Agenda, Day 1, 26th February 2013

Zeit / time			
	Opening of the conference		
10:00 am	Prof. Dr. Martin Winter		
	Greetings		
10:05 am	Liane Horst, Head of Department 511 New Materials and Nanotechnology, Federal Ministry of Education and Research Greetings		
	Plenary Talks		
10:35 am	Prof. Dr. Dirk Uwe Sauer Introduction		
10:40 am	Hao Li, HCA Consulting China Development of E-mobility in China		
11:05 am	Erhard Schletterer, Li-Tec Battery GmbH Li-Ionenbatterien für EVs aus Deutschland, wo stehen wir?		
11:30 am	Dr. Hartmut Pröbstle, BMW Group Energy Storage Systems in Future Automotive Power Supplies		
11:55 am	Dr. Klaus Peter Röttgen, E.ON SE Energy supply: Batteries in competition		
	Lunch Break with poster session and exhibition		
12:20 pm	Lunch Break		
1:20 pm	Poster session and exhibition		
	Parallel Session 1		
2:45 pm	**Room: Brüssel-Saal** **Parallel session 1A: Battery technologies for micro-hybrid vehicles** **Session Chair: Moritz Schindler**	**Room: Europa-Saal** **Parallel session 1B: Capacitors and next generation batteries** **Session Chair: Dr. Margret Wohlfahrt-Mehrens**	**Room: Konferenzraum K1** **Parallel session 1C: Production of battery cells** **Session Chair: Dr. Martin Lang**
	Experience with system integration of batteries in micro-hybrid vehicles Author: Eberhard Meissner, Johnson Controls Autobatterie GmbH & Co. KGaA, EMEA	New electrolytes components for high voltage electrochemical double layer Author: Dr. Andrea Balducci, University of Münster-MEET	Research Production Line for Large Size Li-Ion-Cells Author: Prof. Dr. Werner Tillmetz, Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg (ZSW)
	Statistical Validation of a DCA Test Author: Eckhard Karden, Ford Forschungszentrum Aachen GmbH	Enhanced cycle stability in Lithium-Sulfur batteries through innovative cathode and anode composite materials Author: Dr. Holger Althues, Fraunhofer IWS	Cost reduction in the battery production Author: Prof. Dr.-Ing. Achim Kampker, Werkzeugmaschinenlabor WZL der RWTH Aachen
	From Advanced Lead-Acid Batteries to Lithium-Ion Batteries Author: Program Manager Li-Ion Batteries Christina Antonius, Johnson Controls Advanced Power Solutions GmbH	Development of Solid-State Lithium Ion Batteries Author: Senior Scientist Christopher Lee, Ilika PLC	Challenges in Design and Manufacturing of Lithium-ion Battery Cells for Battery Electrical Vehicles Author: Dr. Markus Pompetzki, Konrad Holl, VOLKSWAGEN VARTA Microbattery Forschungsgesellschaft mbH & Co. KG Verwaltungsgesellschaft mbH
	In Search of the Optimal Battery Chemistry for the Micro-hybrid Vehicle Market Author: Salil Soman, PowerGenix	Anion intercalation into graphitic carbon from ionic liquid based electrolytes for high performance dual-ion batteries Author: Hinrich-Wilhelm Meyer, Westfälische Wilhelms-Universität, MEET Batterieforschungszentrum, Institut für Physikalische Chemie	Upscaling New Battery Technologies from Laboratory to Fabrication Author: Thomas Kolbusch, Coatema Coating Machinery GmbH
	Break with poster session and exhibition		
4:15 pm	Break with poster session and exhibition		
	Parallel Session 2		
4:45 pm	**Room: Brüssel-Saal** **Parallel session 2A: Lead/acid technology progress for innovative 14 V automotive systems** **Session Chair: Dr. Peter Pilgram**	**Room: Europa-Saal** **Parallel session 2B: Production of batteries and recycling** **Session Chair: Dr. Arnold Lamm**	**Room: Konferenzraum K1** **Parallel session 2C: Battery modelling** **Session Chair: Dr. Peter Birke**
	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. Author: Luca Brisotto, EXIDE Technologies	Safe and affordable series batteries: The second generation Author: Dr. Volker Hennige, AVL List GmbH	Lithium-ion battery performance predictions with multiscale physicochemistry-based simulations Author: Markus Lindner, Adam Opel AG
	Cycle Life Study of Lead-Acid Batteries for Automotive Applications under Different Operating Conditions Author: Dipl.-Wirt.-Ing. Julia Badeda, ISEA	Corrosion-resistant, electrical conductive adhesives for fuel cell and battery purposes Author: Dipl.-Ing. Mario Wagner, Institut für Füge- und Schweißtechnik, TU Braunschweig	3D Thermal characterization and modelling of large scale lithium-ion cells on cell and battery level Author: Christian Veth, Deutsche ACCUmotive GmbH & Co. KG
	Precondition for appearance of lug thinning - an approach Author: Dr. Eva Zena, ABR - Austrian Battery Research Laboratory GmbH	Statistical Design of Experiments for a time optimized formation procedure Author: Dr. Christian Bretthauer, Fraunhofer-IKTS	A comprehensive electrothermal FEM-model of prismatic Li-ion cells Author: André Loges, Karlsruher Institut für Technologie, Institut für thermische Verfahrenstechnik
	Impact of Microscopic Electrode Structure on Dynamic Charge Acceptance for Lead-Acid Batteries Author: Heide Budde-Meiwes, ISEA - RWTH Aachen University	Processing and Structuring of Battery Electrodes Author: Prof. Dr.-Ing. Arno Kwade, TU Braunschweig, Institut für Partikeltechnik und Battery LabFactory Braunschweig	In situ impedance spectroscopy on high capacity Si microwire anodes for Li-ion batteries Author: Dr. Enrique Quiroga-González, University of Kiel

