

Conference Programme

Event location: Steigenberger Parkhotel Braunschweig, Germany

07.11.12023						
Time						
18:00	Registration					
19:00	Apero					

Day 1 of the conference

<u>U5.11.2U25</u>									D	
Time	Registration								Duration	
08:00	0						Drof Arna Kuunda Dro	f Christanh Harrmann	20.20	
09:00 09:20	Welcome speech Prof. Arno Kwade, Prof. Christoph Herrmann Morning adress by BMFTR Dr. Stefan Jung, Federal Ministry of Research, Technology and Space (BMFTR)								00:20 00:20	
09:20	Morning adress by BMFTR	the				Dr. Stelali Julig, Fe	<u> </u>		00:20	
10:10	Keynote tba Prof. DrIng. Sabrina Zellmer, BLB+ Transit									
10:10	Tradisit Room Maschinenhalle Room Nimês 1+2									
	Topic	Speaker	Institution	Duration	Topic	Speaker	Institution	Duration		
10:25	Dry Coating 1: Advanced Processing Strategies	Chair: tbd	mattation	00:45	Novel Materials	Chair: tbd	institution	00:45	00:45	
10:25	Advances in continuous extrusion-mixing of dry electrode masses – how to tackle the challenges with LFP-based formulations	Benedict Stien	Bühler AG	00:15	Investigations of organic coverage (OC) design on lithium-ion battery and the beyond	Fu Ming Wang	National Taiwan University of Science and Technology	00:15	00.13	
	Process Interactions in Dry Coating: From Mixing Mode to Line Load Requirements	Alexander Diener	TU Braunschweig, iPAT	00:15	Toward Scalable Aqueous Processing of High-Loading LNMO Electrode for High Energy Li ion Batteries	Frode Fagerli	SINTEF AS	00:15		
	DRYtraec® Process: Shear-Based Dry Electrode Manufacturing for LIB and Next-Gen. Battery Technologies	Benjamin Schumm	Fraunhofer IWS	00:15	Multifunctional structural battery composites: Production and characterisation of fiber-reinforced cathodes and separators	Daniel Vogt	TU Braunschweig, iPAT	00:15		
11:10	Discussion				Discussion				00:15	
11:25	Poster session + Coffee break	•					.		00:30	
11:55	European Battery Supply Chain Challenges	Chair: tbd	Institution	00:45	Modelling & Investigation of Battery Safety	Chair: tbd	Institution	00:45	00:45	
	The Tipping Point: Why Europe's Battery Ambitions Are at Risk—and How to Save Them	Joscha Schnell	P3 automotive GmbH	00:15	Explainable Deep Learning Enables Accurate Battery Cycle Life Predictions	Hamidreza Eivazi Kourabbaslou	Clausthal University of Technology	00:15		
	Team Design & Manufacturing - How DfM can improve the current situation of EU cell production?	Luke Hu	Electroder	00:15	Metrology and Safety for Batteries at Physikalisch- Technische Bundesanstalt (PTB)	Fabian Plag	Physikalisch-Technische Bundesanstalt (PTB)	00:15		
	Cathode Materials Pilot-Plant "Powder-Up!! in Operation First Experiences with Scaling	Peter Axmann	Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg (ZSW)	00:15	Unlocking Fast Charging Capability: The Impact of Thermal Management on Battery Performance	Thomas Nyhues	MAHLE & Karlsruhe Institute of Technology (KIT)	00:15		
12:40	Discussion	•		00:15	Discussion			00:15	00:15	
12:55	Lunch break			•		•			01:05	
14:00	Keynote	New Cathode Material Sc	olutions for Lithium Ion and Sodiu	m Ion Batteries –	Challenges for Production or Opportunities for Lowering	g Cost?	DrIı	ng. Hannes Wolf, BASF	00:30	
14:30	Keynote		in Sulfide All-Solid-State Lithium			·		. Misae Otoyama, AIST	00:30	
15:00	Break							,	00:15	
15:15	Manufacturing & Processing of Solid State Electrolytes / Batteries	Chair: tbd	Institution	00:45	Coating and Drying of Battery Electrodes	Chair: tbd	Institution	00:45	00:45	
	Impact of extrusion parameters on polymer and composite electrolyte membranes via melt-processing	Dane Sotta	University Grenoble Alpes & CEA-Liten	00:15	About Humidity Management and Post Drying for different Battery Electrode Materials: Sorption and Kinetics	Philipp Barbig	Karlsruhe Institute of Technology (KIT), TFT	00:15		
	Manufacturing of polymer-based solid state battery electrolytes and electrodes via spray coating	Jonas Morgenstern	Fraunhofer ICT	00:15	Slot die designs – comparison fix lips vs. flex lips / T- Bar	Harald Doell	TSE Troller AG	00:15		
	Impact of Extrusion and Direct Calendering on Dry Coated Cathodes for Sulfidic All-Solid-State Batteries	Michael Wolf	BMW Group	00:15	IR-assisted vacuum drying to remove water from Prussian Blue cathodes in sodium-ion batteries.	Larisa Von Riewel	Excelitas Noblelight	00:15		
16:00	Discussion				Discussion				00:15	
16:15	Poster session + Coffee break					•			00:30	

