Poster presentations

Monday, June 12, 2017, 15:30-18:00 Poster session A, chair: M. Perrut

PA1	Thermodynamic modeling of long-term precipitation kinetics in heat-resistant al- loys, Shim Jae-Hyeok
PA2	Analysis of the phase equilibria and phase transformations in the region Al-Al ₃ Zr during slow cooling rate solidification and long-time annealings below the solidus, Khvan Alexandra
PA3	Thermodynamic Optimization of Ni-Ti-V Ternary System, Kathirvelu Santhy
PA4	Computational Study of Atomic Mobility in HCP Mg-Al-Zn Ternary Alloys, Wang Jingya
PA5	High-throughput Investigation of Diffusion and creep Micro-Mechanical Proper- ties in Mg alloys, Li Na
PA6	A study of the Mg-Al-C system: synthesis and thermal stability of the Al_2MgC_2 ternary carbide, Deffrennes Guillaume
PA7	Integration of Phase Equilibrium Calculation and Kinetic Simulation, Chen Shuanglin
PA8	Influence of W and Mo on the phase equilibrium and diffusion behaviour of Ni-Co-Al ternary system, Wang Yang
PA9	Aqueous Salt Hydrates: Unconventional Deep Eutectic Solvents, Marcus Yizhak
PA10	High pressure-high temperature phase diagram using electrical resistance mea- surements in a Paris-Edinburgh large volume press, Emuna Moran
PA11	Ab initio study of the phononic origin of negative thermal expansion, Argaman Uri
PA12	Al-B-C ternary compounds : synthesis, structure, composition and thermal sta- bility, Dezellus Olivier
PA13	Comparison of various DTA methods for liquidus determination in Ag-Cd-In alloys, Gajavalli Sai
PA14	Thermodynamic modelling of the Al-Co-Pd system, aluminium rich corner of the phase diagram, Homolova Viera
PA15	Thermodynamic modelling of Fe-Cr-Ni and its implication for the calculation of multicomponent systems, Jacob Aurélie
PA16	Influencing factors of atomic order in binary sigma phases, Liu Wei
PA17	First-principles Calculation Assisted Thermodynamic Modeling of B-Ta and B-C- Ta System, Xuemei Ouyang
PA18	Experimental Investigation and Thermodynamic Calculation of Phase Equilibria in the Sn-Zn-Co Ternary System, Hu Jingxian
PA19	Phase equilibria, Thermodynamic Assessments and Microstructure Development of Mg-Alkaline Earth-Rare Earth Systems, Xu Guanglong
PA20	Investigation of the ternary Ag-Ga-Sn phase diagram, Premovic Milena

PA21 PA22	Experimental investigation and phase equilibria of Al-Zn-Cu system, Zhang Yuhui Experimental investigation and thermodynamic modeling of Co-Ge system, Zeng
DA 02	Yinping
PA23 PA24	A thermodynamic study of the WC-(Fe,Co,Ni) hardmetal, Peng Zhou Phase Equilibria and Thermodynamic Modelling in the System Ni-Sn-Zr, Vrestál Jan
DAGE	
PA25 PA26	Phase equilibria of Sn-Ag-In-Zn quaternary system, Chen Sinn-Wen Thermodynamic and TEM investigations of Si poisoning effects on grain refine- ment in Al-Ti-Si and Al-Nb-Si systems, Li Yang
PA27	Isothermal sections of Mg-La-Zr system in Mg-rich corner at 300, 400 and 500° C, Zhu Wenfei
PA28	Phase Equilibria of 540° C Isothermal Section of Fe-Al-Zn-Ce System, Zhi Li
PA29	Phase stability of ternary compounds in Cu-Li-Sn system and path hysteresis in Cu ₆ Sn ₅ electrode, Jianchuan Wang
PA30	Thermochemistry of some Bismuth-Transition metal compounds by high temper- ature direct synthesis calorimetry, Meschel Susan V.
PA 31	Modelling solidification segregation in two Nb microalloyed steels, Costa E Silva Andre
PA32	Experimental study of Al-Cu-Zn phase diagram, Zobac Ondrej
PA33	Thermodynamic investigations of Fe-Mn-Al-Ni shape memory alloys, Walnsch
	Alexander
PA34	Optimization of compositions and physical properties of salt systems for latent
	heat storage in thermal solar energy applications, Gheribi Aimen Ernest
PA35	Ternary diffusivity from both the intersection of two diffusion couple and single
	diffusion couple: application to the Cu-Ni-Sn ternary system, Du Changfa
PA36	The stability investigation of $Fe_{23}Zr_6$ in the Fe-Zr system, Zou Nan
PA37	First principles study of hydrogen diffusion in iron, Hirata Kenji
PA38	Thermodynamic evaluations of the local ordering behaviors in the LPSO-forming Mg-Zn-Y system, Egami Mariko
PA39	Thermodynamic re-assessment of the Al-Fe-Mn system, Zheng Weisen
PA40	Study of thermal stability of doped CoSb based skutterudites by Knudsen effusion mass spectrometry, Zelenka Frantisek
PA 41	Study of thermal stability of CoSb ₃ skutterudite by Knudsen effusion mass spec- trometry, Broz Pavel
PA42	Contribution to the experimental determination of the Ti-Al-W phase diagram,
	Vaubois Thomas
PA43	Mixing enthalpy measurements of liquid Li-Pb-Sb alloys, Terlicka Sylwia
PA44	Phase equilibria, thermodynamics and microstructure simulation of metastable spinodal decomposition in metastable c-TiAIN-based coatings, Zhou Jingjing
PA45	Cluster ordering of Mg-LPSO, Nishitani Shigeto
PA46	Thermodynamic descriptions of the quaternary Al-Si-Mg-RE (RE=Sc, Ce) sys- tems and their application to design RE-containing cast aluminium alloys, Lu Zhao
PA47	Experimental Investigation of the Fe-Co-Ce System, Fartushna Iuliia

