

Conference Programme IBPC 2021

Version date 07.10.2021
 Status Preliminary
 Event location Steigenberger Parkhotel Braunschweig



Day 1 of the conference

01.11.2021

Time	Type	Topic	Duration	Invited Speaker	Duration	
08:30	Arrival of attendees				00:30	
09:00	Welcome	Welcome Talk			A. Kwade/ C. Herrmann	00:15
09:15	Keynote	Dr. Tim Schulze (BMW)				00:35
09:50	Keynote	Stefano Saguatti (Manz)				00:35
10:25	Break				00:20	
10:45	Electrode Production I	Kwade	00:45	Cell assembly	Dröder	00:45
	Enabling aqueous processing of positive electrodes for lithium ion batteries – Challenges and opportunities for process and electrode design	Markus Börner	00:15	Inline X-ray Metrology for Lithium-Ion Battery Cells	Markus Möller	00:15
	Development of a solvent reduced electrode production process integrating coating, drying and calendaring	Eike Wiegmann	00:15	The warmer, the faster? - An investigation of the temperature dependence on the wetting process	Nicolaj Kaden	00:15
	Performance increase and process enhancements for capacitors and batteries production by aLITE-Technology	Kai K. O. Bär	00:15	Quality assessment for laser-based contacting of lithium-ion battery cell components using inline process monitoring	Sophie Grabmann	00:15
11:30	Discussion				00:15	
11:45	Lunch break				01:00	
12:45	Postersession + Presentation				01:00	
13:45	Keynote	Prof. Petr Novak (TU Braunschweig)				00:35
14:20	Electrode Production II	Kwade	00:45	Recycling & Sustainability I	Herrmann	00:45
	Simultaneous two-layer slot die coating of ultra-thick LIB electrodes	Alice Hoffmann	00:15	The sustainability of battery cell production in Europe	Marlene Eisenträger	00:15
	Calendering of carbon coated nano-silicon graphite composites (Si@Gr/C)	Jannes Müller	00:15	Aqueous processing of cathode slurries with nickel rich active materials and sustainable binder for green battery production	Anton Werwein	00:15
	Schwarz-Primitive structured electrodes for lithium-ion battery via 3D printed wax templating	Yige Sun	00:15	Characterization of spent lithium-ion batteries in different recycling process routes using automated mineralogy	Kai Bachmann	00:15
15:05	Discussion				00:15	
15:20	Break				00:20	
15:40	Electrode Production III	Kwade	00:45	Module and Pack Production	Dilger	00:45
	Laser structuring in battery production for enhancing the electrochemical performance of NMC 811 high energy electrodes for xEV energy storage systems	Bernd Eschelmüller	00:15	Agile Production Lines - flexible scaling for high-speed production	Alexander Weis	00:15

	Electronic pathway length manipulation and impact on conductivity networks in lithium-ion battery electrodes.	Jake Entwistle	00:15	Dynamic beam shaping and forming technics for improved results in battery welding applications	Peter Kallage	00:15	
	Electrode structure optimization adjusting battery manufacturing parameters by applying computational EIS	Clara Ganuza	00:15	Automatic Machines for Leak Testing of Sealed Batteries	Michael Klenk	00:15	
16:25	Discussion						00:15
16:40	Break						00:20
17:00	Battery Production 4.0 I	Herrmann	00:45	Production of solid state batteries I	Michalowski	00:45	00:45
	Flexible scaling of future battery cells	Jan Diekmann	00:15	Challenges and opportunities for solid-state players – can they be competitive on the battery market within automotive applications?	Joscha Schnell	00:15	
	Let's put smart to work - Future Battery Factories adapting Industry 4.0 Technologies	Klaus Eberhardt	00:15	Advanced Battery Material: Challenges within the laser cutting process of lithium metal	Lars Schmidt	00:15	
	Digital Twin in Battery Production 4.0 – From Data Management and Traceability System to Target-Oriented Application	Alexander Kies and Jonathan Krauß	00:15	Manufacturing of Composite Cathodes for Sulfide-based All-solid-state Batteries	Hans-Christoph Töpfer	00:15	
17:45	Discussion						00:15
18:00	Break						00:30
18:30				Industry Session	Kwade	00:40	00:40
				Structuring of particle systems for the production of wet and dry electrodes with Eirich intensive mixers.	Stefan Gerl	00:10	
				NETZSCH Helios fast and efficient dispersion system for Li-ion Battery Electrode coatings	Alberto Masi	00:10	
				Coperion - Producing Battery Compounds	Anselm Lorenzoni	00:10	
				BioLogic – Our Solutions to Test Your Batteries	Sandra Möller	00:10	
19:10	End of day 1 - start of evening event						

Day 2 of the conference

02.11.2021

Time	Type	Topic					Duration	
08:30	Keynote	Nicolas Vallin (Dassault Systemes)						00:35
09:05	Keynote	Patrick Bernard (SAFT)						00:35
09:40	Break						00:20	
10:00	ProZell – competence cluster for battery cell production	Kwade	00:45	Production of solid state batteries II	Michalowski	00:45	00:45	
	Multilayer silicon/graphite anodes for the use in high-energy cells	Laura Gottschalk	00:15	Novel processing technique for making solid-state batteries with fast lithium ion transport kinetics	Chun Huang	00:15		
	About the vacuum post-drying process in the production of lithium-ion batteries	Thilo Heckmann	00:15	Laser sintering of ceramic-based solid-state battery materials	Linda Hoff	00:15		
	Reconstruction of the carbon-binder domain in Li-ion battery cathodes and its influence on the electrochemical performance	Benedikt Prifling	00:15	Evaluation of formulation variation for scalable processing of sulfide-based all-solid-state batteries	Mattis Batzer	00:15		
10:45	Discussion						00:15	

11:00	Postersession + Presentation						01:00
12:00	Battery Production 4.0 II	Herrmann	00:45	Cell formation and Quality Control	Kurrat	00:45	00:45
	Towards a comprehensive semantic information structure in the battery value chain	Simon Stier	00:15	Optimized cell finishing through innovative plant technology and parameter-based evaluation of process and quality parameters in the virtual production system	Nikolaus Lackner	00:15	
	Data-mining-based multi-criteria quality prediction in battery cell production	Artem Turetskyy	00:15	High Potential Test for Quality Control of Separator Defects in Battery Cell Production	Ferry Kienberger	00:15	
	Modelling of Lithium-ion Battery Electrode Calendering by Discrete Element Method (DEM)	Ruihuan Ge	00:15	tbd	tbd	00:15	
12:45	Discussion						00:15
13:00	Lunch break						01:00
14:00	Keynote	Dr. Felix Eberle (BASF)					00:35
14:35	Recycling & Sustainability II	Kwade	00:45	Multivariable process - property relationships	Herrmann	00:45	00:45
	Recovery of spheroidized graphite from spent lithium ion batteries	Anna Vanderbruggen	00:15	The round-robin test: Towards process standardization of EU research pilot lines	Katja Froehlich	00:15	
	Techno-economic and environmental assessment of production processes for all-solid-state batteries using the example of active material coating by atomic layer deposition	Deidre Wolff	00:15	Study of the cathode coating-drying manufacturing process by design of experiments	Geanina Apachitei	00:15	
	Recycling of oxide electrolytes from all-solid-state lithium-ion batteries by acid leaching	Kirstin Schneider	00:15	Understanding and correcting for temperature variations when measuring self-discharge in cell production	Manuel Moertelmaier	00:15	
15:20	Discussion						00:15
15:35	Guided Tour BLB						01:00
16:35	The End						