

Programm 1. Tag, 26.02.2013

Zeit / time			
	Eröffnung der Tagung		
10:00	Prof. Dr. Martin Winter		
	Grußworte		
10:05	BMBF Grußwort		
	Plenarvorträge		
10:35	Prof. Dr. Dirk Uwe Sauer Einführung		
10:40	Hao Li, HCA Consulting China Development of E-mobility in China		
11:05	Erhard Schletterer, Li-Tec Battery GmbH Li-Ionenbatterien für EVs aus Deutschland, wo stehen wir?		
11:30	Ottmar Sirch, Dr. Hartmut Pröbstle, BMW Group Speicher in Bordnetzen		
11:55	Dr. Klaus Peter Röttgen, E.ON SE (angefragt)		
	Mittagspause mit Postersession und Ausstellung		
12:20	Mittagspause		
13:20	Postersession und Ausstellung		
	Parallelsitzung 1		
14:45	Raum: Brüssel-Saal Parallelsitzung 1A: Battery technologies for micro-hybrid vehicles Leitung: Moritz Schindler Experience with system integration of batteries in micro-hybrid vehicles Autor: Eberhard Meissner, Johnson Controls Autobatterie GmbH & Co. KGaA, EMEA Statistical Validation of a DCA Test Autor: Eckhard Karden, Ford Forschungszentrum Aachen GmbH From Advanced Lead-Acid Batteries to Lithium-Ion Batteries Autor: Program Manager Li-Ion Batteries Christina Antonius, Johnson Controls Advanced Power Solutions GmbH In Search of the Optimal Battery Chemistry for the Micro-hybrid Vehicle Market Autor: Salil Soman, PowerGenix	Raum: Europa-Saal Parallelsitzung 1B: Capacitors and next generation batteries Leitung: Dr. Margret Wohlfahrt-Mehren (to be confirmed) New electrolytes components for high voltage electrochemical double layer Autor: Dr. Andrea Balducci, University of Münster-MEET Enhanced cycle stability in Lithium-Sulfur batteries through innovative cathode and anode composite materials Autor: Dr. Holger Althues, Fraunhofer IWS Development of Solid-State Lithium Ion Batteries Autor: Senior Scientist Christopher Lee, Ilika PLC Anion intercalation into graphitic carbon from ionic liquid based electrolytes for high performance dual-ion batteries Autor: Hinrich-Wilhelm Meyer, Westfälische Wilhelms-Universität, MEET Batterieforschungszentrum, Institut für Physikalische Chemie	Raum: Konferenzraum K1 Parallelsitzung 1C: Production of battery cells Leitung: Dr. Joachim Fetzer Research Production Line for Large Size Li-Ion-Cells Autor: Prof. Dr. Werner Tillmetz, Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg (ZSW) Cost reduction in the battery production Autor: Prof. Dr.-Ing. Achim Kampker, Werkzeugmaschinenlabor WZL der RWTH Aachen Challenges in Design and Manufacturing of Lithium-ion Battery Cells for Battery Electrical Vehicles Autor: Dr. Markus Pompetzki, Konrad Holl, VOLKSWAGEN VARTA Microbattery Forschungsgesellschaft mbH & Co. KG Verwaltungsgesellschaft mbH Upscaling New Battery Technologies from Laboratory to Fabrication Autor: Thomas Kolbusch, Coatema Coating Machinery GmbH
	Pause mit Postersession und Ausstellung		
16:15	Pause mit Postersession und Ausstellung		
	Parallelsitzung 2		
16:45	Raum: Brüssel-Saal Parallelsitzung 2A: Lead/acid technology progress for innovative 14 V automotive systems Leitung: Dr. Peter Pilgram Cycle life and dynamic charge acceptance improvements in Flooded Lead Acid batteries for micro-hybrid applications: closing up the GAP to AGM VRLA batteries performances and countermeasures against early decay of performances and charge acceptance. Autor: , Cycle Life Study of Lead-Acid Batteries for Automotive Applications under Different Operating Conditions Autor: Dipl.-Wirt.-Ing. Julia Badeda, ISEA Precondition for appearance of lug thinning - an approach Autor: Dr. Eva Zena, ABR - Austrian Battery Research Laboratory GmbH Impact of Microscopic Electrode Structure on Dynamic Charge Acceptance for Lead-Acid Batteries Autor: Heide Budde-Meiwes, ISEA - RWTH Aachen University	Raum: Europa-Saal Parallelsitzung 2B: Production of batteries and recycling Leitung: Dr. Arnold Lamm Safe and affordable series batteries: The second generation Autor: Dr. Volker Hennige, AVL List GmbH Corrosion-resistant, electrical conductive adhesives for fuel cell and battery purposes Autor: M.Sc. Marcus Weber, Institut für Füge- und Schweißtechnik, TU Braunschweig Statistical Design of Experiments for a time optimized formation procedure Autor: Dr. Christian Bretthauer, Fraunhofer-IKTS Processing and Structuring of Battery Electrodes Autor: Prof. Dr.-Ing. Arno Kwade, TU Braunschweig, Institut für Partikeltechnik und Battery LabFactory Braunschweig	Raum: Konferenzraum K1 Parallelsitzung 2C: Battery modelling Leitung: Dr. Peter Birke Lithium-ion battery performance predictions with multiscale physicochemistry-based simulations Autor: Markus Lindner, Adam Opel AG 3D Thermal characterization and modelling of large scale lithium-ion cells on cell and battery level Autor: Christian Veth, Deutsche ACCUotive GmbH & Co. KG A comprehensive electrothermal FEM-model of prismatic Li-ion cells Autor: André Loges, Karlsruher Institut für Technologie, Institut für thermische Verfahrenstechnik In situ impedance spectroscopy on high capacity Si microwire anodes for Li-ion batteries Autor: Dr. Enrique Quiroga-González, University of Kiel