PA47 Experimental Investigation of the Fe-Co-Ce System, Fartushna Iuliia

PA48 Experimental investigation and thermodynamic re-assessment of the ZrO₂-TiO₂ system, **Saenko Ivan**

- **PA49** Stability and defect chemistry analysis of Cu-doped Ceria by computational thermodynamic modelling, **Mcinnes Gregor**
- PA50 Phase equilibria of binary Cr-Os system: experimental measurement and thermodynamic assessment, Lin Yan
- PA51 Modeling of the Mn-Ni-Pd alloy system, Brosh Eli
- PA52 Thermodynamic modelling of the B Mn V system, Kepic Jan
- **PA53** Experimental and computational study of diffusion between Fe-Cr-Al and Fe-Ni alloys at 800° C and 1000°, **Ojha Rohit**
- PA54 On the configurational entropy of nano-solutions, Kaptay George
- PA55 Thermodynamic Modelling of the Al-Mn-C System, Tang Florian
- PA56Phase equilibria of the Gd-Mn-Ge/Si ternary systems and magnetic properties of
GdMn2(Ge,Si)2 compound, Wang Jiang
- **PA57** Experimental study and thermodynamic calculation of Mn-RE (RE=Nd, Gd, Ho, Dy) binary systems, **Wang Jiang**
- PA59 Electronic state entropy: informing thermodynamic and transport properties of the molten state., Allanore Antoine
- PA60 Solidus surface projection of Fe-Sn-S system, Sinyova Svetlana
- PA61 Phase Equilibria of the Fe-Al-Zr System at 600°C, Zhao Manxiu

Tuesday, June 13, 2017, 15:30-18:00 Poster session B, chair: M. Perrut

- PB1 Experimental study on Fe-C-La system, Mardani Masuma
- **PB2** Wetting and interfacial reactivity in the Al₃Ti-SiC system, **Gambaro Sofia**
- PB3 Experimental study of phase equilibria of the La/Y-Fe-B ternary systems, Wang Jiang
- PB4
 Thermodynamic optimization of Al-B-N system using ab initio calculations, Sridar

 Soumya
- PB5 Prediction of heat capacity, Zienert Tilo
- **PB6** Thermodynamic study and assessment of the fluorine-iron system, **Chatain Sylvie**
- **PB7** Effects of Ni-doping on various properties of NbH phases: A First-principles investigation, **Wang Zhongmin**
- PB8Effects of Mo alloying on the structure and hydrogen-permeation properties of
Nb metal, Wang Zhongmin
- **PB9** Evaluation of empirical rules on the phase formation of the multi-principal element alloys through Calphad approach, **Liang Song-Mao**
- PB10 Ab initio calculations of the intermetallics in Ni-Zr system, Jana Asmita
- **PB11**Thermodynamic modeling of the Co-Cr-Ta system, **Yao Wang**
- **PB12**Experimental research on thermo-stability of the ternary compounds and related
phase transformation in the Mg-Zn-Gd system, Li Hong-Xiao
- PB13 Remodelling of Hf-V system, Pavlu Jana
- PB14Thermodynamic Evaluation and Optimization of the NaF KF ZnF2 System,
Aubé Maxime
- PB15
 Thermodynamic modelling of key metallic sub-systems for the treatment of midlevel wastes, Soldi Luca
- PB16 Thermodynamic description of the Ga-Li-Zn system, Debski Adam
- **PB17** The characteristic of Fe as a β -Ti stabilizer in Ti alloys, **Guo Yanhua**
- **PB18**Structure, elasticity and thermal decomposition of $Ti_{1-x}TM_xN$ alloys from first-
principles study, **Jiong Wang**
- **PB19** Calculation of mixing enthalpy in Mo-Pd-Rh-Ru system, **Crivello Jean-Claude**
- **PB20** Experimental and computational study on surface layer microstructure evolution in single crystal superalloys during solution heat treatment, **Spathara Dimitra**
- **PB21**Experimental Determination of Phase Equilibria Related to Iron Silicides in the
Fe-Si Binary System, Han Kwangsik
- PB22 Theoretical study of hydrogen insertion in bcc metals, Bourgeois Natacha
- **PB23** Experimental investigation and thermodynamic calculation of the Al-Si-V system in the Al-rich corner, **Li Kang**
- PB24 CALPHAD assessment of the key ternary and quaternary systems in Ti alloys, Hu Biao
- PB25 Liquidus and solidus projections of the Fe-Co-S system, Ilatovskaia Mariia
- PB26 Phase Equilibria of the Gd-Fe-B Ternary system at 873K and 1073 K, Cheng Gang

