

29th Annual MSIT Meeting

International Seminar on Heterogeneous Multicomponent Equilibria

15 – 20 February 2015, Schloss Ringberg, Tegernsee, Germany

Organized by

*MSI, Materials Science International Services GmbH, Stuttgart, Germany
and*

KIT, Karlsruhe Institute of Technology, Karlsruhe, Germany

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Content

Workshop Agenda

List of Participants

Working Groups

MSI Graphics Editor – collaboration tool

MSI Collaboration – collaboration environment

A G E N D A

SUNDAY, February 15, 2015

Starting 15:00		ARRIVAL
16:09	Tegernsee train station	Shuttle 1 to the castle
17:09	Tegernsee train station	Shuttle 2 to the castle
19:00	Gartenzimmer	Get Together (snack bar)

MONDAY, February 16, 2015

Materials Chemistry 30 Years MSIT - Experience in Critical Evaluation

9:00	Konferenzraum	Chair: Günter Effenberg	Opening by Günter Effenberg (MSI, DE) "30 Years MSIT"
9:30			Rainer Schmid-Fetzer (TU Clausthal, DE) "Phase Diagrams: Primer, Applications and Traps"
10:00			Peter Franz Rogl (University Vienna, AT) "Crystallographic Data in Critical Evaluations"
10:30	Konferenzgebäude		Coffee
11:00	Konferenzraum	Chair: Rainer Schmid-Fetzer	Andy Watson (University Leeds, UK) "How to Evaluate Experimental & Computational Thermodynamic Data"
11:30			Gautam Ghosh, (Northwestern Univ., Evanston, USA) "Ab initio" Calculations Applied in Evaluation Work
11:55			Svitlana Iljenko (MSI GmbH, Stuttgart, DE) "Critical Evaluations: Best Practice from the Editorial Office"
12:10			Hans Jürgen Seifert (KIT, Karlsruhe, DE) "Thermodynamics of Lithium Batteries"
12:30	Speisesaal		Lunch

A G E N D A

New Comers and New Projects		
14:00	Konferenzraum Chair: Andy Watson	Alina Makudera, (FIPMS, Kiev, UA) <i>"Interaction in the Systems Including Alumina, Zirconia, Hafnia and Scandia"</i>
14:05		Sofia Gambaro (Univ. Genova, IT) <i>"Investigation of Solid-Liquid Interactions in High Temperature Metal-Ceramic Systems"</i>
14:10		Yao Wang (Univ. Genova, IT) <i>"Thermodynamic Assessment of Co-Cr-Ni System"</i>
14:15		Elena Lukyanova, Moscow, (Baikov IMET, Moscow, RU) <i>"Investigation of the Mg-Sm-Tb System"</i>
14:20		Fabuyide, Abosede Adefunke (Univ. Witwatersrand, SA) <i>"Investigation of C-Ni-V Alloys Ternary for Wear Resistance"</i>
14:25		Vladimir Cheverikin (MISIS, Moscow, RU) <i>"Experimental and Thermodynamic Investigations of Al-Mg-Hf System"</i> – Cheverikin, V., Sidorovich A.E., Khvan A.V., Dinsdale A.T.
14:30		Alina Akhmetova (MISIS, Moscow, RU) <i>"Experimental Studies and Thermodynamics on Ag-Cu-Ge System"</i> – Akhmetova A., Khvan A.V., Dinsdale A.T., Cheverikin V.V., Kondratiev A.V.
14:35		Evgeny Syutkin (MISIS, Moscow, RU) <i>"Thermodynamic Assessment of Mn-H System"</i> – Syutkin E., Khvan A.V., Dinsdale A.T.,
14:55		Olga Fabrichnaya (TU Bergakademie, Freiberg, DE) <i>"Heat Capacity Measurements in the Al-Fe-Si System and Experimental Phase Relations in the Fe-Al System"</i>
15:10		Dmytro Pavlyuchkov (TU Bergakademie, Freiberg, DE) <i>"Experimental Investigation and Thermodynamic Modelling of the ZrO₂-MgO-MnO_x Phase Diagram"</i>
15:25	Gartenzimmer	Coffee
Critical Evaluation and Review of Materials Systems		
15:55	allocated group rooms	Critical Evaluation and Review of Materials Systems Evaluation Group-Work
18:30	Speisesaal	Dinner (Bavarian Buffet)