 Ende des ersten Tages

18:15 Ende des ersten Tages

 Abendveranstaltung

19:30 Abendveranstaltung im Rathaus Aachen

Programm 2. Tag, 27.02.2013

Zeit /
time

 Plenarvorträge

08:30 Dr. Detlev Repenning, ECC Repenning GmbH
From the raw material to the finished energy storage system - the production chain with aspects of safety, economics and performances

08:55 Dr. Rudolf Krebs, Volkswagen AG & Co. KG
(angefragt)

09:20 Kay Bohlmann, Jungheinrich Norderstedt AG & Co. KG
Application of Lithium-Ion Batteries in industrial trucks

09:45 Prof. Dr. Bernd Friedrich, IME Metallurgische Prozesstechnik und Metallrecycling RWTH Aachen
Ecobatrec - Optimierung der Recyclingeffizienz von Lithiumbatterien durch flexibles Prozessdesign

10:10 Dr. Chihiro Yada, Toyota Motor Europe NV/SA
R&D on "All-solid-state" Lithium Batteries in TOYOTA for PHV and EV application

 Pause mit Postersession und Ausstellung

10:35 Pause mit Postersession und Ausstellung

 Mittagspause

12:00 Mittagspause

 Parallelsitzung 3

13:00	Raum: Brüssel-Saal Parallelsitzung 3A: Battery management and diagnostics Leitung: Prof. Dr. Andreas Jossen (to be confirmed)	Raum: Europa-Saal Parallelsitzung 3B: Materials – Electrode materials Leitung: Prof. Dr. Jürgen Janek (to be confirmed)	Raum: Konferenzraum K1 Parallelsitzung 3C: Integration of batteries for automotive and non-automotive applications Leitung: Dr. Matthias Ullrich
	Surface strain measurement of Lithium-Ion pouch cells for safety and state monitoring Autor: Nora Martiny, TUM CREATE	Alloy Materials for Anodes Autor: Dr Egbert Figgemeier, 3M Deutschland GmbH	Market Drivers and Value Chain Analysis for Automotive and Stationary Batteries Autor: Dr. Franz J. Kruger, Roland Berger Strategy Consultants GmbH
	Performance estimation method for lithium-ion battery packs in electric vehicles Autor: Verena Klass, KTH Royal Institute of Technology	Carbon Nanotubes for High Performance Li-Ion Batteries Autor: Dr. Werner Hoheisel, Bayer Technology Services GmbH	Starter batteries – is it time for a new generation? Autor: Michael Schiemann, Continental AG
	Dual estimation for lithium-ion batteries using adaptive parameter identification and sequential Monte Carlo filter Autor: Jiahao Li, Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg	Li ₂ FeSiO ₄ : Challenging combination of a new cathode material with conventional electrolytes Autor: Christian Dippel, Universität Münster / MEET	Battery Aging and Battery Value for 2nd Life Applications for Traction Batteries Autor: Hermann Pyschny, P3 automotive GmbH
	Adaptive Online battery parameters/SOC/Capacity estimation Autor: Habiballah Rahimi-Eichi, North Carolina State University	The Next Step in Cathode Materials Development for use in Automotive and Electric Power Grid Applications Autor: Dr.-Ing. Paul Spurk, Umicore AG & Co KG	Lithium-Ion Battery Systems in Heavy Duty Applications – Combining Maximum Power with High Energy Density Autor: Dr.-Ing. Björn Eberle, Akasol GmbH
