

Conference Programme

Event location: Steigenberger Parkhotel Braunschweig, Germany

04.11.2025

<u>0-7.11.2025</u>		
Time		
18:00	Registration	
19:00	Anero	

Day 1 of the conference

05.11.2025

Time									Duration
08:00	Registration								Duration
09:00	Welcome speech					Pro	f. DrIng. Arno Kwade, Prof. Dr	ng. Christoph Herrmann	00:20
09:20	Morning adress by BMFTR Dr. Stefan Jung, Federal Ministry of Research, Technology and Space (BMFTR)							00:20	
09:40	Keynote	Learnings from the Lithiu	m-Ion Battery Value Chain for the	Circular Produc	tion of Solid-State Batteries	Prof. D	rIng. Arno Kwade & Prof. DrIr	g. Sabrina Zellmer, BLB+	00:30
10:10	Transit	0	,					,	00:15
	Room Maschinenhalle Room Nimês 1+2								
	Topic	Speaker	Institution	Duration	Topic	Speaker	Institution	Duration	
10:25	Dry Coating 1: Advanced Processing Strategies	Chair: Rüdiger Daub		00:45	Novel Materials	Chair: René Wilhelm		00:45	00:45
	Advances in continuous extrusion-mixing of dry electrode masses – how to tackle the challenges with LFP-based formulations	Adrian Spillmann	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	
	Process Interactions in Dry Coating: From Mixing Mode to Line Load Requirements	Julius Gerk, Franziska Beverborg	TU Braunschweig, iPAT	00:15	Upscaling Aqueous Generation 3b Battery Chemistry	Frode Fagerli	SINTEF AS	00:15	
	DRYtraec® Process: Shear-Based Dry Electrode Manufacturing for LIB and Next-Gen. Battery Technologies	Arthur Dupuy	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: Thomas Spengler	Institution	00:45	Modelling & Investigation of Battery Safety	Chair: Thomas Turek	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	Scaling of Cathode Paste Dispersion Processes in Small- Scale Applications Using Stress-Based Principles	Tim Grenda	TU Braunschweig, iPAT	00:15	
12:40	Discussion	•		00:15	Discussion			00:15	00:15
12:55	Lunch break						•		01:05
14:00	Keynote	New Cathode Material So	lutions for Lithium Ion and Sodiu	m Ion Batteries -	- Challenges for Production or Opportunities for Lowering	Cost?	Dr	-Ing. Hannes Wolf, BASF	00:30
14:30	Keynote	Visualization of Reactions	in Sulfide All-Solid-State Lithium	Batteries				Dr. Misae Otoyama, AIST	00:30
15:00	Break								00:15
15:15	Manufacturing & Processing of Solid State Electrolytes / Batteries	Chair: Holger Althues	Institution	00:45	Coating and Drying of Battery Electrodes	Chair: Georg Garnweitne	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	
	Mixing Composite Cathodes for Solid-State Batteries: The Key to Reliable High Performance	Maximilian Kissel	Justus-Liebig-Universität Giessen	00:15	IR-assisted vacuum drying to remove water from Prussian Blue cathodes in sodium-ion batteries.	Thorsten Mally	Excelitas Noblelight	00:15	
16:00	Discussion				Discussion		1		00:15
16:15	Poster session + Coffee break								00:30