End of first day

6:15 pm End of first day

Evening Reception

7:30 pm Evening reception in Aachen town hall

Agenda, Day 2, 27th February 2013

Zeit / time

Plenary talks

8:30 am 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

8:55 am Dr. Rudolf Krebs, Volkswagen AG & Co. KG
(solicited))

9:20 am Kay Bohlmann, Jungheinrich Norderstedt AG & Co. KG
Application of Lithium-Ion Batteries in industrial trucks

9:45 am Prof. Dr. Bernd Friedrich, IME Metallurgische Prozesstechnik und Metallrecycling RWTH Aachen
Ecobattrec - Optimierung der Recyclingeffizienz von Lithiumbatterien durch flexibles Prozessdesign

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

Break with poster session and exhibition

10:35 am Break with poster session and exhibition

Lunch Break

12:00 pm Lunch Break

Parallel Session 3

1:00 pm

Room: Brüssel-Saal
Parallel session 3A: Battery management and diagnostics
Session Chair: Prof. Dr. Andreas Jossen

Surface strain measurement of Lithium-Ion pouch cells for safety and state monitoring
Author: Nora Martiny, TUM CREATE

Performance estimation method for lithium-ion battery packs in electric vehicles
Author: Verena Klass, KTH Royal Institute of Technology

Dual estimation for lithium-ion batteries using adaptive parameter identification and sequential Monte Carlo filter
Author: Jiahao Li, Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg

Validation and Simulation of Cell-Balancing Algorithms - Can Lifetime and Capacity of aged battery packs be extended?
Author: Adrian Heuer, Fraunhofer ISE

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

Room: Europa-Saal
Parallelsession 3B: Materials – Electrode materials
Session Chair: Prof. Dr. Jürgen Janek

Alloy Materials for Anodes
Author: Dr Egbert Figgemeier, 3M Deutschland GmbH

Carbon Nanotubes for High Performance Li-Ion Batteries
Author: Dr. Werner Hoheisel, Bayer Technology Services GmbH

Li2FeSiO4: Challenging combination of a new cathode material with conventional electrolytes
Author: Christian Dippel, Universität Münster / MEET

The Next Step in Cathode Materials Development for use in Automotive and Electric Power Grid Applications
Author: Dr.-Ing. Paul Spurk, Umicore AG & Co KG

Microstructural change of Li(NiCo)O2 based materials of Li Ion Battery during charge and discharge
Author: Yoshio Ukyo, TOYOTA Central R&D Laboratories Inc.