	Validation and Simulation of Cell-Balancing Algorithms - Can Lifetime and Capacity of aged battery packs be extended? Autor: Adrian Heuer, Fraunhofer ISE	Microstructural change of Li(NiCo)O ₂ based materials of Li Ion Battery during charge and discharge Autor: Yoshio Ukyo, TOYOTA Central R&D Laboratories Inc.	System Design of Fuel Cell Hybrid Buses Autor: Philipp Sinhuber, ISEA der RWTH Aachen
		High-Power Lithium-Ion Batteries with enhanced Capacity Retention Autor: Prof. Dr. Rüdiger-A. Eichel, Forschungszentrum Jülich	
		Patents - Opportunities & Risks Autor: Dr. Rainer Sterthaus, KUHNEN & WACKER, Patent- und Rechtsanwaltsbüro	

 Pause mit Postersession und Ausstellung

14:45 Pause mit Postersession und Ausstellung

 Parallelsitzung 4

15:15	Raum: Brüssel-Saal Parallelsitzung 4A: Battery systems and components Leitung: Horst Mettlach	Raum: Europa-Saal Parallelsitzung 4B: Materials – Electrolytes and safety	Raum: Konferenzraum K1 Parallelsitzung 4C: Stationary batteries and grid applications Leitung: Prof. Dr. Armin Schnettler
	Design of Batteries for Series-Production Vehicles Autor: Dipl.-Ing. (FH) Christian Brommer, Deutsche ACCUotive GmbH & Co KG	Novel Gel-Polymer Electrolytes and Lithium Salts Autor: Dipl.-Chem. Martin Hiller, Institut für Anorganische und Analytische Chemie, Westfälische Wilhelms-Universität Münster	Development of operational strategies for a hybrid storage system in the Smart Region Pellworm Autor: Simon Koopmann, Institute for High Voltage Technology, RWTH Aachen University
	Magnetotomography, a diagnostic tool for one-layer batteries Autor: PD Dr. Hans Lustfeld, FZ-Jülich und Uni Duisburg-Essen	Hybrid polymer electrolytes for lithium ion batteries Autor: Dr. Christine Brinkmann, Fraunhofer Institut für Silicate Research ISC	Electrochemical Storage Systems for stationary applications in lead-acid and Lithium-Ion technology, comparison and potentials and synergies by hybridization Autor: Dr. Bernhard Riegel, HOPPECKE Batterien GmbH & Co. KG

Sensorless battery cell temperature measurement
Autor: Dr. Joop van Lammeren, NXP Semiconductors

Development of advanced gel polymer electrolytes with novel polymer host systems
Autor: Dr. Alexandra Lex-Balducci, University of Münster, MEET Battery Research Centre, Institute of Physical Chemistry

Interaction of storage systems and power grid - How much grid is needed for storage systems and what is the added value of storage systems for the grid?
Autor: Dipl.-Ing. Christoph Aldejohann, Institut für Energiesysteme, Energieeffizienz und Energiewirtschaft TU Dortmund

Flexible Printed Circuits for Li-Ion Battery Interconnection Devices
Autor: Dr. Wulf Bramesfeld, Freudenberg NOK Mechatronics GmbH & Co. KG

Thermal and Electrical Inhomogeneities in Lithium Ion Batteries under Extreme Conditions
Autor: Heiko Witzhausen, Institut für Stromrichtertechnik und Elektrische Antriebe, RWTH Aachen

Grid quality as a critical aspect for the charging process of electric vehicles
Autor: Dr.-Ing. Christian Hille, P3 energy and storage

