



# **BATTERY PRODUCTION DAYS**

Symposium | Trade Fair | Tour of the Fraunhofer FFB October 21<sup>st</sup> & 22<sup>nd</sup>, 2025, Münster (MCC Halle Münsterland)





## **CELL CULTURE: HOW WE ARE GROWING** THE BATTERY INDUSTRY TOGETHER









Dear reader.

Innovations alone do not make a location strong. Only the ability to scale them up efficiently, bring them to series production, and embed them in a functioning value chain creates a sustainable future. Developments in recent months have made us acutely aware that it is not enough to enter the race with ambitious goals. Product and process uncertainties during the rampup of gigafactories are leading to delays for cell manufacturers. This costs a lot of money and is a threat to the entire electric mobility "made in Europe".

However, we must not stop at the end of the production line. Existing and future battery cell factories have to consider the entire life cycle - because recovering valuable resources from used cells is not only an imperative of ecological responsibility but also a way to secure supply chains. The current ownership structures along the battery value chain illustrate the global competition for critical raw materials and show how vulnerable Europe is when it comes to stability and resilience.

With this in mind, we regard the new Battery Production Days (BPD) primarily as a platform for exchange, inspiration, and collaboration. By focusing on the battery cell from development to production, we are responding to the growing need for in-depth discussions and industrial solutions. With BatteryCityMünster as the new venue, we are opening a new chapter in the succession of the renowned Aachen "Electric Vehicle Production Days".

In future, the BPD will alternate between Münster and Aachen every year. In this way, we are building a bridge between two strong locations to jointly advance battery research. We therefore cordially invite you to the first edition of the Battery Production Days! Be inspired by the latest innovations, gain unique insights into Europe's open research platform for battery cell production in the "FFB PreFab", exchange ideas with leading experts and industry colleagues, and let us work together to provide new impetus for the further development of this key technology!

We look forward to a personal exchange with you! All the best,

Prof. Dr. Achim Kampker Director of PFM & Director of Fraunhofer FFB

Prof. Dr. Heiner Heimes Member of PFM Institute Management

/ Hi Hi Jens Tach Prof. Dr. Jens Tübke

Executive Director of Fraunhofer FFB & Division Director at Fraunhofer ICT

Prof. Dr. Simon Lux Director of Fraunhofer FFB

## BACK TO THE TOP WITH OUR TAKING THE CURVE WITH **OWN EXPERTISE**



Dear participants,

The wake-up call is coming from all over the world: Competition is increasing, and a good reputation alone is no guarantee of success. This has also been felt by those who were recently regarded as great pioneers. Increasing dependencies in global trade relations and supply chains are creating more and more uncertainty. Nevertheless, as the largest industrial employer and one of the sectors with the highest turnover in Germany, mechanical and plant engineering is keeping up the pace of innovation.

If innovative manufacturing processes are to continue to provide secure jobs and technological sovereignty in Europe, we need reliable market conditions and targeted incentives. Approval processes must be accelerated, bureaucratic hurdles removed and research into batteries as well as production technologies secured in the long term. Expanding joint industrial research means developing our own expertise as a hard currency in global competition! Sustainable European production must be economically viable. Scalable production capacities, easy access to financing, and a strategically coordinated industrial policy at EU level are essential for this.

In these times, it is particularly important that together we make the difference: machine and plant manufacturers, industry and research. With this in mind, we wish you a lively exchange at the Battery Production Days!

Vice President of the German **Engineering Industry Association** (VDMA)

# **INNOVATIVE DRIVE**



Dear reader.

For decades, the automotive industry has been Germany's constant engine of prosperity. However, the transformation on the road to climate-neutral and digital mobility has presented the industry with major challenges and has brought unparalleled dynamism to the global market. The German automotive industry is resolutely helping to shape this change and is investing large sums in the mobility of the future. From 2025 to 2029, around 320 billion euros will be invested in research and development, and a further 220 billion euros in production sites worldwide.