16:45	Battery Recycling & Repurposing, Material	Chair: Bengi Yagmurlu	Institution	00:45	Battery Cell Inspection and Monitoring	Chair: Carsten Schilde	Institution	00:45	00:45
	Recovery								
	Influence of the drying temperature on the	Jannik Born	TU Braunschweig, iPAT	00:15	Monitoring exposure to airborne particulates along	Kevin Sparwasser	Stat Peel AG	00:15	
	recovery of electrolyte components in battery				the value chain of Li-ion batteries				
	recycling								
	Challenges of Using Recycled Ethyl Methyl	Valerie Mohni	TU Braunschweig, InES	00:15	Non-Destructive Characterization of Projection	Felix Thurn	Fraunhofer ISE	00:15	
	Carbonate in Lithium-Ion Batteries				Welding for Battery Cell Interconnection with				
					Scanning Acoustic Microscopy and X-Ray Computer				
	Process failure mode - product failure mechanism -	Ctofon Crallitach	Vehicle Safety Institute, Graz	00:15	Tomography From molecule to module – the Lund University	Elna Heimdal Nilsson	LTH, Lund University	00:15	
	effect analysis ((PFM) ² EA): A novel risk assessment	Steran Gronitsch	University of Technology	00:15	ecosystem for battery safety characterization and fire	Ellia Helifidal Niissofi	LTH, Lund Oniversity	00:15	
	methodology for automated battery disassembly -		Offiversity of Technology		hazard assessment				
	Integrating process and product safety in				nazaru assessment				
	repurposing								
17:30	Discussion		•		Discussion				00:15
17:45	Break								00:15
18:00					Industry Session I	Chair: Sabrina Zellmer	Institution	00:50	00:50
					From Battery to Black Mass: Practical Insights to Lab-	Lena Weigold	Retsch	00:10	
					Scale Milling and Sieving				
					Giga-Odenwald 2.0 – a modularized, standardized,	Stefan Gerl	Eirich	00:10	
					and scalable mixing plant on a gigafactory scale				
		Conversion for dinner			XRF-Based Quality Classification of Lithium-Ion Battery	Jana Kalbáčová	HORIBA Jobin Yvon GmbH	00:10	
					Black Mass				
					Continuous Mixing of Electrode Masses by Extrusion -	Markus Lehmann	Coperion	00:10	
					On the Way to Dry Electrodes				
						Andreas Leitze	Tumbler	00:10	
					Processing – Opportunities and Challenges in Battery				
	-				Slurry Production Discussion				20.45
19:05	Break				DISCUSSION				00:15
19:05	Reception	Steigenberger Parkhotel							00:10 00:30
19:15	Gala Dinner	Maschinenhalle of Steige	nherger Parkhotel						00:50
17.45	Gala Dillilei	masermentalic of Stelge							