Influence of anode/cathode balancing on cycling stability of lithium ion cells
Autor: Dipl. Chem.- Marcel Wilka, Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg

Applications and Operational Scenarios for BESS in industrial Micro Grids
Autor: Dr. Stefan Kempen, AEG Power Solutions

Electrochemical-calorimetric studies on safety fundamentals of 40 Ah NMC lithium ion pouch cells
Autor: Dr. Carlos Ziebert, Karlsruher Institut für Technologie (KIT), Institut für Angewandte Materialien-Angewandte Werkstoffphysik (IAM-AWP)

Initial Reactions During Thermal Runaway of Lithium-Ion Batteries
Autor: Dr Meike Fleischhammer, Zentrum für Sonnenenergie- und Wasserstoff-Forschung

Ende der Tagung

17:00 Ende der Konferenz

Institutsbesichtigung

18:00 Besichtigung ISEA
nur nach vorheriger Anmeldung im Tagungsbüro

Posterausstellung

PA Materials – Electrode Materials

PA01 Carbon coated iron oxide as high performance anode in lithium-ion batteries
Autor: Diplom Chemiker Adrian Brandt, Universität Münster - MEET

PA02 Nanocarbons as electrode material
Autor: Urszula Kosidlo, Fraunhofer IPA

PA03 Mesoporous NiMoO₄ thin films with nanocrystalline walls for lithium-ion battery applications
Autor: Jan Haetge, Batterieforschungszentrum MEET, Westfälische Wilhelms-Universität Münster

PA04 Size dependency study of Si microwire anodes by cyclic voltammetry
Autor: M. Sc. Sandra Nöhren, University of Kiel

PA05 Electrochemical Behavior and Properties of Polyanilines in LiFePO₄ Composite Cathodes for Li-Ion Batteries
Autor: Dr. Lidiya Komsijska, NEXT ENERGY - EWE-Forschungszentrum für Energietechnologie e. V.

PA06 Mesoporous Carbon Materials for Application in Batteries
Autor: Anika Juhl, Universität Hamburg, Institut für Anorganische und Angewandte Chemie

PA07 Amorphous Si thin film anodes and its performance in lithium ion batteries
Autor: Dipl. Wirt. - Chem. Schmülling Guido, Batterieforschungszentrum MEET Universität Münster

PA08 Chemical surface modification and characterization of carbons for an optimized artificial solid electrolyte interface formation
Autor: Dr. Hans-Gerhard Bredas, MEET Batterieforschungszentrum

PB Materials – Electrolytes and passive materials

PB01 New ceramic separators for Li-ion batteries
Autor: Dr Jan Holtmann, MEET/ Uni Münster

PB02 Influence of the solvation of the conducting salt on the lithium mobility in gel polymer electrolytes
Autor: Philipp Isken, MEET

PB03 The influence of the electrochemical and thermal stability of mixtures of ionic liquid and organic carbonate on the performance of high power lithium-ion batteries
Autor: Sebastian Menne, WWU Münster-Institut für Physikalische Chemie-MEET

PB04 Beneficial influence of succinic anhydride as electrolyte additive on the self-discharge of 5 V LiNi_{0.4}Mn_{1.6}O₄ cathodes
Autor: Dipl.-Chem. Julian Kalhoff, MEET Batterie Research Centre Muenster

PB05 Block copolymers – towards gel polymer electrolytes for LIB application
Autor: Christoph Ulbricht, University of Münster

PB07 Full Cell Tests of a New Type of Nonwoven Separator
Autor: Dr. Reinhard Mörtel, Fraunhofer Institut für Siliziumtechnologie (ISIT)

PB08 Effect of Conducting Salts in Ionic Liquid based Electrolytes for Li-Ion-Batteries
Autor: Dr. Andreas Hofmann, Karlsruher Institut für Technologie

PB09 Nanostructured Silica as Filler in Electrolytes for Lithium Ion Batteries
Autor: Jan Willem Vogel, Universität Hamburg; Fachbereich Chemie; IAACH; AK Prof. Dr. Fröba

PB10 Novel gel polymer electrolytes based on amphiphilic block-copolymers for lithium ion batteries
Autor: Dipl. Chem Moritz Schaefer, WWU Münster, Meet