For Germany to remain a competitive business location, we need a change of mentality in politics from Berlin and Brussels. This includes better framework conditions, especially with regard to energy prices, digitalization, and bureaucracy, in order to strengthen innovations made in Germany. However, more intensive state funding for research projects must also be at the top of the agenda - because a strong alliance between industry and science as well as the rapid transfer of research success to series production help us move forward. We therefore strongly support the Battery Production Days and wish all participants exciting discussions, valuable insights, and successful new partnerships!

Milder I Sele Hildegard Müller

President of the German Association of the Automotive Industry (VDA)

## **INDUSTRY ADVISORY BOARD**



Arnd Franz Chairman of MAHLE Group Management Board & CEO, MAHLE GmbH



Dr. Sarah Michaelis Head of VDMA Battery Production & Deputy Managing Director EMINT,



Dr. Michael Salmen Head of Manufacturing Engineering Battery Systems, Daimler Truck AG



Prof. Dr. Jens Tübke Executive Director of Fraunhofer FFB & Division Director at Fraunhofer ICT



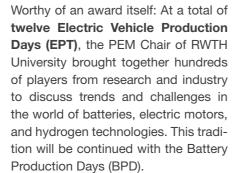
**German Wankmiller** CEO. GROB-WERKE GmbH & Co. KG



A LOOK BACK AT PAST EVENTS













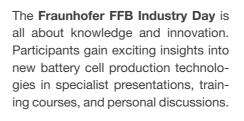








The opening ceremony marked the official launch of the FFB PreFab: Partners from industry and research have the opportunity to build, test, and further develop innovative systems and technologies here. North Rhine-Westphalia's Minister President Hendrik Wüst and numerous guests from the worlds of science, business, and politics attended the opening.









SPECIAL INSIGHTS INTO FRAUNHOFER FFB









# **BATTERY PRODUCTION DAYS (BPD)**

October 21st & 22nd, 2025

With the Battery Production Days, the organizers of the renowned Electric Vehicle Production Days (EPT) are setting a new focus – on battery production. PEM of RWTH Aachen University, Campus Forum, and Fraunhofer FFB invite everyone interested to come to BatteryCityMünster on October 21<sup>st</sup> and 22<sup>nd</sup>, 2025 for the first BPD.

Participants can look forward to an exciting exhibition and a top-class conference with sessions on topics such as Innovations in the Manufacturing Process, Scaled Battery Cell Production, or Quality Assurance and Modern Factory Planning – with top decision-makers, technology pioneers, and production managers from the entire value chain of battery production. Take the opportunity to discuss current trends, discover the latest technologies, and exchange ideas with leading experts!

#### The Battery Production Days are aimed at a diverse specialist audience, including

- managers and decision-makers from the battery and automotive industry,
- production managers and engineers directly involved in manufacturing and production optimization,
- · companies and start-ups that develop new technologies or services for the industry,
- political players and funding institutions supporting the battery industry's strategic development,
- scientists and researchers working on innovative approaches to battery production.

#### THE PARALLEL PRESENTATIONS' VARIETY AT A GLANCE

QUALITY ASSURANCE AND MODERN FACTORY PLANNING



DIGITALIZATION IN BATTERY CELL PRODUCTION



INNOVATIONS IN BATTERY CELLS



BATTERY TESTING AND ANALYSIS



INNOVATIONS IN BATTERY CELL PRODUCTION



BATTERY RECYCLING AND "END OF LIFE"



## YOU ARE WELCOMED BY...

Hildegard Müller
President of the German Association
of the Automotive Industry (VDA)



