A comparative study of diffusion in Nickel and Cobalt using diffusion couples approach Contribution types: Highlight talks: 30 mins + 10 mins discussion Talks: 20 mins + 10 mins discussion Posters: large-format posters (portrait) are preferred

	Monday, 22 nd July
07:00	Breakfast and registration
09:00	Welcome address, M.Göken, FAU Erlangen
	Session Microstructure & Phase Stability
09:15	K.Ishida, Tohoku University, Japan
	Recent Progress in Co-Base Superalloy -Phase Stability and
	Applications
09:55	C.Zenk, FAU Erlangen, Germany
	Microstructure and Mechanical Properties of Co-Al-W-Ti
	superalloys
10:25	K.A.Christofidou, Cambridge University, UK
	Microstructural stability in the Ni-Co-Al-Ti-Cr system
10:55	Coffee break
	Session Wear & Oxidation Behaviour
11:15	Y.S.Sato, Tohoku University, Japan
	Feasibility of cobalt-base superalloy for friction stir welding
	tool of high-softening-temperature materials
11:45	H-Y.Yan, Imperial College London, UK
	Effect of alloying elements on oxidation behavior of Co-Al-W
	base superalloys at high temperature
12:15	L.Klein, FAU Erlangen, Germany
	High temperature oxidation of poly & single crystalline γ/γ' -
	strengthened Co–Al–W–B based superalloys
12:45	Lunch break
	Session Microstructure & Adv. Characterization
14:15	D.Dye, Imperial College London, UK
	Quaternary Alloying Effects and the Prospects for a New
	Generation of Co-base Superalloys
14:55	I.Povstugar, MPIE Düsseldorf, Germany
	Elemental partitioning and lattice site occupancy in γ '-
	strengthened Co-based superalloys
15:25	F.Pyczak, HZ Geestacht, Germany
	The effect of tungsten content on microstructure and creep
	properties in L1 ₂ -hardened Co-Al-W alloys
15:55	
	Phase Diagram and Alloy Design for Co-Al-W-Based
	Wrought Superalloy
16:25	
	Poster session
17:30	
18:00	BBQ and social gathering

Tuesday, 23 rd July	
07:00	Breakfast
	Session Microstructure & Mech. Properties
09:00	S.Neumeier, FAU Erlangen, Germany
	Influence of alloying elements on microstructure and
	mechanical properties of Co-base superalloys
09:40	
	Microstructural Evolution and Phase Equilibria in Ternary
	Co-W-Al Melt-Spun Ribbons
10:10	H.Mughrabi, FAU Erlangen, Germany
	The importance of γ/γ' lattice mismatch in γ '-hardened superalloys
10:30	Coffee break
	Session TEM & Deformation Mechanisms
11:00	J.Müller, FAU Erlangen, Germany
	Simultaneous strain and chemical mapping by CBED-
	EDXS of Co-based superalloys
11:30	M.S.Titus, Univ. of California, Santa Barbara, USA
	SX Tensile Creep Deformation Mechanisms in L1 $_2$ -
	containing Co-base Superalloys at High Temp.
12:00	Y.Eggeler, Univ.of California, Santa Barbara, USA
	Creep Deformation-induced APBs in L1 ₂ -containing
	Single Crystal Cobalt Base Superalloys
12:30	Lunch break
	Session Simulation, Modelling & Databases
14:00	S.G.Fries, ICAMS Bochum, Germany
	Towards a true predictive model database for the thermo-
	physical properties of Co-based alloys
14:40	
	Interdiffusion and Mobility of f.c.c Co-base Solid Solutions
45.40	
15:10	······································
	Stability of TCP phases in Co-based superalloys: Comparison of ab initio results with structure maps
15.40	
15:40	o.edo, ioAino Booliani, eermany
	Study of creep behavior of cobalt-base superalloy single crystal by 3D discrete dislocation dynamics
16:10	
16:10	
10.30	
	Sightseeing Castle Weissenstein, Pommersfelden
10.00	
18:00	
18:30	Conference dinner
10.30	Conference ainner