High-Power Lithium-Ion Batteries with enhanced Capacity Retention
Author: Prof. Dr. Rüdiger-A. Eichel, Forschungszentrum Jülich

Patents - Opportunities & Risks
Author: Dr. Rainer Sterthaus, KUHNEN & WACKER, Patent- und Rechtsanwaltsbüro

Room: Konferenzraum K1
Parallel session 3C: Integration of batteries for automotive and non-automotive applications
Session Chair: Dr. Matthias Ullrich

Market Drivers and Value Chain Analysis for Automotive and Stationary Batteries
Author: Dr. Franz J. Kruger, Roland Berger Strategy Consultants GmbH

Starter batteries – is it time for a new generation?
Author: Michael Schiemann, Continental AG

Battery Aging and Battery Value for 2nd Life Applications for Traction Batteries
Author: Benjamin Hörpel, P3 energy

Lithium-Ion Battery Systems in Heavy Duty Applications – Combining Maximum Power with High Energy Density
Author: Dr.-Ing. Björn Eberleh, Akasol GmbH

System Design of Fuel Cell Hybrid Buses
Author: Philipp Sinhuber, ISEA der RWTH Aachen

Break with poster session and exhibition

2:45 pm Break with poster session and exhibition

Parallel Session 4

3:15 pm

Room: Brüssel-Saal
Parallel session 4A: Battery systems and components
Session Chair: Horst Mettlach

Design of Batteries for Series-Production Vehicles
Author: Dr. Hartung Wilstermann, Deutsche ACCUmotive Gmbh & Co KG

Magnetotomography, a diagnostic tool for one-layer batteries
Author: PD Dr. Hans Lustfeld, FZ-Jülich und Uni Duisburg-Essen

Room: Europa-Saal
Parallel session 4B: Materials – Electrolytes and safety
Session Chair: Dr. Gerhard Hörpel

Novel Gel-Polymer Electrolytes and Lithium Salts
Author: Dipl.-Chem. Martin Hiller, Institut für Anorganische und Analytische Chemie, Westfälische Wilhelms-Universität Münster

Hybrid polymer electrolytes for lithium ion batteries
Author: Dr. Christine Brinkmann, Fraunhofer Institut for Silicate Research ISC

Room: Konferenzraum K1
Parallel session 4C: Stationary batteries and grid applications
Session Chair: Dr.-Ing. Christian Hille

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

Development of operational strategies for a hybrid storage system in the Smart Region Pellworm
Author: Simon Koopmann, Institute for High Voltage Technology, RWTH Aachen University

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

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

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

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

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

Electrochemical-calorimetric studies on safety fundamentals of 40 Ah NMC lithium ion pouch cells
Author: 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
Author: Dr Meike Fleischhammer, Zentrum für Sonnenenergie- und Wasserstoff-Forschung

Electrochemical Storage Systems for stationary applications in lead-acid and Lithium-Ion technology, comparison and potentials and synergies by hybridization
Author: Dr. Bernhard Riegel, HOPPECKE Batterien GmbH & Co. KG

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?
Author: Dipl.-Ing. Christoph Aldejohann, Institut für Energiesysteme, Energieeffizienz und Energiewirtschaft TU Dortmund

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

End of conference

5:00 pm End of conference

Visit of ISEA

6:00 pm Visit of ISEA
participants have to register at the conference office

Poster Session

PA Materials – Electrode Materials

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

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

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

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

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

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

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

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

PB Materials – Electrolytes and passive materials

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

PB02 Influence of the solvation of the conducting salt on the lithium mobility in gel polymer electrolytes
Author: 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
Author: 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 LiNi0.4Mn1.6O4 cathodes
Author: Dipl.-Chem. Julian Kalhoff, MEET Batterie Research Centre Muenster

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

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

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

PB09 Nanostructured Silica as Filler in Electrolytes for Lithium Ion Batteries
Author: 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
Author: Dipl. Chem Moritz Schaefer, WWU Münster, Meet

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

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

PB14 Nanofiber/Microfiber Lithium Ion Battery Separators
Author: 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
Author: Dipl.-Wirt.-Ing. Jens Münnix, Institut für Stromrichtertechnik und Elektrische Antriebe

PC02 Lithium-Ion-Battery from AEE
Author: 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
Author: Ulrike Langklotz, TU Dresden

PE Calendar life & cicle life

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

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

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

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

PE06 Characterization of Tensile Stress Effect on Electrodes for Lithium-Ion Batteries
Author: 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
Author: 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
Author: Prof. Dr.-Ing. Knoblauch Volker, Hochschule Aalen