A G E N D A

TUESDAY, February 17, 2015

8:00 – 9:00	Speisesaal	Breakfast	
DFG SPP 1473 II - WeNDeLIB			Critical Evaluation and Review of Materials Systems
9:00	Konferenzraum	Hans Jürgen Seifert (KIT, Karlsruhe, DE) <i>Introducing Remarks and Welcome</i>	
9:15		Damian Cupid (KIT, Karlsruhe, DE) <i>“Electrode Materials for Lithium Ion Batteries”</i>	
9:45		Dajian Li (KIT, Karlsruhe, DE) <i>“Overview of our Investigations of the Cu-Li-Sn System”</i>	
10:15		Thomas Reichmann (KIT, Karlsruhe, DE) <i>“Lithiated Intermetallic Anode Materials for Li-Ion Batteries: An Outlook”</i>	
10:30	Gartenzimmer	Coffee	
11:00	Konferenzraum	Melanie Mangang (KIT, Karlsruhe, DE) <i>“Femtosecond Laser Processing of LiFePO₄ Electrodes and its Impact on Rate and Diffusion Capability”.</i>	
11:30		Peter Smyrek (KIT, Karlsruhe, DE) <i>“Coating and Laser-Structuring of Thick Film Li(Ni_{1/3}Mn_{1/3}Co_{1/3})O₂ Electrodes”</i>	
12:00		Boxia Lei (KIT, Karlsruhe, DE) <i>“Electrochemical-Calorimetric Studies on Different Lithium Ion Cells”</i>	
12:30	Speisesaal	Lunch	
14:00	Konferenzraum	Maryam Masoumi (KIT, Karlsruhe, DE) <i>“Thermal Analysis of Selected Compositions in the LiNiO₂-LiMnO₂-LiCoO₂ System”</i>	
14:30		Nicolas Mayer (KIT, Karlsruhe, DE) <i>“Thermodynamics of Co-Cu-O Conversion Type Anodes for Lithium Ion Batteries”</i>	
15:00		Maren Lepple (KIT, Karlsruhe, DE) <i>“CALPHAD-Based Investigation of the Li-Cu-O and Li-Fe-O Systems”</i>	
15:30		Arno Lehmann (MSI, Stuttgart, DE) <i>“Recent Enhancements of the Collaboration Tool LIBworks”</i>	
15:45	Gartenzimmer	Coffee	
16:15	Konferenzraum	<i>Discussions on the WeNDeLIB projects</i>	Evaluation Group-Work continued (allocated group rooms)
18:30	Speisesaal	Dinner	
21:00	Speisesaal	Feuerzangenbowle	

A G E N D A

WEDNESDAY, February 18, 2015

8:00 – 9:00	Speisesaal	Breakfast
Critical Evaluation and Review of Materials Systems		
9:00	allocated group rooms	Evaluation Group-Work continued
10:30	Gartenzimmer	Coffee
11:00	allocated group rooms	Evaluation Group-Work continued
12:30	Speisesaal	Lunch
13:30	allocated group rooms	Evaluation Group-Work continued
15:30	Gartenzimmer	Coffee
16:00	allocated group rooms	Evaluation Group-Work continued
18:30	Speisesaal	Dinner
20:00	Konferenzraum	Discussion of evaluation problems found at Group Work

THURSDAY, February 19, 2015

8:00 – 9:00	Speisesaal	Breakfast
Critical Evaluation and Review of Materials Systems		
9:00	allocated group rooms	Evaluation Group-Work continued
10:30	Gartenzimmer	Coffee
11:00	allocated group rooms	Evaluation Group-Work continued
10:30	Gartenzimmer	Coffee
11:00	allocated group rooms	Evaluation Group-Work continued
12:00	Speisesaal	Lunch
13:30	Gate of the castle	Walking (weather dependent and optional)
		Evaluation Group-Work continued (allocated group rooms)
15:30	Gartenzimmer	Coffee
16:00	allocated group rooms	Evaluation Group-Work continued
18:30	Speisesaal	Dinner

A G E N D A

FRIDAY, February 20, 2015

8:00 – 9:00	Speisesaal	Breakfast
Critical Evaluation and Review of Materials Systems		
9:00	<i>Re-allocated grouprooms</i>	Evaluation Group-Work continued
10:30	Gartenzimmer	Coffee
11:00	Grüner Seminarraum Chair: Günter Effenberg /Svitlana Ijjenko	Group Reports
12:30	Speisesaal	Lunch
till 14:00		Departure
		Evaluation work to be completed remotely till 31.03.2015