## THERE WILL BE PLENARY SPEECHES BY:



**Bjoern Ingo Hogg**Expert Technology Battery Cell,
BMW Group



**Prof. Dr. Achim Kampker** Director of PEM & Director of Fraunhofer FFB



Andreas Löhrke
SVP Product Line
Cylindrical Cells and Series R&D,
CustomCells



Dr. Ahmad Mikael Mohsseni Head of Global Engineering Center (GEC), AESC Europe



Thomas Rivault
Director of EU Projects
and Competency Center,
Hynn Technology Europe GmbH



**Dr. Michael Salmen**Head of Manufacturing
Engineering Battery Systems,
Daimler Truck AG



Prof. Dr. Jens Tübke
Executive Director of
Fraunhofer FFB & Division
Director at Fraunhofer ICT



Dr. Hannes Weinmann
Head of International
Technical Center,
Lead Intelligent Equipment
(Deutschland) GmbH



## **LOCATION: MÜNSTER**

Münster not only is a bicycle town worth living in but also a renowned location for innovation and science. As BatteryCityMünster, the Westphalian town is developing into a leading center for battery research and technology scaling. Münster combines scientific excellence with a clear commitment to climate neutrality and a future-oriented economy.

With the Fraunhofer Research Institution for Battery Cell Production FFB, the MEET Battery Research Center at the University of Münster, and other excellent research institutions, Münster is setting standards in the development of sustainable battery technologies and the industrialization of innovative production processes.

As a "climate city," Münster is pursuing a consistent strategy for sustainable urban development - from low-emission mobility to the promotion of climate-friendly technologies. This makes Münster the ideal venue for the Battery Production Days.

## THE EVENT CENTER

The "Messe und Congress Centrum Halle Münsterland" is the region's largest event center, with more than 98 years of experience in organizing international trade fairs, congresses, and conferences. On October 21st and 22<sup>nd</sup>, 2025, it will provide the setting for the first Battery Production Days.

With three exhibition halls covering more than 18,000 square meters, a congress center with a plenary hall and flexible breakout rooms, a large event hall, and 30,000 square meters of outdoor space, the center meets all the requirements for a technology-oriented trade event. Exhibitors and visitors will find optimal conditions for specialist presentations, live demonstrations, and direct exchange.

In addition to modern infrastructure and barrier-free certification, the center impresses with first-class event logistics, while Stolzenhoff Catering provides tailor-made catering.



## WHEN NIGHT FALLS

There are numerous hotels in Münster to choose from for your overnight stay.

Recommendations near the venue:

- B&B Hotel Münster Hafen
- Hotel Meliá Münster
- ATLANTIC Hotel Münster
- Hotel Conti Münster

**Service phone:** +49 (0)251 492 27 26 E-mail: tourismus@stadt-muenster.de Website: https://bit.ly/BatteryProductionDays



## **Exhibition**

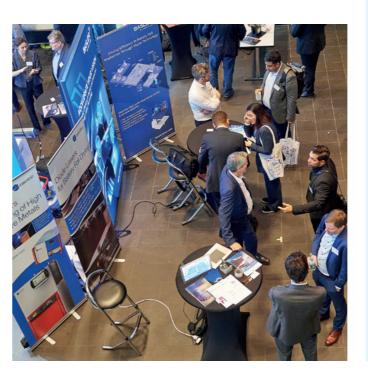
Use the event for a direct exchange with our partners. Find out more about innovations in battery production and attractive offers for your company. You will also be inspired by the current research of the Fraunhofer FFB and the PEM Chair of RWTH Aachen University!

As an event partner, you can help shape the conference program as part of the exhibition and through "Meet the Partners" pitches. Present your company in event marketing as well as your products and services live at the conference!

Would you like to present your company at BPD in the form of a partnership?