PB27	Next Generation CALPHAD Databases: Accurate approximation of the Debye model and its application for phase diagram calculations, Roslyakova Irina
PB28	The first principle calculation and experimental investigation of the $Ti_2(AI,Si)C$ solid solution, Piven Kseniia
PB29	Experimental and thermodynamic study of Li-O and $Li_2O-P_2O_5$ systems, Jin Liling
PB30	Thermodynamic description of spinodal decomposition in Ni-based superalloys, Forghani Farsad
PB31	Isothermal section of the Phase diagram of the Co-Pt-Ho ternary system at 773K, Du Yusong
PB32	Thermodynamic modelling of lead chalcogenide thermoelectrics for optimized ZT, Peters Matthew
PB33	Thermodynamic stability of substitutional- and interstitial-type of boron in fcc Fe, Kouta lyoda
PB34	First-principles calculations and thermodynamic modeling of the Cu-Sn-S system relevant to CZTSSe photovoltaic materials, Guan Pin-Wen
PB35	Design of Ti-Alloy by Integrating High Throughput Experiments and Calculations, Liu Libin
PB36	,
PB37	Phase relations of the Ce_2Co_{17} -Sm ₂ Co ₁₇ system, Du Yusong
PB38	Experimental reinvestigation and thermodynamic description of Bi-Te binary System, Zhang Ligang
PB39	Application of the CALPHAD approach and First-principles calculations to electrode materials in Li ion batteries, Chang Keke
PB40	Experimental investigation and thermodynamic modelling of LiF-NdF_3-DyF_3 system, Abbasalizadeh Aida
PB41	Thermodynamic properties of liquid In-Li solutions, Gasior Władysław
PB42	Ab-initio study of finite pressure-temperature phase stability for magnetic materials, Singh Harish Kumar
PB43	Stability study of Ni $_8$ V phase, Noori Seyed-mohammad-mehdi
PB44	Progress in the development of the OECD-NEA Thermodynamics Advanced Fuels - International Database (TAF-ID): Application calculations, Guéneau Christine
PB45	Assessment of NiO-SiO_2 System with Kapoor-Frohberg-Gaye Model, Farina Alexandre
PB46	Development of cemented carbides through thermodynamic calculations, Peng Yingbiao
PB47	Prediction of Free Energy at Finite Temperatures by First-Principles Calculations and Statistical Mechanics, Liu Zi-Kui
PB48	,
PB49	Development of lightweight high entropy alloys using coupled CALPHAD-DFT modeling, Huang Xuejun
PB50	Thermodynamic modelling of FeO-Fe $_2O_3$ -Ti $_2O_3$ -Ti O_2 system, Panda Sourav Kumar
PB51	Analysis at high lateral resolution of Mo-Ni-Re system with the CAMECA SXFIVE FE, ${\mbox{Robbes Anne-Sophie}}$

PB52	Thermodynamic properties of alloys of the binary Sb-Yb system, Shevchenko Maksym
PB53	Thermodynamic Assessment of Binary Subsystems of Al ₂ O ₃ -CaO-SiO ₂ -UO ₂ -ZrO ₂ System Using Cell Model and Ionic Model, Kurata Masaki
PB54	Computational thermodynamics of solid-solid phase change materials devel- opment for thermal energy storage in ternary system: Pentaglycerine - Tris(hydroxymethyl)-aminomethane - 2-amino-2-methyl-1,3-propanediol (PG- TRIS-AMPL), Chandra Dhanesh
PB55	The 600°C isothermal section of the La-Zn-Si system, Tu Hao
PB56	Experimental investigation of the intermetallic dross phases formed in galvalume baths, Peng Haoping
PB57	lsothermal section of Zn-rich corner of the Zn-Al-Mg-Si system at 450° C, Wang Jianhua
PB58	High Temperature Experimental Contribution to the Thermodynamic Modeling of Corium Pools, Gossé Stéphane
PB59	Explicit calculations of vacancy profile during interdiffusion in quaternary Ni-Pt-Cr-Al system for optimization of new $\gamma \gamma$ bond coating, Desgranges Clara
PB60	Mechanical Properties of Non-Centrosymmetric CePt $_3$ Si and CePt $_3$ B, Rogl Gerda
PB61	Kinetic simulation of alloying element partitioning in Q&P steels, Maheswari Nandakumar