ALBA is hosted by CONSORTIUM FOR BATTERY INNOVATION

ALBA 2026

AUTOMOTIVE LOW-VOLTAGE BATTERY ADVANCEMENTS

Online Workgroups Jan-May 2026
In-person Conference May | Mainz, Germany

in collaboration with

CENELEC EUROPEAN COMMITTEE FOR ELECTROTECHNICAL STANDARDIZATION — TC21X WG3

IEC International Electrotechnical Commission — TC21 WG2

bci BATTERY COUNCIL INTERNATIONAL SINCE 1924 — Technical Committee

A global, application-driven forum connecting OEMs, battery companies, suppliers and researchers to define next-generation low-voltage battery systems.

What Makes ALBA Unique

Global Expert Network
Access 90+ leading experts in battery technology and power-supply systems

Early Insight into Future Requirements
Early access to specs, tools, knowledge

Collaborative Workshop Format
Technical presentations with hands-on discussions

Co-Located with Key Industry Forums
AABC Europe, IEC-TC21, CENELEC-TC21 and CBI

2026 Focus Topics

- **Low temperature performance** needs and chemistry-competitive benchmarking (Pb/Li/Na)
- Improving and understanding **charge recovery** in Auxiliary applications
- Sizing, selection, and operation of batteries in **12V** and **24V systems**
- **Test method** validation and best practices, in-vehicle correlation

Who Benefits from ALBA Participation

	BATTERY EXPERTS	AUTOMOTIVE SUPPLIERS	EXECUTIVES	OEM REPS
Direct OEM Interactions/Learning	✓	✓	✓	
Network with Experts	✓	✓		✓
Educate suppliers	✓			✓
Collaborate on pre-competitive research	✓	✓		✓
Intensive application specific training	✓		✓ for staff	
Compare battery chemistry pros/cons	✓	✓	✓	✓
Help shape industry standards (EN, IEC)	✓			✓
Condensed overview of industry challenges			✓	

Past Workshop Outcomes

(1) Shaped **IEC 60095-8, EN 50342-HTE**) standards
(2) Enabled **development of sales tools** (e.g., Pulse Power) to improve battery selection.
(3) Benchmarked **various battery chemistries** against current and future test specifications
(4) Deeply **expanded lead-acid battery** fundamental knowledge to drive new battery design innovations.
(5) Improved reliability of high-throughput test cells through global data sharing and standardization

Dr. Eckhard Karden – ALBA26 Chairman
- Globally respected independent consultant
- 21 y with Ford Motor Company (EFB, AUX)
- 8 y at RWTH Aachen University (ISEA)
- Specializes in application-centric R+D
- International Lead Award winner 2022

Registration Open!

Pricing, venue information, sponsorship opportunities, and further details available online at https://alba-workshop.info

ALBA 26

Bringing together
the automotive-battery value chain

Workshop on
Automotive Low-Voltage Battery Advancements

19-20 May 2026
Mainz, Germany

The ALBA Workshop series has established itself as the go-to place for automotive 12 V battery experts discussing **new battery requirements** arising from vehicle hybridization and electrification, functional safety and new power-supply topologies – as well **as improvements in battery technology** to better serve these future demands.

Why you should be at ALBA 26

- Join over 70 technology experts from all along the supply chain – from materials to vehicle.
- Gain professional experience in an active workshop atmosphere, learning by doing.
- Get the automotive system view: understand how your work supports new vehicle demands.
- Use priority access to content and tools prepared exclusively for this workshop.
- Share 92.7% participants satisfaction ("worth the time and money spent" in 2025 survey).