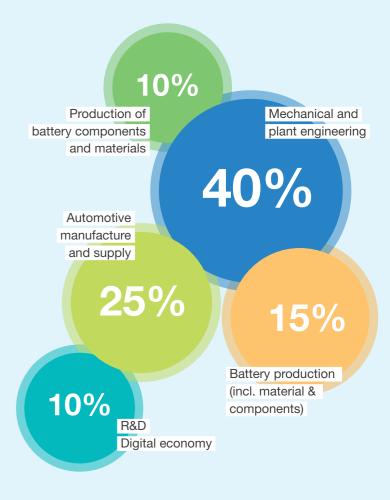
Please feel free to contact us! More information is provided on our website:

www.battery-production-days.de



## **YOU WILL MEET**

managers and experts from the positions of management and divisional management as well as product development and planning.





GUIDED TOURS OF THE RESEARCH FACTORY

To kick off the Battery Production Days, we cordially invite you to an exclusive tour of the new "FFB PreFab" research factory. Discover pioneering European machine technology and real production environments, and experience exciting insights into ongoing innovation projects. Our experts will guide you through four thematically curated tours. The transfer from Halle Münsterland is organized for you.



#### **TECHNICAL BUILDING EQUIPMENT (TGA)**

From the innovation area to modern dehumidification and recovery systems to the refrigeration system: This tour shows how central infrastructure systems contribute to energy efficiency and operational safety.

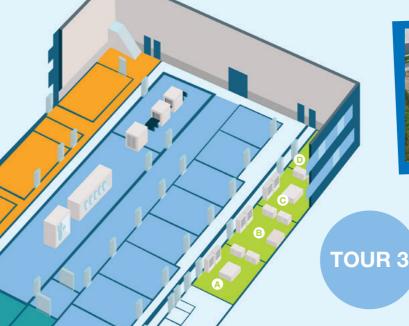


Insights into warehousing, hazardous material handling, mixing, coating, calendering, cutting, and drying: ideal for anyone who wants to experience the complex process chain of electrode production.









TOUR 4

### **CELL ASSEMBLY & FORMATION**

From pouch cell assembly to forming and end-of-line testing: This tour shows the essential process steps for the production of functional cells.



**LABORATORIES & QUALITY ASSURANCE** 

Visit innovation labs where experts from different research institutions work together on solutions for quality assurance and next-generation cell development.

**INNOVATION LABS & AREAS:** 

A JÜLICH B meet®



cells on a smaller scale - from the starting material to the

final cell. Under one roof, the technology is taken from the

laboratory through the prototype stage to the production line. The FFB team shows how expertise and research results can be transferred in a practical way - and how they can be tailored to the individual needs and objectives of each customer. State-of-the-art European plant technology enables industry-oriented production research and development in the gigawatt range.

"With the FFB PreFab, we are creating an environment in which industry, research, and development come together seamlessly. Here, companies can test, try out, and further develop their innovations in a practical environment and bring them to market faster. This concept is unique in Europe and accelerates sustainable and efficient battery cell production made in Europe. During our tours, you will experience first-hand how ideas become industrially viable solutions."

