



Grant agreement no: 711792	Project Acronym: LiRichFCC	Project title: Novel Cathode Materials for Lithium Ion Batteries
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Organization name of lead contractor: Karlsruhe Institute of Technology	Document version: 2018-09-27
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Work package:

WP 5: Management & Evaluation

Title:

D5.7: LiRichFCC International Workshop

Start date of project: Oct. 1st 2016 (duration 36 months)	Contractual Delivery Date: 2018-09-30	Actual Delivery Date: 2018-09-30
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Dissemination level:

☒ **PU (Public)**

☐ **CO (Confidential, only members of the consortium + Commission)**

Authors (beneficiary name):

Christian Punckt (KIT)



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1 SUMMARY

Within the framework of the Electrochemistry 2018 conference at Ulm University Sept. 24 – 26, 2018, the LiRichFCC Consortium organized the

First International Workshop on “Li-rich Cation Disordered Rock Salt Structures”.

The workshop was attended by over 90 researchers from Europe, Japan, and the US.

2 WORKSHOP PROGRAM

- 10.20 KEYNOTE LECTURE The Electrochemical Performance of Solid Polymer Electrolytes Based on Polycarbonates and Polyesters, K. Edström, Uppsala/SE, D. Brandell, Uppsala/SE, J. Mindemark, Uppsala/SE
- 10.55 Understanding Cation-Disordered Li-Ion Battery Cathodes by Computation, A. Urban, Scotland/GB, A. Abdellahi, S. Dacek, Cambridge/GB, N. Artrith, G. Ceder, Berkeley/US
- 11.20 Atomic Scale Investigations of Lithium Transition Metal Oxyfluorides, J. H. Chang, Lyngby/DK, S. Loftager, J. M. García Lastra, T. Vegge, Lyngby/DK
- 11.45 Ab initio modeling of Li-rich transition metal fluorides, H. Euchner, Ulm/DE, A. Gross, Ulm/DE
- 12.10 Oxygen Redox Chemistry in Disordered Rocksalt Cathode Materials, R. House, Oxford/GB, P. Bruce, Oxford/GB
- 12.35 Disordered Rock Salt Oxyfluorides for electrochemical storage Synthesis and Stability, C. Baur, Ulm/DE, J. Chable, Ulm/DE, J. H. Chang, Lyngby/DK, J. M. Ateba Mba, Ljubljana/SI, M. Fichtner, Ulm/DE
- 13.00 LUNCH BREAK
- 14.10 Investigations on Positive Electrode Material $\text{Na}_x\text{Li}_{0.7-x}\text{Ni}_{1-y}\text{Mn}_y\text{O}_2$, M. Shikano, Ikeda/JP, K. Chiba, H. Sakaebe, Ikeda/JP
- 14.35 $\text{Li}_2\text{MO}_2\text{F}$ (M=Fe or Ti) as high energy cathode materials, R. Dominko, Ljubljana/SI, J. M. Ateba MBA, Ljubljana/SI, I. Arcon, Nova Gorica/SI, E. Chernyshova, G. Mali, Ljubljana/SI
- 15.00 Surface chemistry of $\text{Li}_2\text{VO}_2\text{F}$ seen through photoelectron spectroscopy, M. Hahlin, Uppsala/SE, I. Källquist, A. Naylor, D. Brandeli, K. Edström, Uppsala/SE
- 15.25 Study on the stabilization of the Electrolyte/ Material interface for Disordered Rock-Salt cathodes, J.-F. Colin, Grenoble/FR, J.-F. Martin, Grenoble/FR, M. Le Digabel, Monts/FR
- 15.50 Design and tuning of the surface properties to improve the electrochemical performance of cation-disordered cathode material, M. A. Cambaz, Ulm/DE, M. Fichtner, Ulm/DE
- 04.15 p.m. FAIRWELL COFFEE BREAK



3 DOCUMENTATION



Figure 1: Daniel Brandell presenting at the “Li-rich cation disordered rock salt structures” workshop at Ulm University on Sept. 26, 2018.