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

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

PE11 Lifetime prediction model based on accelerated ageing tests
Author: 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
Author: Dipl.-Ing. Vassilios Siozios, MEET Batterieforschungszentrum

PF Improved safety on material and cell level

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

PF02 E-car battery - coordination of intrinsic safety with passive and active protection
Author: 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
Author: Senior Consultant Lars Hollmotz, CPC Momentum

PF04 Difference in Performance and Safety between the different Li-Ion Technologies
Author: 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
Author: 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
Author: 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?
Author: André Loges, Karlsruher Institut für Technologie, Institut für thermische Verfahrenstechnik

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

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

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

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

PG08 Thermodynamic data for new anode materials measured by Knudsen Effusion Mass Spectrometry
Author: 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
Author: Jun.-Prof. Dr. Martin Korth, Universität Ulm

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

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

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

PG13 Understanding the Impedance Spectrum of 18650 LiFePO_4-Cells
Author: 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
Author: Mr. Gustavo Pérez Rodríguez, IK4-IKERLAN

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

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

Author: Dipl.-Ing. Boris Dotz,
PG20 On Systemtheoretical Characterization of Electrochemical Systems for Analyzing Impedance Data
Author: Dr. rer. nat. Jonny Dambrowski,

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

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

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

PH Battery management and diagnostics

Fractional Identification of the State of Charge of a Li-Ion Battery Cell
Author: 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 obserbability on the SoC
Author: Mr Oyarbide Mikel, IK4-CIDETEC

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

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

PH07 3D Modeling of Lead-Acid Batteries with emphasis on the Influence of Acid Stratification and Inhomogeneous Current Distribution
Author: Dominik Schulte, P3 energy and storage

PH08 Experimental Investigation of Inhomogeneities during Ageing of Flooded Lead-Acid Batteries
Author: Dominik Schulte, P3 energy and storage

PI Battery systems and components

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

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

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

PI04 Successful integration of a large scale battery into the primary frequency control
Author: Michael Schreieder, Younicos AG

PJ Capacitators and next generation batteries

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

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

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

PJ04 Electrochemical Performance of Layered Na0.41Ni0.2Co0.1Mn0.6O2-δ Cathode Material in Lithium- and Sodium-Ion Batteries
Author: Dipl.Chem. Daniel Buchholz, MEET Batterieforschungszentrum/Institut für Physikalische Chemie

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

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

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

PJ09 Electrodes for customised energy storage
Author: Dr. Victor Trapp, Fraunhofer Institut für Silicatforschung

PJ10 High performance Lithium-Ion Capacitor containing Soft Carbon and safe Electrolytes
Author: 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
Author: Julia Drillkens, RWTH Aachen

PJ12 Promising bifunctional catalysts for aqueous Lithium-Air Batteries: Influence of catalysts composition, molarity and temperature on the activity
Author: 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
Author: 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 cells2 Technology, machinery and devices for pouch cell manufacturing at laboratory and prototype series scale
Author: 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
Author: Dipl.-Wirtsch.-Ing. Jan Schmitt, TU Braunschweig, Institut für Werkzeugmaschinen und Fertigungstechnik

PK05 Process chains in the battery production
Author: Dipl.-Ing. Dipl.-Wirt. Ing. Marc Schmidt, Werkzeugmaschinenlabor WZL der RWTH Aachen

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

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

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

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

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

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

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

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

PL Stationary batteries and applications

PL01 Test Center for Interoperable Electromobility
Author: 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
Author: DI (FH) Stefan Übermasser, Austrian institute of Technology - AIT

PL03 Development of a technology roadmap for energy storage in stationary applications based on patent analyses
Author: 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
Author: Johannes Fleer, Forschungszentrum Jülich, IEK-STE

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

PL07 Efficient Energy Storage Systems
Author: Dr.-Ing. Ronald Neubert, EES Effiziente Energiespeichersysteme GmbH

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

PM Integration of batteries for automotive and non-automotive applications

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

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

PM04 Use of the high performance Lithium iron phosphate battery in the fuel cell range extender vehicle concept
Author: 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
Author: 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
Author: Dipl.-Ing. Matthias Klötzke, 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
Author: Dr. Alexander Börger, Volkswagen AG

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

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

PN04 LiBERT'e – Freedom on two wheels
Author: Dr. Markus Einhorn, Bertrandt

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