16:45	Battery Recycling & Repurposing, Material Recovery	Chair: tbd	Institution	00:45	Battery Cell Inspection and Monitoring	Chair: tbd	Institution	00:45	00:45
	Influence of the drying temperature on the recovery of electrolyte components in battery recycling	Jannik Born	TU Braunschweig, iPAT	00:15	Monitoring exposure to airborne particulates along the value chain of Li-ion batteries	Kevin Sparwasser	Stat Peel AG	00:15	
	Challenges of Using Recycled Ethyl Methyl Carbonate in Lithium-Ion Batteries	Valerie Mohni	TU Braunschweig, InES	00:15	Non-Destructive Characterization of Projection Welding for Battery Cell Interconnection with Scanning Acoustic Microscopy and X-Ray Computer Tomography	Felix Thurn	Fraunhofer ISE	00:15	
	Process failure mode - product failure mechanism - effect analysis ((PFM)³EA): A novel risk assessment methodology for automated battery disassembly - Integrating process and product safety in repurposing	Stefan Grollitsch	Vehicle Safety Institute, Graz University of Technology	00:15	From molecule to module – the Lund University ecosystem for battery safety characterization and fire hazard assessment	Elna Heimdal Nilsson	LTH, Lund University	00:15	
17:30	Discussion				Discussion				00:15
17:45	Break						_		00:15
18:00					Industry Session I	Chair: tbd	Institution	00:50	00:50
						tbd	Retsch	00:10	
					Giga-Odenwald 2.0 – a modularized, standardized, and scalable mixing plant on a gigafactory scale	tbd	Eirich	00:10	
		Conversion for dinner			XRF-Based Quality Classification of Lithium-Ion Battery Black Mass	Jana Kalbáčová	HORIBA Jobin Yvon GmbH	00:10	
						tbd	FOM	00:10	
					Trajectory Mixing for Wet and Dry Electrode	tbd	Tumbler	00:10	
					Processing – Opportunities and Challenges in Battery				
					Slurry Production				
					Discussion				00:15
19:05	Break								00:10
19:15	Reception								00:30
19:45	Gala Dinner								