> Division Director "Strategy and Corporate Development" at Fraunhofer FFB

# PROGRAM | BPD | DAY 1 | TUESDAY, OCTOBER 21ST, 2025

8:30 AM	Admission & networking					
9:00 AM	Welcome to the 1st day of BPD by Dr. Florian Degen & Prof. Dr. Heiner Heimes, Member of PEM Institute Management					
9:15 AM	Battery Cell Production in Transition: Consolidation of a Booming Market Under Pressure Prof. Dr. Achim Kampker, Director of PEM and Director of Fraunhofer FFB					
9:45 AM	Battery Production for Commercial Vehicles – The Daimler Truck Approach Dr. Michael Salmen, Daimler Truck AG					
10:15 AM	Meet the Partners					
10:45 AM	Visit to the exhibition & coffee break					
	Session I	: Innovations in Battery Cell Production	Session II: Digitalization in Battery Cell Production	Session III: Quality Assurance & Modern Factory Planning		
11:15 AM	EPIC Solu Dennis Be		Challenges in Scrap Reduction for Coating Process: How Near-Real Time Interoperability of Systems, Machines, and Equipment Play a Crucial Role in Reducing Scrap Christober Vinoth Raj, Verkor SAS	Back to Power – Synergetic Factory Planning for Special Batteries Dr. Norbert Szimhardt, Diehl Energy Products GmbH		
11:45 AM			Battery Production 4.0 – With Digital Technologies towards Intelligent Manufacturing Dr. Hermann Uchtmann, ANDRITZ Schuler GmbH	UKBIC Capabilities to Scale up Battery Manufacturing – From Lab Level to Volume Production Richard LeCain, UK Battery Industrialisation Centre		
12:15 PM	Lunch & networking					
1:15 PM			The Future of Battery Production: Next-Gen Automation and Digital Transformation Leads in Adaptive & Autonomous Battery Manufacturing Marc Deyda, Siemens AG	Designing DryRoom-Ready Equipment for Efficient Clean Production Dr. Stefan Jakschik, ULT AG		
1:45 PM	Europe, quo vadis? The Battery Alliance – A Strategic Approach to Maintaining the Technological Sovereignty and Competitiveness of the European Automotive and Battery Industry Hans Kostwein, Kostwein Group		Current Status and Future of Interoperable Standards for Battery Production Stefan Hoppe, OPC Foundation	The Hidden Impact of Basis Weight in Electrode Coating Leon Onorio, Scantech Germany GmbH		
2:15 PM	Technology Development and Unlocking Efficiency in Formation and Ageing Thomas Rivault, Hynn Technology Europe GmbH					
2:45 PM	"FFB PreFab" presentation (tours) & safety briefing					
3:00 PM	Total dura	Total duration of the "FFB PreFab" tours incl. transfer: 2.5 hours each (for tour selection see pages 10 & 11)				
3:10 PM	Bus A					
3:25 PM	in the meantime, the exhibition					
3:40 PM	Bus C can still be visited.					
3:55 PM	Bus D					
4:00 PM	End of the exhibition					
7:00 PM	7:00 PM Award ceremony & get-together incl. dinner					

# PROGRAM | BPD | DAY 2 | WEDNESDAY, OCTOBER 22ND, 2025

8:30 AM	Admission & networking				
9:00 AM	Welcome to the 2 <sup>nd</sup> day of BPD by Hildegard Müller, President of the German Association of the Automotive Industry (VDA)				
9:15 AM	BMW Battery Cell Technology, Current Trends and Challenges Björn-Ingo Hogg, BMW Group				
9:45 AM	Meet the Partners				
10:15 AM	Perspectives on Setting up Battery Manufacturing in Europe Dr. Ahmad Mikael Mohsseni, AESC Europe				
10:45 AM	Visit to the exhibition & coffee break				
	Session IV: Innovations in Battery Cells	Session V: Battery Testing and Analysis	Session VI: Battery Recycling and "End of Life"		
11:15 AM	Innovative Materials for Future Battery Cell Generations Victor Trapp, Fraunhofer ISC	Battery Cell Design Revealed – Why Batteries Are Built The Way They Are Dr. Adrian Schmidt, Batemo GmbH	Rethinking Battery Transport for a Profitable Circular Economy Áron Németh, CTO LiBCycle GmbH		
11:45 AM	High-Power, Long-Life Lithium-Ion Batteries Dr. Philipp Dechent & Dr. Sara Luciani, Toshiba Europe GmbH, Regenerative Innovation Center	3D CT in Cell Production: Boost Efficiency, Ensure Quality, Drive Innovation Bernhard Mürkens, Head of VCbattery VisiConsult X-ray Systems & Solutions GmbH	Automated Disassembly: A Key Enabling Process for a Battery Circular Economy Martin Sulzbacher, HAHN Automation Group Holding GmbH		
12:15 PM	Lunch & networking				
1:15 PM	Sodium-Ion Batteries: Technological Challenges, Development & Scaling of New Active Materials in the ZSW Synthesis Technology Center "Powder-Up!"  Dr. Peter Axmann, ZSW	Innovative Test Methods to Shorten Life Cycling by Utilizing Digital Twins Dr. Christian Miesner, AVL Deutschland GmbH	Revolutionizing the Critical Minerals Recovery from Recycled Materials with Deep Eutectic Solvents Dr. Ebbe Dommisse, londrive Europe GmbH		
1:45 PM	Innovative Mechanical Components Can Improve Cell Performance! Dr. Peter Kritzer, Freudenberg SE	Closing the Loop: EOL Quality Inspection for Fast Ramp-up and Consistent High-Yield Battery Production Dr. Alexander Gitis, Safion GmbH	The EU Recycling Market: A Viable and Sustainable Business Dr. Philipp Rose, PwC Strategy& GmbH		
2:15 PM	Visit to the exhibition & coffee break				
2:45 PM	Fraunhofer Batteries: Research Areas and Strategic Innovation Prof. Dr. Jens Tübke, Fraunhofer Alliance Batteries/ Executive Director of Fraunhofer FFB				
3:15 PM	Scaling Battery Cell Production: Real-World Challenges and Solutions from an Industrial Manufacturer Dr. Hannes Weinmann, Lead Intelligent Equipment (Deutschland) GmbH				
3:45 PM	46XX - Standardized Cell Form Factor for Multiple Performance Applications Andreas Löhrke, CustomCells Holding GmbH				
4:15 PM	Farewell		REGISTER NO.		