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Li-rich cation disordered rock-salt structures in batteries I+II
Electrochemistry 2018, Ulm University, Sept. 26, 2018

Last Name	First Name	Organisation	Signature
		University of Konstanz, HEET	
		University of Münster, MRETT	
		ZSW - BW, Ulm	
		ZSW, Ulm	
		ZSW, Ulm	
		ZSW, Ulm	
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		ZSCD, Ulm	
		University Marburg	
		University of Marburg	
		University of Marburg	
		University of Marburg	
		Karlsruhe Institute of Technology	
		TU - Berlin	
		UW - Uppsala	

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Li-rich cation disordered rock-salt structures in batteries I+II
Electrochemistry 2018, Ulm University, Sept. 26, 2018

Last Name	First Name	Organisation	Signature
		TUM, Garching, DE	
		TUM	
		Paul Scherrer Institut, CH	
		IP, Uni Oldenburg	
		Uni Oldenburg	
		Uni Oldenburg	
		Uni Oldenburg	
		ZBT GmbH	
		Volkswagen AG	
		Oldenburg, de	
		Uni Oldenburg	
		Uni Aalen	
		Oxford University	
		UPPSALA UNIVERSITY	
		HIM	

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Li-rich cation disordered rock-salt structures in batteries I+II

Electrochemistry 2018, Ulm University, Sept. 26, 2018

Last Name	First Name	Organisation	Signature
		Nic-Gubiana	
		Nic Gubiana	
		U St. Andrews (UK)	
		KIT	
		H1U-KIT	
		Uni. Marburg	
		Krot. University	
		BASF	
		AIST	
		TU Dresden	
		H1U-KIT	
		Uni Sofia/Uni Siegen	
		JLU Siegen	
		Forschungszentrum Jülich	
		RENA	

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Li-rich cation disordered rock-salt structures in batteries I+II
Electrochemistry 2018, Ulm University, Sept. 26, 2018

Last Name

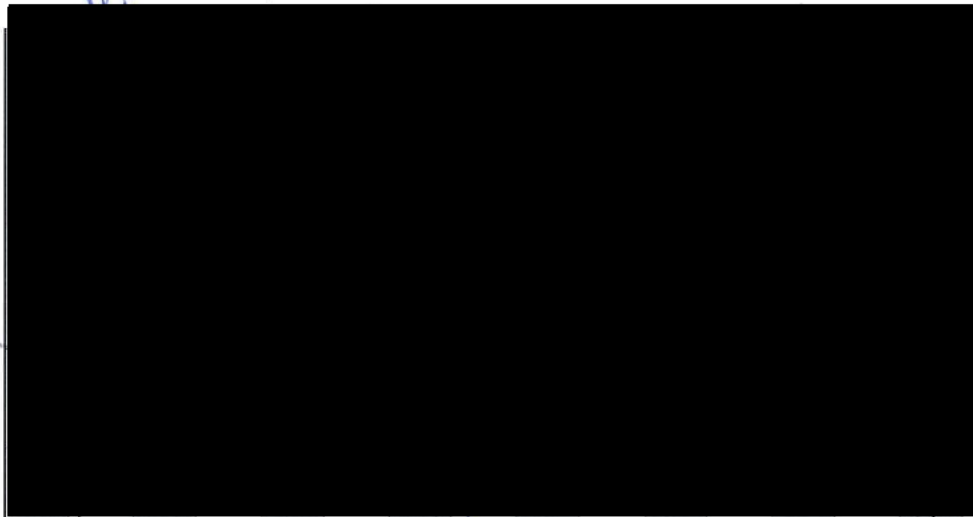
First Name

Organisation

Signature



JLU Gießen
Univ. Salzburg
HIL, KIT
HIV, KIT
HIV, KIT
FINO / HS Aalen
HIV, KIT
DTU Energy, DK
DTU Energy, DK
HIV / KIT
CEA / LITEN
CEA / LITEN
Continental
MEET, WWU Münster
Freudenberg SE





Li-rich cation disordered rock-salt structures in batteries I+II
Electrochemistry 2018, Ulm University, Sept. 26, 2018

Last Name	First Name	Organisation	Signature
		Uppsala Uni.	
		HJU - KIT	
		HIN	
		Goethe - University Frankfurt	
		Ulm / HJU	
		Ulm / HJU	
		CIC - ENERGIGUNE	
		CIC - ENERGIGUNE	
		FZ Jülich	
		NEET Münster	
		HU / KIT	
		ZAE Bayern	
		TUM	
		ZSW	
		ZSW, Ulm	

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Li-rich cation disordered rock-salt structures in batteries I+II
Electrochemistry 2018, Ulm University, Sept. 26, 2018

Last Name	First Name	Organisation	Signature
		KIT	
		HIV	
		Frankfurt IPAM	
		Ulm - Ulm	
		HIL	
		KIT	
		Ulm - Ulm	
		Simon Steiner U	
		Uni Oldenburg	
		Uni Ulm	
		LI-ERN	
		HIV	
		TAM	
		DL	
		DFI	



Last Name	First Name	Organisation	Signature
		Frederick St	
		Diamond Light Source	
		KAU	
		KU	
		MPI	
		University of Gießen	
		ZSW	
		Opfer University	