Day 2 of the conference

06.11.2025 Time									Duration
08:30	Keynote	Optimizing Cathode Comp	oosites for Solid-State Batteries		Pro	f. Dr. Jürgen Janek, Center	for Materials Research, Justus Lie	big University Giessen	00:30
09:00	Keynote	Experiences and challenge	es in scaling new technologies into	mass production	וס	DrIng. Jo	ochen Eser & Nils Barenthin, VART	A Microbattery GmbH	00:30
09:30	Poster session + Coffee break								
		Room Maschinenhalle				Room Nimês 1+2			00:30
	Topic	Speaker	Institution	Duration	Topic	Speaker	Institution	Duration	
10:00	Dry Coating 2: Novel Binder Systems	Chair: tbd	motitudion	00:45	Modelling Battery Production & Processing	Chair: tbd	moreuron	00:45	00:45
10.00	Investigating the mechanical and electrochemical	Alex Lonergan	The University of Sheffield	00:15	Model-Based Assessment of Energy and Material	Gabriela Ventura Silva	TU Braunschweig, IWF	00:15	00.15
	performance of polymer binder composites for	THE CONCIGUIT	The diliversity of shemela	00.13	Efficiency for Sustainable Battery Cell Production	Cabricia Ventara Silva	To Braunsentreig, Ttt	00.13	
	fibrillated free-standing dry electrode films				Efficiency for Sustainable Buttery Cell Froduction				
	Toward PFAS-Free Lithium-Ion Batteries: Fluorine-	Minwon Suh	CNP Solutions	00:15	Model-based prediction of SEI growth and formation	Felix Schomburg	Bavarian Center for Battery	00:15	
	Free Binders and Scalable Dry Coating Technologies	Williwoll Sull	CIVE SOLUTIONS	00.13	metrics for a knowledge-based process design	I elix schollibulg	Technology (BayBatt)	00.13	
	Tree biliders and Scalable bry Coating reciniologies				metrics for a knowledge-based process design		reciniology (Baybatt)		
	Dry Electrode Processing for Sodium-Ion Batteries:	Oliver Fitz	Fraunhofer ISE	00:15	Scaling of Cathode Paste Dispersion Processes in Small-	Tim Granda	TU Braunschweig, iPAT	00:15	
	Transition from PFAS-Based to PFAS-Free Binders	Oliver Fitz	Tradifioler ISE	00.13	Scale Applications Using Stress-Based Principles	Tilli Grenda	To braunscriweig, if AT	00.13	
	Transition from FFA3-based to FFA3-Free billders				Scale Applications Using Stress-based Filliciples				
10:45	Discussion				Discussion				00:15
11:00	Break				Discussion				00:15
11:00	Advanced Production of Conventional and Novel	Chair: tbd	Institution	00:45	Dry Coating 3: Characterization & Innovative	Chair: tbd	Institution	00:45	00:15
11:15		Chair: tod	institution	00:45		Chair: tou	institution	00:45	00:45
	Batteries				Approaches				
	Partials based magnetic additions as information	Jakob Endres	Fraunhofer ISC	00:15	Multi Tachnique Characterization of DTEE Containing	Tamara Chuar	Anton Paar GmbH	00:15	
	Particle-based magnetic additives as information	Jakob Endres	Fraunnofer ISC	00:15	Multi-Technique Characterization of PTFE-Containing	Tamara Ebner	Anton Paar GmbH	00:15	
	providers in lithium-ion cells				Dry Electrode Mixtures for Lithium-Ion Battery				
					Applications				
	Dry electrode processing of electrodes and recent	Tom Boenke	Fraunhofer IWS	00:15	Investigation of PTFE fibrillation in continuous twin-	Annika Völp	Thermo Fisher Scientific	00:15	
	advancements in multi-layer pouch cell				screw dry processing of graphite anodes				
	development of sodium ion batteries								
	Advancing Sulfur–Carbon Composite Production:	Marina Schwan	German Aerospace Center (DLR)	00:15	Effect of Dry Surfactant-Modified Carbon Additives on	Rajasekar	The University of Sheffield	00:15	
	Industrial and Lab-Scale Infiltration Techniques for				the Electrical Conductivity and Powder Flow Behavior	Krishnamoorthy			
	Metal–Sulfur Batteries				of Dry Battery Electrode Mix				
12:00	Discussion				Discussion				00:15
12:15	Lunch break								01:00
13:15	Panel Discussion	Circular Battery Production						tba	00:45
14:00	Industry Session II	Chair: tbd	Institution	00:50	Enabling Battery Circularity	Chair: tbd	Institution	00:45	00:50
	Smart Mixing for Battery Slurries: NETZSCH		Netzsch	00:10	Fast and Safe Electrical Characterization for Second-	Simeon Kremzow-Tennie	Keysight Technologies	00:15	
	Planetary System with Real-Time Absolute Viscosity	Schmiedel			Life Battery Modules Across Diverse Testing		Deutschland GmbH		
	Analysis				Conditions				
	Introducing the Center of Excellence Battery: Cell –	Dr. Dominik Koll	vw	00:10	Solving the environmental challenges of cathode	Shun Takano	Proterial Ltd., Japan	00:15	
	and Battery Development for the Volkswagen-				active materials for Li-ion batteries – the CALISMAT				
	Group				process				