REGISTER NOW

# PARALLEL SESSIONS | DAY 1

OCTOBER 21<sup>ST</sup>, 2025

#### **SESSION I:**

#### INNOVATIONS IN BATTERY CELL PRODUCTION

- New production technologies to increase efficiency from electrode production to cell finishing
- Sustainable production approaches to reduce waste, energy, and material consumption
- Advanced system concepts for innovative cell formats and scalable production lines



#### **DIGITALIZATION IN BATTERY CELL PRODUCTION**

- Interoperability in cell production: how people, machines, IT systems, and data standards need to work together
- Digital standards & AI: which technologies enable and accelerate integration
- · Competitive advantage through networking: efficiency, scalability, and innovation through smart integration
- Best practices & outlook: what is already working today - and what will be possible tomorrow



#### **QUALITY ASSURANCE AND MODERN FACTORY PLANNING**

- Technical cleanliness: avoiding particle contamination,
- Production ramp-up: challenges and best-practice approaches when starting up battery production



# PARALLEL SESSIONS | DAY 2

OCTOBER 22<sup>ND</sup>, 2025



### **SESSION IV:**

#### **INNOVATIONS IN BATTERY CELLS**

- Innovative materials for future cell generations
- Scaling up the production of innovative materials
- Opportunities and challenges of sodium-ion technology
- Disruptive development of cell components



#### **BATTERY TESTING AND ANALYSIS**

- Innovative inline-capable test methods for the detection of production-related cell defects
- Reducing the test duration of time-consuming test procedures using digital twins
- Best practices & outlook: mutual implications between battery cell design and performance characteristics



- Quality assurance: avoiding errors in production and the battery cell
- especially in clean rooms and dry rooms



#### **SESSION VI:**

#### **BATTERY RECYCLING AND "END OF LIFE"**

- Innovative concepts for safe and economical battery transportation
- Automated disassembly as a key process for the circular battery economy
- New technologies for recovering critical raw materials from recycling materials
- Economic efficiency and sustainability of battery recycling in Europe

## THE EVENT PARTNERS



#### PEM | RWTH Aachen University (Production Engineering of E-Mobility Components)

The PEM Chair of RWTH Aachen University is dedicated to all aspects of electrified mobility in research, consulting, and teaching - from the production and recycling of battery systems to the production of hydrogen technologies and the electric drivetrain through to entire vehicle concepts.