Key areas of the technical agenda 2026 will be

- **OEM strategies and new storage technologies:** lead or lithium or sodium or no battery?
- **Cold performance:** How to specify, test and predict charging and pulse-discharge performance of lead, lithium and sodium batteries; implications for cold winter operation?
- **Charge recovery:** State of function (SOF) recovers much faster than state of charge (SOC) when charging lead batteries: Understand the processes and maximize the SOF boost.
- Battery **selection and operation**: Tools and guidelines for 12V (24V) battery selection, sizing and operation in electrified vehicles, for example CCA sizing and charging controls.
- **Test methods** for stop/start, micro-hybrid, auxiliary and backup batteries in laboratory and vehicles: implementation, evaluation, correlations, references.
- Seminar on **new storage technologies** – Get first-hand insights of system trends and the quickly growing sodium-ion batteries! (Tuesday morning before main workshop)

The ALBA workshop series, since 2017, is bringing together experts from vehicle manufacturers, battery makers, material and component suppliers, as well as test and research laboratories, to discuss application-driven topics. This year, the international standardization expert group (IEC TC21 WG2) will meet in Mainz the day after our workshop and discuss their new 12V sodium-ion project as well as ongoing lead-battery activities. As a special opportunity right after ALBA this year, participants may visit the Advanced Automotive Battery Conference (AABC) that takes place in the same city the same week.

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CONSORTIUM FOR BATTERY INNOVATION

in collaboration with

CENELEC EUROPEAN COMMITTEE FOR ELECTROTECHNICAL STANDARDIZATION
TC21X WG3

IEC International Electrotechnical Commission
TC21 WG2

bci BATTERY COUNCIL INTERNATIONAL SINCE 1924
Technical Committee

Bringing together global technical experts from the battery and automotive industries, ALBA is hosted by the Consortium for Battery Innovation (CBI) in close collaboration with *European Committee for Electrotechnical Standardization* (CENELEC TC21X WG3), International Electrotechnical Commission (IEC TC21 WG2), and *Battery Council International* (BCI).

Timeline of events	
7 May, 11 May, mid June	**3 webinars** providing reviews, industry trends, overview of workshop papers
Monday 18 May (10:30-17:30)	**Speakers' Day** (by Advance Registration), concluding the virtual workstreams and preparing the main workshop
Tuesday 19 May (8:30-10:30)	**Sodium-ion technology for automotive application:** seminar given by **leading industry experts**
Tuesday 19 May (11:00) – Wednesday 20 May (14:30)	**ALBA Workshop**: express presentations, breakout sessions, group discussions, OEM feedback
Thursday 21 May (8:30-15:00) 2 parallel events:	**IEC TC21 WG2** meeting **CBI** European Technical Workshop

NEW

ST Storage Technology Trends

- OEM roadmaps and requirements for low-volt power supply & energy storage
- New battery technologies or no-battery topologies? Low-volt systems for BEVs
- Sodium-ion batteries for 12V and 24V: status, challenges, industrialization
- Market trends in Europe, Asia, globally for automotive low-volt batteries
- How can standardization support technology adoption and reliable vehicle application?

Tom Boetticher, *Litona*
Luca Brisotto, *Exide*
Asmae El Mejdoubi, *Tiamat*
Benjamin Hübner, *Moll Batterien*
Gunnar Ledfelt *, *Traton*
Egbert Lodowicks, *Audi*
Hazel Li, *Camel*
Mike Miao, *Leoch*
Rolf Naumann, *BMS expert*
Shawn Peng, *Quantum Shield*
Luan Yundong, *SAC/TC69*
Lorenzo Zolin, *Stellantis*
and other presenters

CP Cold Performance

- New application-driven test methods for discharge power and charge recovery of lead, lithium-ion and sodium-ion batteries
- How do power and charging performances age? End-of-life PPC & CR data collection.
- BMS functions and battery protection for charging at extreme winter condition
- Effects of cell design, separator type, and expanders
- Electrochemical Impedance Spectroscopy for SOF and SOH prediction