		tbd	BioLogic	00:10	Enabling circular battery manufacturing through	Sebastian Thiede	University of Twente	00:15	
		tbd	Coperion	00:10	digital technologies				
		tbd	Mathis	00:10					
								00:15	00:15
14:50	Discussion			00:15					
14:50 15:05	Discussion Poster session + Coffee break			00:15	1				00:30
				00:15					00:30
15:05	Poster session + Coffee break			00:15					
15:05 15:35	Poster session + Coffee break Poster prizes	Chair: tbd	Institution	00:15	Advanced Electrode & Cell Production	Chair: tbd	Institution	00:45	00:20
15:05 15:35 15:55	Poster session + Coffee break Poster prizes Break, Transition	Chair: tbd Sahin Cangaz	Institution Fraunhofer IWS		Advanced Electrode & Cell Production Polyvinylene carbonate in anodes as strategy to form	Chair: tbd Nina Philipp	Institution TU Braunschweig, iPAT	00:45 00:15	00:20 00:05
15:05 15:35 15:55	Poster session + Coffee break Poster prizes Break, Transition Next-gen Battery Production			00:45					00:20 00:05
15:05 15:35 15:55	Poster session + Coffee break Poster prizes Break, Transition Next-gen Battery Production			00:45	Polyvinylene carbonate in anodes as strategy to form a stable SEI in Lithium-Ion-Batteries				00:20 00:05
15:05 15:35 15:55	Poster session + Coffee break Poster prizes Break, Transition Next-gen Battery Production Upscaling sulfide-based solid-state batteries Mechanofusion-derived cathode composite	Sahin Cangaz	Fraunhofer IWS	00:45 00:15	Polyvinylene carbonate in anodes as strategy to form a stable SEI in Lithium-Ion-Batteries Continuous processing and characterization of Si	Nina Philipp	TU Braunschweig, iPAT Karlsruhe Institute of	00:15	00:20 00:05
15:05 15:35 15:55	Poster session + Coffee break Poster prizes Break, Transition Next-gen Battery Production Upscaling sulfide-based solid-state batteries Mechanofusion-derived cathode composite microstructures for solid-state batteries: A scalable	Sahin Cangaz	Fraunhofer IWS	00:45 00:15	Polyvinylene carbonate in anodes as strategy to form a stable SEI in Lithium-Ion-Batteries Continuous processing and characterization of Si anode and aqueous LFP cathode slurries via twin-	Nina Philipp	TU Braunschweig, iPAT	00:15	00:20 00:05
15:05 15:35 15:55	Poster session + Coffee break Poster prizes Break, Transition Next-gen Battery Production Upscaling sulfide-based solid-state batteries Mechanofusion-derived cathode composite	Sahin Cangaz	Fraunhofer IWS	00:45 00:15	Polyvinylene carbonate in anodes as strategy to form a stable SEI in Lithium-Ion-Batteries Continuous processing and characterization of Si	Nina Philipp	TU Braunschweig, iPAT Karlsruhe Institute of	00:15	00:20 00:05
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15:05 15:35 15:55	Poster session + Coffee break Poster prizes Break, Transition Next-gen Battery Production Upscaling sulfide-based solid-state batteries Mechanofusion-derived cathode composite microstructures for solid-state batteries: A scalable mixed conducting matrix coating approach	Sahin Cangaz Finn Frankenberg	Fraunhofer IWS TU Braunschweig, iPAT	00:45 00:15 00:15	Polyvinylene carbonate in anodes as strategy to form a stable SEI in Lithium-Ion-Batteries Continuous processing and characterization of SI anode and aqueous LFP cathode slurries via twinscrew extrusion	Nina Philipp Kevin Raczka	TU Braunschweig, iPAT Karlsruhe Institute of Technology (KIT)	00:15 00:15	00:20 00:05
15:05 15:35 15:55	Poster session + Coffee break Poster prizes Break, Transition Next-gen Battery Production Upscaling sulfide-based solid-state batteries Mechanofusion-derived cathode composite microstructures for solid-state batteries: A scalable mixed conducting matrix coating approach Solvent-Free Processed Polymer Electrolyte for Li-	Sahin Cangaz Finn Frankenberg	Fraunhofer IWS TU Braunschweig, iPAT Centre for Cooperative	00:45 00:15 00:15	Polyvinylene carbonate in anodes as strategy to form a stable SEI in Lithium-Ion-Batteries Continuous processing and characterization of Si anode and aqueous LFP cathode slurries via twinscrew extrusion Materials and Interfaces Design for Next-Generation	Nina Philipp Kevin Raczka	TU Braunschweig, iPAT Karlsruhe Institute of Technology (KIT) University of Western Ontario,	00:15 00:15	00:20 00:05

17:00	Goodbye speech			
18:00	Exhibition of EU-Projects (IBPC-guests are welcome)			

Seminar Day - to be separately booked - not included in the standard conference fee

Time				
08:30	Seminar participants: Arrival and registration			
09:00	Seminar Introductory course	Seminar Expert course	03:00	
12:00	End of Seminar		00:00	