



FRAUNHOFER INSTITUTE FOR MATERIAL AND BEAM TECHNOLOGY IWS

Call for abstracts

You are highly welcome to present your latest research results with a lecture or a poster presentation. Abstracts (maximum one page) should be written in English, including name, company and e-mail address of the corresponding author. Please use the template provided at www.iws.fraunhofer.de/materials-for-energy.

Topics

- Synthesis and characterization of advanced carbon electrode materials
- Processing of carbon electrodes
- Carbon electrodes in energy storage and conversion
- Processing of Lithium metal anodes
- Protective coatings on Lithium anodes for battery applications
- Safety and performance of Lithium anodes in future generation batteries

Deadlines

Abstract submission:	
Acceptance notification of authors:	

July 31, 2019 August 31, 2019

Please send your abstract to **manja.hanke@iws.fraunhofer.de**. We will review all contributions and decide whether your topic will be presented orally or as a poster. Accepted contributions will be published in the abstract booklet.

Venue

Fraunhofer-Institut für Werkstoff- und Strahltechnik IWS Winterbergstr. 28 01277 Dresden, Germany

Conference fee

Single workshop:195 EUR*Both workshops:350 EUR*

^{*}Included in the Workshop fee: Lab tour and poster session with gettogether on November 18, 2019.

Workshop office

Manja Hanke ☎ +49 351 83391-3561 ♣ +49 351 83391-3300 ⊠ manja.hanke@iws.fraunhofer.de

MATERIALS FOR ENERGY

WORKSHOPS "CARBON ELECTRODE MATERIALS" & "LITHIUM METAL ANODES"

NOVEMBER 18-19, 2019







www.iws.fraunhofer.de/materials-for-energy





BATTERY RESEARCH @FRAUNHOFER IWS

NOVEMBER 18, 2019 WORKSHOP "CARBON ELECTRODE MATERIALS"

NOVEMBER 19, 2019

WORKSHOP "LITHIUM-METAL ANODES" PROCESSING AND INTEGRATION IN NEXT-GENERATION BATTERIES

Fraunhofer IWS scientists focus their research on electromobility and stationary energy storage systems. Thanks to a profound know-how and a large variety of manufacturing technologies, they service the complete process chain for the development of new battery cells with a focus on material, surface and laser technologies. The Center for Battery Research, established at IWS, bundles all the expertise and helps to support enterprises with solutions today and in the future.

Two workshops – one goal: Shaping the future of energy systems

The development of new materials, their processing and integration into applications are key aspects for generations of safe and highgrade future energy storage systems. Combined within the joined topic of "Materials for energy" Fraunhofer IWS provides two topical workshops covering latest innovations for two different classes of electrode materials and their impact on enhanced energy storage. Carbon electrode materials play a key role in energy storage and conversion systems. They find application in

- Batteries,
- Supercaps and
- Electrocatalysis

Carbon materials will be a critical component in developing future generation devices, such as Lithium-Sulfur and solid-state batteries, as well as hybrid capacitors. Carbon black, graphite, graphene and carbon nanotube based electrode materials offer a wide range of structural and electrical properties, ready to be tailored for emerging applications and markets. The workshop brings together experts from industry and research to discuss the most recent developments of new materials, processes and applications.

Duration: 9:00–17:00 Language: English Lithium-metal anodes are regarded as key elements for battery systems of the future. While being already applied in high gravimetric energy density Lithium-Sulfur cells, Lithium-metal anodes are receiving growing attention for application in solid-state batteries and alternative liquid electrolyte battery technologies with high volumetric energy density.

Following the needs for applying Lithium-metal anodes, internationally renowned experts from industry and academia will present their latest results on the following topics:

- Raw materials: resources and refinement
- Lithium anodes: deposition, protection and processing
- Lithium-metal battery cells: design, safety and application

Duration: 9:00–17:00 Language: English

JOINT EVENTS ON NOVEMBER 18, 2019 17:00–18:00 Lab Tour @ Fraunhofer IWS
18:00–21:00 Poster Session & Get Together
The events address participants of both workshops.