Paul Everill, *Black Diamond*
Benjamin Hübner, *Moll Batterien*
Koda Jones / Pritpal Singh*, *Villanova Univ.*
Hazel Li, *Camel*
Luan Yundong / Bingbing Fu, *SAC/TC69*
Yukiyasu Nagata, *Quantum Shield*
Alan Perez / Michael Verde, *C&D Trojan*
Luke Salzer / Carter Abney*, *Borregaard*
Serubbabel (Abel) Sy / Eric Miller, *Daramic*
Danila Viglione, *Stellantis*
Ian Wolfe, *EastPenn*
Yu Kunping, *Camel*
and other presenters

* remote speaker

ALBA Seminar

New Storage Technologies

Tuesday 8:30–10:30

- Methods for technology benchmarking between lead, lithium and sodium batteries
- Trends in material development for automotive sodium-ion batteries (SIB)
- SIB industrialization per region
- SIB winter performance and hot-climate operation: power, charging, durability
- Implications for battery management and power supply system specifications

Tom Boetticher, *Litona*
Asmae El Mejdoubi, *Tiamat*
Philipp Heimbucher, *Bosch*
Hazel Li / Rachel Du, *Camel*
Mike Miao, *Leoch*
Christian Mondoloni*, *Stellantis*
Shawn Peng / Yuki Nagata, *Quantum Shield*
and other presenters

NEW

CR

Charge Recovery

- Vehicle requirements to 12V battery from over-the-air update and functional safety
- How does PbO_2 structure govern the 1...2 volt SOF boost in cold recharged lead batteries?
- Characterize pseudocapacitance and potential plateau under varying charging regimes
- Electrode material investigations of charged versus discharged positive electrode material
- Correlation between EN Dynamic Charge Acceptance and IEC SOF Recovery

Markus Föhlisch / Benjamin Hübner, *Moll Batterien*
Jun Furukawa
Miguel Garcia / Jesús Valenciano, *Exide*
Pascual Garcia Perez, *Imerys*
Eberhard Meissner
Christian Mondoloni*, *Stellantis*
Campbell Matthews / Shane Christie, *ArcActive*
Plamen Nikolov, *BAS*
Jochen Settelein, *Fraunhofer ISC*
Abel Sy, *Daramic* & Paul Everill, *Black Diamond*
Francisco Trinidad
Jonathan Wirth, *UL Batterieingenieure*
Jibo Zhang / John Wertz*, *Hollingsworth & Vose*
and other presenters

SO

Battery Selection and Operation

- Sizing the power: PPC and State-of-function (SOF) versus classic CCA ratings.
- Recharge after over-the-air update: Improved charge controls and battery design effects
- 12V charging system strategy guideline for electric vehicles and functional safety
- Laboratory simulation of complex vehicle use cases and charging strategies

Bernd Engwicht, *EastPenn*
Jörg Tiburcy, *Clarios*
Jonathan Wirth, *Batterieingenieure*
Yukiyasu Nagata, *Quantum Shield*
Hürkan Catalkaya, *Inci GS Yuasa*
Rodrigo Cavendish, *ITEMM*
Rolf Naumann, *BMS expert*
Sebastian Mauer, *Moll Batterien*
Yu Kunping / Kevin Luo*, *Camel*
and other presenters

TM

Test Methods

- New international standards for auxiliary and backup batteries and for sodium batteries
- Best practices for performance and durability tests: Implementation & evaluation
- How symmetric are parallel batteries running? Demonstrating in-vehicle data analysis
- Can 12V mild-hybrids in emerging markets benefit from advanced lead batteries?

Bernd Engwicht, *EastPenn*
Torsten Hildebrandt, *Clarios*
Kohei Koga, *GS Yuasa / BAJ*
Campbell Matthews / Shane Christie, *ArcActive*
Prince Elmer Reyes *, *Philippine Batteries*
Grace Rocha, Moura
Kemal Yalim, *Klaric*
Jibo Zhang / John Wertz*, *Hollingsworth & Vose*
and other presenters

* remote speaker

CBI	**Roadmap Discussion**
➢ KPIs for automotive batteries 2030 ➢ Opportunities and frameworks for pre-competitive collaboration	Begüm Bozkaya, *CBI* Matt Raiford, *CBI* and experts as panelists

For the first time this year, the workshop is preceded by an **industry seminar** given by key technology experts introducing new concepts for 12 V and 24 V energy storage, including the latest status of **sodium-ion technology** for automotive application.