PB11 Balancing of graphite / LFP full cells with focus on the graphite anode characteristics
Autor: Paul Meister, MEET Batterieforschungszentrum Münster

PB12 Investigation of the stability of bis(trifluoromethanesulfonyl) imide-based electrolytes for dual-ion cells by ion chromatography
Autor: Dipl.-Chem. Olga Fromm, MEET Batterieforschungszentrum

PB13 Electrochemical intercalation of bis(trifluoromethanesulfonyl)imide anions into various types of graphitic carbon as cathode for dual-ion cells
Autor: Dipl.-Chem. Tobias Placke, MEET Batterieforschungszentrum

PB14 Nanofiber/Microfiber Lithium Ion Battery Separators
Autor: Brian Morin, Dreamweaver International

PC Materials – Advancements of power an energy density

PC01 Determination of change of capacity for Lithium-Ion- Batteries at different pressures
Autor: Dipl.-Wirt.-Ing. Jens Münnix, Institut für Stromrichtertechnik und Elektrische Antriebe

PC02 Lithium-Ion-Battery from AEE
Autor: Sales Director - German Market Di Wu, Advanced Electronics Energy

PD Cell concepts and performance

PD01 Relation between electrolyte/separator combinations and the internal resistance of lithium ion cells
Autor: Ulrike Langklotz, TU Dresden

PE Calendar life & cycle life

PE01 Investigations of lithium dendrite growth
Autor: Stephan L. Koch, MEET Battery Research Centre, Institute of Physical Chemistry, University of Münster

PE02 Spatially resolved electrode-capacity distribution in an aged NMC-based lithium-ion battery
Autor: Dipl.-Wirt.-Ing. Jens Münnix, Institut für Stromrichtertechnik und Elektrische Antriebe

PE03 The Interplay of Anode and Cathode in Lithium-Ion Battery Full Cells
Autor: Steffen Krüger, Meet

PE05 Degradation-Model for Li-Ion Batteries: Correlation of Capacity Fade and Impedance Rise
Autor: Timm Bergholz, Forschungszentrum Jülich GmbH

PE06 Characterization of Tensile Stress Effect on Electrodes for Lithium-Ion Batteries
Autor: Dipl.-Wirtsch.-Ing. Jan Schmitt, TU Braunschweig, Institut für Werkzeugmaschinen und Fertigungstechnik

PE07 Post Mortem Analysis of Commercial Lithium Ion Batteries at the End of Life
Autor: M.Sc Diana Marcela Leiva Pinzón, Fraunhofer IKTS Dresden

PE08 On the influence of mechanical compressive preloading on the cycle stability of lithium-ion pouch cells
Autor: Prof. Dr.-Ing. Knoblauch Volker, Hochschule Aalen

PE09 Methodology for Lithium-Ion Cylindric Cells Post-Mortem-Analysis
Autor: ELIXABET SARASKETA ZABALA, IK4-IKERLAN

PE10 Experimental Investigation of Lithium-Plating in Lithium-Ion Batteries
Autor: Madeleine Ecker, RWTH Aachen - ISEA

PE11 Lifetime prediction model based on accelerated ageing tests
Autor: Johannes Schmalstieg, Institute for Power Electronics and Electrical Drives (ISEA), RWTH Aachen

PE12 Improved cycling behaviour on silicon/carbon-based anode materials by chemical surface modification
Autor: Dipl.-Ing. Vassilios Siozios, MEET Batterieforschungszentrum

PF Improved safety on material and cell level

PF01 Towards understanding thermal runaway of lithium batteries
Autor: Prof. Dr. Wolfgang Bessler, Offenburg University of Applied Sciences

PF02 E-car battery - coordination of intrinsic safety with passive and active protection
Autor: Dipl.-Phys. Detlef Hoffmann, SGS Germany GmbH

PF03 Safety of Lithium Ion Batteries in Vehicles – State of the Art, Risks and a method for a safety assessment
Autor: Senior Consultant Lars Hollmotz, CPC Momentum

PF04 Difference in Performance and Safety between the different Li-Ion Technologies
Autor: Dr. Jochen Mähliß, Battery University

PG Battery modelling (electrical, thermal, ageing, lifetime prediction) and fundamentals