Day 2 of the conference 06.11.2025

Time									Duration
08:30	Keynote	Optimizing Cathode Comp	osites for Solid-State Batteries		Pro	of. Dr. Jürgen Janek, Cente	r for Materials Research, Justus Lie	big University Giessen	00:30
09:00	Keynote	Experiences and challenge	s in scaling new technologies into ma	ass production		DrIng. J	ochen Eser & Nils Barenthin, VART.	A Microbattery GmbH	00:30
09:30	Poster session + Coffee break								
		Room Maschinenhalle				Room Nimês 1+2			
	Topic	Speaker	Institution	Duration	Topic	Speaker	Institution	Duration	
10:00	Dry Coating 2: Novel Binder Systems	Chair: Klaus Dilger		00:45	Modelling Battery Production & Processing	Chair: Sebastian Thiede		00:45	00:45
	Investigating the mechanical and electrochemical	Rajasekar	The University of Sheffield	00:15	Model-Based Assessment of Energy and Material	Gabriela Ventura Silva	TU Braunschweig, IWF	00:15	
	performance of polymer binder composites for fibrillated free-standing dry electrode films	Krishnamoorthy		00.13	Efficiency for Sustainable Battery Cell Production			55.15	
	Toward PFAS-Free Lithium-Ion Batteries: Fluorine- Free Binders and Scalable Dry Coating Technologies	Minwon Suh	CNP Solutions	00:15	Model-based prediction of SEI growth and formation metrics for a knowledge-based process design	Felix Schomburg	Bavarian Center for Battery Technology (BayBatt)	00:15	
	Dry Electrode Processing for Sodium-Ion Batteries: Transition from PFAS-Based to PFAS-Free Binders	Oliver Fitz	Fraunhofer ISE	00:15	Cell and system level models integration in battery cell formation.	Cihan Yurtsever	Comau SpA	00:15	
10:45	Discussion				Discussion				00:15
11:00	Break				1				00:15
11:15	Advanced Production of Conventional and Novel Batteries	Chair: Peter Axmann	Institution	00:45	Dry Coating 3: Characterization & Innovative Approaches	Chair: Sabrina Zellmer	Institution	00:45	00:45
	Particle-based magnetic additives as information providers in lithium-ion cells	Jakob Endres	Fraunhofer ISC	00:15	Multi-Technique Characterization of PTFE-Containing Dry Electrode Mixtures for Lithium-Ion Battery Applications	Tamara Ebner	Anton Paar GmbH	00:15	
	Dry electrode processing of electrodes and recent advancements in multi-layer pouch cell development of sodium ion batteries	Tom Boenke	Fraunhofer IWS	00:15	Investigation of PTFE fibrillation in continuous twin- screw dry processing of graphite anodes	Annika Völp	Thermo Fisher Scientific	00:15	
	Advancing Sulfur–Carbon Composite Production: Industrial and Lab-Scale Infiltration Techniques for Metal–Sulfur Batteries	Marina Schwan	German Aerospace Center (DLR)	00:15	Effect of Dry Surfactant-Modified Carbon Additives on the Electrical Conductivity and Powder Flow Behavior of Dry Battery Electrode Mix	Rajasekar Krishnamoorthy	The University of Sheffield	00:15	
12:00	Discussion				Discussion				00:15
12:15	Lunch break								01:00
13:15	Panel Discussion	Circular Battery Producti			Dr. Tobias Elwert (cylib), Dr. André Meck		moderated by Prof. Dr. Tho	mas S. Spengler (BLB+)	00:45
14:00	Industry Session II	Chair: Michael Kurrat	Institution	00:45	Enabling Battery Circularity	Chair: Thomas Vietor	Institution	00:45	00:45
	Smart Mixing for Battery Slurries: NETZSCH Planetary System with Real-Time Absolute Viscosity Analysis	Maximilian Münzner- Schmiedel, Onur Özgül	Netzsch	00:15	Fast and Safe Electrical Characterization for Second- Life Battery Modules Across Diverse Testing Conditions	Simeon Kremzow-Tennie	Keysight Technologies Deutschland GmbH	00:15	
	Introducing the Center of Excellence Battery: Cell – and Battery Development for the Volkswagen- Group	Dominik Koll	VW	00:10	Solving the environmental challenges of cathode active materials for Li-ion batteries – the CALISMAT process	Shun Takano	Proterial Ltd., Japan	00:15	
	Measurement automation in battery research and production	Julian Diener	BioLogic	00:10	Enabling circular battery manufacturing through digital technologies	Sebastian Thiede	University of Twente	00:15	
	Dry Mixing and Post Processing for Reliable Dry Coating	Hans Schneider	Zeppelin	00:10					
14:45	Discussion			00:15				00:15	00:15
15:00	Poster session + Coffee break				<u></u>				00:30
15:30	Poster prizes								00:20
15:50	Break, Transition								00:05
	Next-gen Battery Production	Chair: Sabrina Zellmer	Institution	00:45	Advanced Electrode & Cell Production	Chair: Marcus Jahn	Institution	00:45	00:45
15:55	Mechanofusion-derived cathode composite	Finn Frankenberg	TU Braunschweig, iPAT	00:15		Nina Philipp	TU Braunschweig, iPAT	00:15	00113
15:55	microstructures for solid-state batteries: A scalable								
15:55	microstructures for solid-state batteries: A scalable mixed conducting matrix coating approach Upscaling sulfide-based solid-state batteries	Paul Härtel	Fraunhofer IWS	00:15	Continuous processing and characterization of Si anode and aqueous LFP cathode slurries via twin- screw extrusion	Kevin Raczka	Karlsruhe Institute of Technology (KIT)	00:15	
15:55	mixed conducting matrix coating approach	Paul Härtel Laida Otaegui	Fraunhofer IWS Centre for Cooperative Research on Alternative Energies CIC energiGUNE	00:15	anode and aqueous LFP cathode slurries via twin-	Kevin Raczka Yang Zhao		00:15	

16:55	Goodbye speech		00:15
18:00	Exhibition of EU-Projects with Apero (IBPC-guests are welcome)	Bath+Sousse, Steigenberger Parkhotel	

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

07.11.2025

<u>071111000</u>		
Time		Duration
08:30	Seminar participants: Transfer, arrival and registration	00:30
09:00		04:00
	IDDO O	
	IBPC Seminar	
13:00	Networking Lunch	00:00