During the main workshop on 19/20 May in Mainz, **compact plenary talks** will expose key results and summaries to all participants. In interactive break-out sessions, each participant will have the opportunity to **discuss in depth** individual papers. About 2 weeks before this face-to-face meeting, webinars will provide **up-to-date overview** presentations to all registrants.

The event series will take place in the conference centre Erbacher Hof, close to Mainz Cathedral, **address**: Grebenstraße 24-26, 55116 Mainz, Germany. From Frankfurt international airport, take

- suburban train S8 to "Mainz Römisches Theater" (19 min ride, then 10 min walk).
- or taxi (30 min, 30 km, approx. 60 €)

In the same week as ALBA 2026, the **Advanced Automotive Battery Conference** (AABC Europe) takes place in Mainz, within 10 minutes walking distance from ALBA. ALBA registrants receive a 20% discount on AABC registration and may arrange additional business meetings in town.

We recommend the hotel Mainzer Hof, a 20 minutes stroll from ALBA (or 11 minutes by city bus), with AABC (Rheingoldhalle) half way. A **hotel room** block is available on our registration site.

Regular Registration is open **until 30 April** and provides access to 3 webinars, the industry seminar on new technologies and the 2-day live workshop:

Register here: https://alba-workshop.info/

Registration fees (VAT will be added)	**Advance Registration by 14 February**	**Regular Registration by 30 April**	**Last Minute after 30 April**
Regular	1,299 €	**1,549 €**	1,699 €
2nd and more participant per company (group discount)	799 €	**1,049 €**	1,199 €
Students, vehicle OEM experts	799 €	**799 €**	899 €
An additional **discount for CBI members** has been offered by e-mail from 16 January.			

Registration for **CBI European Technical Workshop:** For the workshop on the day after ALBA (9:00-14:30) at the same location, CBI members may register at an extra fee of 199€ on https://cvent.me/8ob5Yr?RefId=cbi-etw-2026

The Consortium for Battery Innovation (CBI) is hosting ALBA, organized by Eckhard Karden Consulting. Write us at info@alba-workshop.info.

Tuesday, 19 May 2026

08:30 – 09:30 — NEW
ALBA Seminar:
New Storage Technologies

10:00 – 10:30 — coffee

11:00 — Plenary - Welcome

11:30 – 13:00 — ST - Storage Technology Trends
OEMs - standardization - alternative technologies

13:00 – 13:30 — lunch break
fingerfood buffet

14:00 – 14:30 — Overview Cold Performance
16 express talks

15:00 – 15:30

Breakout LAB @ EOL	Breakout SIB methods	Breakout BMS aspects
4 posters	8 posters	2 posters

15:30 – 16:00 — coffee

16:00 – 16:30
Overview LAB CP optimizations
Overview SOF sizing & monitoring
Overview TMV in-vehicle analysis

16:30 – 17:00

Breakout LAB CP2	Breakout SOF sizing &monit.	Breakout TMV in-vehicle anal.
3 posters	demo & discussion	demo & disc.

17:15 — end of day

Wednesday, 20 May 2026

08:30 – 09:30 — Plenary CR
Meissner, Furukawa, Mondoloni:
SOF recovery decyphered - and why we need it

09:30
Overview CR part 1
Overview CR after software update
Overview mild HEV & microcycling

10:00 – 10:30 — coffee

10:30 – 11:00

Breakout LAB CR1	Breakout CRS	Breakout TMH
5 posters	CR after FOTA update 3 posters	DCA for mildHEV & microcycling 4 posters

11:00
Overview CR part 2
Overview charging guideline
Overview Best practices for std. testing

11:30 – 12:30

Breakout LAB CR2	Breakout SOC	Breakout TMS
5 posters	charging guideline 4 posters	Best practices for std. testing 4 posters & disc.