PG01 Determination of Thermodynamic Data for Advanced Lithium-Ion Battery Materials by Coulometric Titration
Autor: Marco Prill, Forschungszentrum Jülich GmbH

PG02 Aging mechanisms in Lithium-Ion-Batteries: A comparative study on 18650-cells with LiMnO₂/Li(MnxNiyCoz)O₂ blend cathodes
Autor: Benedikt Kugler, Hochschule Aalen -Technik und Wirtschaft ; Institut für Materialforschung Aalen

PG03 Temperature dependence of material properties of Li-ion cells – What should be considered?
Autor: André Loges, Karlsruher Institut für Technologie, Institut für thermische Verfahrenstechnik

PG04 Distribution of Relaxation Times for Lithium Ion Batteries
Autor: Friedrich Hust, Institut für Stromrichtertechnik und Elektrische Antriebe, RWTH Aachen

PG05 Understanding microscopic processes in ionic liquids via MD-simulations
Autor: Volker Lesch,

PG06 Ah-Throughput versus Residual Capacity method for prediction of capacity loss of Li-Ion Batteries at alternating temperatures
Autor: Matthias Lepiorz, Siemens AG / TU München

PG07 Detailed 3D thermal-electric model of Li-Ion Cells
Autor: Dr.-Ing. Wieland Beckert, Fraunhofer IKTS

PG08 Thermodynamic data for new anode materials measured by Knudsen Effusion Mass Spectrometry
Autor: David Henriques, Forschungszentrum Jülich

PG09 Possibilities and limitations of computational approaches for speeding up innovation in the field of advanced battery electrolyte solvents and additives
Autor: Jun.-Prof. Dr. Martin Korth, Universität Ulm

PG10 Thermal Diffusivity of Cylindrical Battery Cells
Autor: Arno Arzberger, RWTH Aachen -ISEA-

PG11 Simulation of Lithium-Ion Batteries and its application to the testing of EVs and hybrid cars
Autor: Prof. Dr. Volker Schulz, Duale Hochschule Baden-Württemberg Mannheim

PG12 Determination of the Thermal Impedance by Different Methods
Autor: Jan Philipp Schmidt, Institut für Werkstoffe der Elektrotechnik /KIT

PG13 Understanding the Impedance Spectrum of 18650 LiFePO₄-Cells
Autor: Jörg Illig, Institut für Werkstoffe der Elektrotechnik (IWE), Karlsruher Institut für Technologie (KIT)

PG14 Relevant Issues of Impedance Modeling for High Power Li-Ion Batteries
Autor: Mr. Gustavo Pérez Rodríguez, IK4-IKERLAN

PG15 Mathematical Homogenization of an Electrochemical Li-Ion-Battery Model and the Numerical Solution via a Heterogeneous Multiscale Method Approach
Autor: Magister Franz Pichler, Kompetenzzentrum Das virtuelle Fahrzeug Forschungsgesellschaft mbH. (VfF)

PG17 Parameterization of an Impedance-Based Lead-Acid Battery Model Extended by Time-Domain Submodels
Autor: Dr.-Ing. Julia Kowal, RWTH Aachen ISEA

PG19 On the Practise of Using the Kramers-Kronig-Transformation to Validate the Linearity Condition of Electrochemical Systems
Autor: Dipl.-Ing. Boris Dotz,

PG20 On Systemtheoretical Characterization of Electrochemical Systems for Analyzing Impedance Data
Autor: Dr. rer. nat. Jonny Dambrowski,

PG21 Electrothermal modeling of lithium-ion pouch-cells
Autor: Daniel Werner, Karlsruher Institut für Technologie

PG22 Experimental & theoretical thermal characterization of a Lithium-ion battery
Autor: Gorka Vertiz, CIDETEC-IK4

PG23 Influence of electrochemical impedance spectroscopy on state of charge and state of health of lithium-ion cells
Autor: Alexander Bauder, Deutsches Zentrum für Luft- und Raumfahrt

PH Battery management and diagnostics

PH01 Fractional Identification of the State of Charge of a Li-Ion Battery Cell
Autor: Marius Eckert, Karlsruher Institut für Technologie (KIT), Institut für Regelungs- und Steuerungssysteme (IRS)

PH03 SoC and capacity estimation of LiNiCoMn cells Combining AEKF and capacity observability on the SoC
Autor: Mr Oyarbide Mikel, IK4-CIDETEC

