SEMINAR INFORMATION

HANDS-ON LITHIUM-ION BATTERY SEMINAR

24th + 25th November 2021 - ITZEHOE - GERMANY

ABOUT THE SEMINAR

The Hands-On Lithium-Ion Battery Seminar - from state of the art to future technologies - focusses on the industrial production of lithium-ion cells. In practical modules, starting from the raw materials, slurries and electrodes going to the production of pouch cells and closing with the electrochemical characterization, the cell assembly will be performed hands-on. The corresponding lecture program gives insights to the latest technology trends on material and on machinery as well as on processing side. The battery seminar takes place on site at the Fraunhofer ISIT as CUSTOMCELLS® R&D partner. The practical parts take place at CUSTOMCELLS®.

KEY BENEFITS - The Seminar provides
+ Practical sessions to learn about all lithium-ion cell production steps
+ Supporting lectures on the practical session, technology, processes, machinery and market
+ Updates about the latest technology trends in lithium-ion batteries (all-solid-state for example)

WHO SHOULD ATTEND?

New technology startups • Pack assemblers • Energy storage/Power R&D engineers • Energy storage supplier • Academic researchers • Automotive industry manager • Chemical industry manager • Other industry members

SEMINAR PROGRAM TOPICS

Practical on-site session

Lectures
Technology Overview – Active Materials – Electrode Characterization – Customizing - Batteries – System Layout

SEMINAR LOCATION
Fraunhofer ISIT
Fraunhoferstrasse 1
25524 Itzehoe
Germany

REGISTRATION:
F: +49 4821 133 92 00
M: contact@customcells.org

Registration form available at
www.customcells.org/services/workshops-seminars
SEMINAR AGENDA

HANDS-ON LITHIUM-ION BATTERY SEMINAR

24TH NOVEMBER 2021

8:30  Registration Fraunhofer ISIT, Fraunhoferstr. 1, 25524 Itzehoe
9:00  Welcome to “INDUSTRIAL BATTERY MANUFACTURING TRAINING” – Torge Thönnessen – CUSTOMCELLS®
9:15  Safety instructions – Christian Werlich – Fraunhofer ISIT / Dr. Daniela Werlich – CUSTOMCELLS®

TALK SESSION I
9:30  Introduction lithium-ion technology – Dr. Andreas Würsig – Fraunhofer ISIT
10:10 Introduction of all-solid-state technology – Prof. Dr. Jürgen Janek – University of Giessen
10:50 Processing of elemental lithium – TBD – Fraunhofer Institute ISC
11:30 Cathode materials – Dr. Daniela Werlich – CUSTOMCELLS®
12:10 Lunch break

TALK SESSION II
13:00 Electrolytes – Dr. Ralf Wagner – E-Lyte Innovations GmbH
13:40 Production processes and customization – Dr. Daniela Werlich – CUSTOMCELLS®
14:20 Extrusion – Markus Fiedler – Coperion GmbH
15:00 Coffee break

PRACTICAL SESSION I (in three groups)
16:15 Slurry mixing – theoretical and practical training – Extruder
Anode coating on roll to roll coating line – practical training –
Advanced machinery for electrode coating – Clemens Disch – Werner Mathis AG

18:45 Conclusion first day – Dr. Daniela Werlich – CUSTOMCELLS®
20:00 CUSTOMCELLS® invites for a get-together and dinner (Chili event house auf Amönenhöhe - Breitenburger Weg - 25524 Oelixdorf)

25TH NOVEMBER 2021

09:00  Registration Fraunhofer ISIT, Fraunhoferstr. 1, 25524 Itzehoe

TALK SESSION III
09:30  Electrochemical characterization – Christian Werlich – Fraunhofer ISIT
10:10  All-solid-state test cells – Daniel Alves Dalla Corte – Sphere-Energy
10:50  Dry rooms – Dipl.-Ing. (FH) André Meyer – Munters GmbH
11:30  Battery safety – Dr. Daniela Werlich – CUSTOMCELLS®
12:10 Lunch break

PRACTICAL SESSION II (in six groups)
13:00 Assembly of pouch cells – practical training: Cutting - Stacking - Tab welding - Pouch packing - Electrolyte filling - Formation
15:30 Coffee break

TALK SESSION IV
16:45 Market classical and all-solid-state – Ines Miller – P3 automotive GmbH
17:00 Tour through Fraunhofer ISIT

SEMINAR PRICING
Commercial € 3,100 + VAT
Academic*  € 1,550 + VAT  *Copy of an academic institute ID is required

10% discount for 3+ group attendees. The number of participations is limited. Pricing includes hard copy print out of all seminar presentations, lunch, refreshments and an invitation for a get-together and dinner. Booking is concluded after receiving confirmation. The organizer is allowed to reject potential participants in exceptional cases. Cancellation of registration: Only written notice will be accepted.
Until November 10, 2021 – 50% refund - After that date no refund. If the event is cancelled due to Covid-19 or there are entry restrictions, you will get your entry fee back.

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