The PEM team is engaged in numerous national and international research projects as well as in collaborations with renowned industrial partners. The focus is always on sustainability and cost reduction - with the aim of a seamless "innovation chain" from basic research to largescale production in close proximity.

www.pem.rwth-aachen.de



### Fraunhofer Research Institution for Battery Cell Production FFB

As an open battery cell factory for research and development, Fraunhofer FFB plays a key role in driving forward the sustainable and efficient production of battery cells made in Europe. To this end, an infrastructure for the development and testing of the production of various battery cells is being created in Münster that is unique in Europe.

FFB's research offer is open for companies from the mechanical and plant engineering sector, the battery cell production sector, and integrators of lithium-ion battery cells who want to further develop their products based on the latest cell technologies. The interdisciplinary FFB team combines strong methodological competence with comprehensive battery expertise and supports research projects in Münster or directly at companies on site.

www.ffb.fraunhofer.de



#### Campus Forum GmbH at RWTH Aachen Campus

Campus Forum is your service provider for continuing education at RWTH Aachen Campus. Whether in Aachen or in-house, as e-learning or as blended learning - we impart knowledge from experts from science and industry to interested parties. We offer conferences, seminars, and workshops on topics such as digitalization and production, innovation management, electric mobility, manufacturing processes, and much more.

If you are planning your training, we will support you - from the content and organizational concept to implementation and support. We make knowledge tangible for direct implementation. www.campusforum.de



#### In collaboration with Battery-News.com

"Battery-News" is a news platform that reports daily on important developments in the world of lithium-ion batteries and new battery technologies. The aim of the platform is to network the German and international battery scene even more closely to meet the great need for information of numerous companies and their employees. One of the platform's most popular publications is the Battery Atlas, covering all aspects of the entire battery value chain by using maps which are dedicated to the European and the North American as well as the Asian regions and are available for download.

www.Battery-News.com

## **ORGANIZATION**

#### Date

October 21st & 22nd, 2025 | BPD

#### Conference fee

€1,490 - total event fee

Course materials, refreshments during breaks, lunch, tour, and evening event are included for the entire two days, but not the costs for accommodation and travel to and from the event. Please do not pay until you have received the invoice. If you cancel your registration up to one week before the event, €100 will be charged for administrative costs. Otherwise, the full participation fee will be charged.

#### Venue of the 1st BPD

Messe und Congress Centrum (MCC) Halle Münsterland Albersloher Weg 32 | 48155 Münster



#### Registration

Online until October 14th, 2025, addressed to Campus Forum, Aachen. It is also possible to make a provisional reservation by telephone. If we have not received your written registration by four weeks before the start of the event, we reserve the right to allocate your provisionally reserved place to other interested parties. Registrations will be considered in the order in which they are received.

### Deutsche Bahn Special -**Congress Ticket**



In collaboration with Deutsche Bahn, we offer you a relaxed cost-effective, and resource-saving journey to and from the congress.

Your outward and return journey on long-distance Deutsche Bahn services with the event ticket will be powered by 100 percent green electricity.

#### Your contact



For content Fraunhofer FFB Phillip Suttmever **BPD Project Manager** phillip.suttmeyer@ffb.fraunhofer.de

www.ffb.fraunhofer.de in





Organizational Campus Forum GmbH Dolores Gašparović, M.A. **Project Management Training** +49 (0)241 8023-612 d.gasparovic@campusforum.de

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## Accommodation

Comprehensive advice, information, and tips about the Congress Centrum in Münster:

MÜNSTER MARKETING

Klemensstraße 10

48143 Münster

Phone +49 (0)251/492 27 26 +49 (0)251/492 77 42 tourismus@stadt-muenster.de F-mail

Room reservations:

https://bit.ly/BatteryProductionDays



Further information is provided on our website: www.campusforum.de

> **ONLINE REGISTRATION:** WWW.BATTERY-PRODUCTION-DAYS.DE





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