PH04 Magnetography: A novel Characterization Tool for Li-Ion-Batteries
Autor: Timm Bergholz, Forschungszentrum Jülich GmbH

PH06 Model based determination of the lead-acid battery dynamic response using Butler-Volmer equation
Autor: Grzegorz Pilatowicz, ISEA, RWTH Aachen

PI Battery systems and components

PI01 Safe integration of electromechanics in batteries
Autor: Dietmar Niederl, AVL List GmbH

PI02 Battery Packaging Optimization Algorithm
Autor: Jens Bockstette, RWTH Aachen / VKA

PI03 Vehicle Batteries with Wireless Cell Monitoring
Autor: Dipl.-Ing. Matthias Schneider, HAW Hamburg

PI04 Long term field trial of Lithium-titanate based storage system
Autor: Michael Schreieder, Younicos AG

PJ Capacitors and next generation batteries

PJ01 Design approaches for future Li/air battery packs in the automotive field
Autor: Thomas Traubnig, AVL List GmbH

PJ02 Effect of imide anions on ternary polymer electrolytes for lithium-metal batteries
Autor: Henrik de Vries, WWU Münster - MEET

PJ03 Dry processing of self-supporting sulfur cathodes
Autor: Sören Thieme, Fraunhofer IWS

PJ04 Electrochemical Performance of Layered Na_{0.41}Ni_{0.2}Co_{0.1}Mn_{0.6}O_{2-δ} Cathode Material in Lithium- and Sodium-Ion Batteries
Autor: Dipl.Chem. Daniel Buchholz, MEET Batterieforschungszentrum/Institut für Physikalische Chemie

PJ05 Thin film all solid state Li-ion batteries
Autor: Dr. rer. nat. Martin Finsterbusch, Forschungszentrum Jülich

PJ06 Dual-graphite cells as alternative energy storage devices
Autor: MSc. Sergej Rothermel, MEET Battery Research Centre

PJ07 New promising class of electrochemical generators
Autor: David Judbarovski,

PJ09 Electrodes for customised energy storage
Autor: Dr. Uwe Guntow, Fraunhofer Institut für Silicatiforschung

PJ10 High performance Lithium-Ion Capacitor containing Soft Carbon and safe Electrolytes
Autor: Matthias Schroeder, WWU Münster - Institut für Physikalische Chemie - MEET

PJ11 Investigation of the Relationship between Model Parameterization of Supercapacitors by Using Self-discharge and Impedance Measurements
Autor: Julia Drillkens, RWTH Aachen

PJ12 Promising bifunctional catalysts for aqueous Lithium-Air Batteries: Influence of catalysts composition, molarity and temperature on the activity
Autor: Dennis Wittmaier, Deutsches Zentrum für Luft- und Raumfahrt

PK Production of battery cells and systems and recycling

PK02 Technology, machinery and devices for pouch cell manufacturing at laboratory and prototype series scale
Autor: Dr.-Ing. Gunter Hagen, KMS Technology Center GmbH

PK03 Comparison of mixing technologies for the preparation of slurries for coating of electrodes in lithium-ion cells
2 Technology, machinery and devices for pouch cell manufacturing at laboratory and prototype series scale
Autor: Börner Stefan, Fraunhofer Institut of Ceramic Technologies and Systems (IKTS)

PK04 Effect of Surface Alignment in Electrode Stacks on the Performance of Lithium-Ion Batteries
Autor: Dipl.-Wirtsch.-Ing. Jan Schmitt, TU Braunschweig, Institut für Werkzeugmaschinen und Fertigungstechnik

PK05 Process chains in the battery production
Autor: Dipl.-Ing. Dipl.-Wirt. Ing. Heiner Heimes, Werkzeugmaschinenlabor WZL der RWTH Aachen

PK06 Process development and evaluation for the scale-up towards mass Li-ion battery production
Autor: Dr. Mareike Wolter, Fraunhofer-Institut für Keramische Technologien und Systeme

PK08 Modularity of Battery Systems for Electric Vehicles from the Perspective of DFMA
Autor: Dipl.-Ing. Alexander Tornow, Institut of Machine Tools and Production Technology