12:30 – 13:00 — lunch break
fingerfood buffet

13:30 – 14:00 — Roadmap Discussion
what to aim for &
how to join forces

14:00 — participants' feedback

14:30 — farewell coffee

15:00 – 16:30 — optional
expert group discussions:

CENELEC workshop on NEXFTS
exchange format & data evaluation

and others (as needed)

Tuesday, 8:30 - 10:30

ALBA Seminar: New Storage Technologies		Se	
Christian Mondoloni	**OEM requirements for 12V Main Battery if Technology to move from Lead Acid to Lithium Ion or Sodium Ion**	Se01	13
Philipp Heimbucher	**A Cell Integrator's Perspective on LV Batteries**	Se08	15
Mike Miao	**China Auto Low-Volt Battery Trend**	Se02	18
Hazel Li, Rachel Du	**Introduction into SIB technology**	Se03	21
Asmae El Mejdoubi	**Power performance of sodium-ion NVPF-HC cells at high and low temperatures**	Se05	27
Shawn Peng, Yuki Nagata	**Comparative Investigation of Safety Performance: NFPP/HC vs. LFP Cells**	Se07	35
Tom Bötticher	**Sodium-ion for 12V automotive? Opportunities identified and myths debunked**	Se04	–

Tuesday, 11:10 - 13:10 Discussion Wednesday, 13:30 - 14:15

Storage Technology Trends		ST	
Rolf Naumann	**Future Vehicle Power Distribution Networks**	SO11	41
Lorenzo Zolin	**Automotive 12V batteries: Current trends, technologies, requirements, integration from a carmaker standpoint**	SO12	43
Gunnar Ledfelt	**Truck Trends, Requirements & Field Experience**	SO13	46
Bingbing Fu, Luan Yundong	**Market Trends - Focus China**	ST01	48
Luca Brisotto	**IEC Standardization Project**	ST03	51
Shawn Peng	**BCI Sodium Battery Industry Group: Building the foundation for a U.S. SIB Ecosystem**	ST02	56
Mike Miao	**12V storage technology trends China & Asia & ROW**	ST05	60
Hazel Li, Rachel Du	**Camel 12V Storage Technology and Roadmap**	ST04	63
Asmae El Mejdoubi	**Tiamat solution for automotive low-voltage applications**	ST06	67
Tom Boetticher	**Litona Na-Ion Prussian-White Cells for 12 V Automotive Batteries**	ST07	71
Benjamin Hübner	**Sodium-ion batteries made by Moll**	ST08	–
Dirk Weber	**Sodium-ion battery activities at Clarios**	ST09	–
Begüm Bozkaya	**Opportunities and Frameworks for Pre-Competitive Collaboration**	ST10	74
Matt Raiford	**CBI Battery Roadmap**	ST11	76

Tuesday, 14:10 - 15:35 Breakout Session 14:50 - 15:35

Cold Performance: PPC & CR for aged LAB		CPL	
Matt Raiford	**End-of-Life PPC & CR: introduction (CBI ALBA Plus)**	CP10	–
Koda Jones, Pritpal Singh, Nick Fuierer, Jake Armstrong	**PPC&CR Aged Battery Data Collection and Initial Analysis (CBI ALBA Plus)**	CP12	81
Yu Kunping	**EOL-PPC & CR test data**	CP24	83
Kohei Koga	**Charge Recovery Test: BOL vs MOL for JIS-type flooded batteries**	CP26	85
Ian Wolfe	**End-of-Life Charge Recovery & Pulse Power Characteristics**	CP11	90