PK09 High quality Li-ion battery production – challenges in joining and welding
Autor: Dr. Michael Roscher, ThyssenKrupp System Engineering GmbH

PK10 Ecology meets economy: Processing of aqueous cathode pastes for lithium nickel manganese cobalt oxide (NMC) batteries
Autor: Dipl.-Ing. Fatih A. Çetinel, Karlsruhe Institute of Technology (KIT)

PK11 Water based slurry development and processing for LiFePO₄ cathodes
Autor: Dr.-Ing. Marco Fritsch, Fraunhofer Institut für Keramische Technologien und Systeme (IKTS)

PK12 Analysis of Joining Technologies for the Electrical Contact between Lithium-Ion Cells in Automotive Battery Systems
Autor: Dipl.-Ing. Philipp Schmidt, Institut für Werkzeugmaschinen und Betriebswissenschaften (iwb) Technische Universität München

PK13 Thin film electrodes via sol gel method
Autor: Manuel Röder, Fraunhofer-Institut für Silicatiforschung ISC

PK14 Sealing Components for Battery Systems / Serial Products & Developments Approaches
Autor: Dr. Peter Kritzer, Freudenberg Sealing Technologies GmbH & Co KG

PL Stationary batteries and applications

PL01 Test Center for Interoperable Electromobility
Autor: Kai Asmacher, TU-Dortmund / Test Center for Interoperable Electromobility - Power Electronics and Grid Emulation Platform

PL02 Identifying the self-consumption potential in households with PV-Systems, electric vehicles and storage devices
Autor: DI (FH) Stefan Übermayer, Austrian institute of Technology - AT

PL03 Development of a technology roadmap for energy storage in stationary applications based on patent analyses
Autor: Chie hoon Song, Institut für betriebswirtschaftliches Management im Fachbereich Chemie und Pharmazie an der Westfälischen Wilhelms-Universität Münster

PL05 Requirements for battery systems providing primary and secondary control
Autor: Johannes Fleer, Forschungszentrum Jülich, IEK-STE

PL06 Advanced Grid Model of a Battery Energy Storage System (BESS)
Autor: Ammar Salman, AEG Power Solutions

PL07 Strompuffer im Bilanzkreis
Autor: Dieter Beckers, DACHS.Strom-Outlet.de

PL08 Der Solar-Haushalt – PV-Stromspeicher im Gleichstrom-Wohngebäude
Autor: Dipl.-Ing. Dietmar Spiegel,

PM Integration of batteries for automotive and non-automotive applications

PM02 Complete Vehicle Simulation of a Battery-Electric Vehicle
Autor: Dipl.-Ing. Sina Krug, Zentrum für Sonnenenergie- und Wasserstoff- Forschung

PM03 AVL Battery Pack for a BEV – Layout, Design and Thermal Conditioning
Autor: Stütz Harald, AVL List GmbH

PM04 Use of the high performance Lithium iron phosphate battery in the fuel cell range extender vehicle concept
Autor: Dipl.-Ing. Dave Dickinson, Deutsches Zentrum für Luft- und Raumfahrt e. V.

PM05 Characterisation of automotive Li-ion cells in relation to their material properties based on the test standards
Autor: Expert Smart Grids & Electric Energy Storage Grietus Mulder, VITO Unit Energy Technology

PM06 State of the Art and Trends in Vehicle Concept Development with Focus on Battery Technology
Autor: Benjamin Frieske, Deutsches Zentrum für Luft- und Raumfahrt e.V.

PN 12V batteries for advanced micro hybrid vehicles

PN01 On the use of Raman spectroscopy for the analysis of batteries
Autor: Dr. Alexander Börger, Volkswagen AG

PN02 Single Electrode Polarisation During Dynamic Charging of Lead-Acid Batteries
Autor: Heide Budde-Meiwes, ISEA - RWTH Aachen University

PN03 Preparation Method of Lead-Acid Battery Electrodes for Laser Scanning Microscope
Autor: Christiane Rahe, ISEA - RWTH Aachen University

PN04 LiBERT^e – Freedom on two wheels
Autor: Dr. Markus Einhorn, Bertrandt

PN05 Railway vehicles and energy storages – A contradiction?
Autor: Stefan Kaimer, Deutsches Zentrum für Luft- und Raumfahrt e.V. - Institut für Fahrzeugkonzepte