Tuesday, 14:10 - 15:35 — Breakout Session 14:50 - 15:35

Cold Performance: test methods for LIB, SIB		CPN	
Roger Zimmermann, Nadia Koch, Eckhard Karden	LAB ultra-low temperature peak performance: experimental parameters and reference data (CBI ALBA Plus)	CP17	94
Hazel Li	Pause duration evaluation for relaxation in PPC test	CP13	96
Rachel Du	PPC performance of different SIB cell types and designs	CP27	98
Bingbing Fu	PPC maps for SIB batteries from several manufacturers	CP28	–
Yukiyasu Nagata	PPC & CR test data SIB (cell vs. battery)	CP15	100
Tom Bötticher	CCA and PPC with SIB cells at varied temperature and SOC	CP19	102
Jonathan Wirth	Cold performance testing of aftermarket sodium 12V batteries (ALBA Plus)	CP14	104
Paul Everill	Sodium cell benchmarking in AUX applications	CP16	106

Tuesday, 14:10 - 15:35 — Breakout Session 14:50 - 15:35

Cold Performance: BMS aspects		CPS	
Markus Föhlisch	Benchmark analysis of commercially available 12V SIB	CP25	112
Danila Viglione	12V BMS - Beyond Batteries: From monitoring to system integration	CP23	114

Tuesday, 16:00 - 17:15 — Breakout Session 16:30 - 17:15

Cold Performance: optimization for SOF		CP2	117
Abel Sy	Stratosphere AGMe: A PE-based separator enhancing cold performance and energy density in VRLA batteries	CP21	119
Luke Salzer, Carter Abney	Initial analysis of developmental lignosulfonates for lead battery applications	CP22	124
Alan Perez, Michael Verde	Measuring auxiliary battery SOH using Electrochemical Impedance Spectroscopy (EIS)	CP18	126

Tuesday, 16:00 - 17:15 — Breakout Session 16:30 - 17:15

SOF sizing & monitoring		SOF	129
Bernd Engwicht	Why to use the tool well known as PPC Sizing Tool?	SO16	131
Jonathan Wirth	PPC Tool v2: more sizing & selection functions for OEM & application engineers (ALBA Plus)	SO15	133
Yukiyasu Nagata	PPC and SOF prediction for complex load profiles: SIB vs. LAB	SO17	135
Yu Kunping	PPC Tool: Survey results of Chinese OEMs	SO18	136
Rolf Naumann	Future vehicle battery monitoring for different system demands	SO19	138

Tuesday, 16:00 - 17:15 — Breakout Session 16:30 - 17:15

In-vehicle analysis of battery operation		TMV	138
Eckhard Karden	Dual battery symmetry investigation: introduction (ALBA Plus)	TM23	140
Kemal Yalim	analyzing vehicle operation: logger setups for I,U,T	TM24	141
Roger Zimmermann	analyzing vehicle operation: results (CBI ALBA Plus)	TM25	–

Wednesday, 8:30 - 9:15

Charge Recovery - plenary session		CRP	149
Eberhard Meissner	Understanding PbO2 structure: fast SoF recovery @ PSoC - bottom-up analysis and hypotheses on 'improved' DIScharge Characteristics	CR11	151
Jun Furukawa	Electrochemical double-layer capasitance and pseude-capacitance in negative electrode of the UltraBattery	CR12	171
Christian Mondoloni	Use cases for psdeudo-capacitance and potential plateau	CR21	175

Wednesday, 9:15 — Breakout Session 10:20 - 11:05

Charge Recovery part 1: mechanisms & structures		CR1	
Miguel García García, Jesús Valenciano, Luca Brisotto	Enhanced SoF in auxiliary batteries: Voltage plateau evaluation	CR13	177
Abderrezak Hammouche*, Nadine Dehnert, Eckhard Karden	charge peak absorption: How robust is voltage quality assured?	CR14	181
Yu Kunping	Research on the Charging Recovery ability after deep discharge	CR29	182
Jonathan Wirth	SOF recovery parameters during simulated driving (CBI ALBA Plus)	CR15	185
Jochen Settelein	Pseudocapacitive effects of cell geometry and rest phases	CR16	187

Wednesday, 11:05 - 12:30 — Breakout Session 11:45 - 12:30

Charge Recovery part 2: optimizations		CR2	
Abel Sy, Paul Everill, Eric Miller	Combining separator and active mass improvements to augment Charge Recovery	CR22	193
Plamen Nikolov, Maria Matrakova, Albena Aleksandrova, Lilia Stoimenova	Impact of PAM charge potential, SoC recovery levels and relaxation time on SoF performance during Charge Recovery testing	CR18	199
Markus Föhlisch, Jochen Settelein	NAM recipe optimization - hands-on experience	CR25	205
Jibo Zhang, Campbell Matthews, John Wertz, Shane Christie	Optimizing voltage distribution in Charge Recovery by GEM negative electrodes	CR26	207
Pascual García Pérez	Charge Recovery in the positive active mass through synthetic and expanded graphite addition	CR24	214

Wednesday, 9:30 — Breakout Session 10:20 - 11:05

Charge Recovery after software updates		CRS	219
Christian Mondoloni	Recap of additional Charge Rrecovery tests launched on LAB	SO21	221
Hürkan Catalkaya, Eckhard Karden Christian Mondoloni	Repetitive Charge Recovery of fresh / fresh+FOTA and Aged LN3 AGM Batteries	SO22	223
Rodrigo Cavendish, Emmily Nascimento, William Pinheiro	CR and SOF behavior in LABs under advanced operating conditions	SO23	227

Wednesday, 9:30 — Breakout Session 10:20 - 11:05

DCA and microcycling		TMH	
Yasmin Eustáquio, Rodrigo Cavendish, Grace Rocha, André Candido, William Pinheiro	12V mild hybrid - use case and battery requirements, EFB results	TM21	231
Campbell Matthews, Shane Christie	12V mild hybrid - DCA run-in test	TM22	233
Jibo Zhang, John Wertz	12V mild hybrid - DCA run-in test, AGM results from 2V cells	TM27	234
Torsten Hildebrandt	Do we need a shallow-cycling test (MHT) for small batteries in 2-wheelers or auxiliary applications?	TM15	240

Wednesday, 11:20 — Breakout Session 11:45 - 12:30

Battery Operation Guidelines		SOC	
Jörg Tiburcy, Roger Zimmermann, Eckhard Karden	**Recommendation for 12V charging strategy in BEV – new chapters (CBI ALBA Plus 2025)**	SO24	249
Benjamin Hübner	**water consumption / Z curve**	SO27	–
Jörg Tiburcy	**Drive cycle simulation at IBR: Charging recommendation for high temperature (CBI ALBA Plus 2025)**	SO26	251
Sebastian Mauer	**Comparing charging strategies in simulated driving cycles: low temperature**	SO25	257

Wednesday, 11:20 — Breakout Session 11:45 - 12:30

Best practices for standard test methods		TMS	
Torsten Hildebrandt	**Best practices: Battery test Standards per region**	TM14	264
Prince Elmer Reyes *	**Best practices for battery testing: compilation of international/regional standard test procedures for car and motorcycle batteries**	TM11	267
Torsten Hildebrandt	**Neutral EXchange Format for battery Test Sequences (NEXFTS) - Exchanging test programs without errors or worries**	TM13	268
Yu Kunping	**50% DOD test with low charging voltage**	TM16	–

Wednesday, 13:30 - 14:15 — Participants Feedback 14:15 - 14:30

Roadmap Discussion		
moderator: Matt Raiford	♦ **KPIs for automotive batteries 2030**	–
	♦ **Opportunities and frameworks for pre-competitive collaboration**	–