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Latest news around battery research

Emerging markets for mobile energy storage currently boost the interest in next generation batteries. The Fraunhofer IWS will present the latest results at the 5th "Lithium-Sulfur Battery Workshop" on November 21 - 22, 2016 in Dresden. Renowned national and international experts from industry and science will come together to gain profound insight in the current and future trends and developments.

Holger Althues, coordinator of the IWS Battery Center and project manager of several related research projects comments on the recent status of the Li-S-technology: "Lithium-sulfur batteries are still the most promising innovation for future energy storage devices. They offer the potential to significantly reduce the weight and decrease the costs when compared to Li-Ion-batteries. The major challenge, however, is to improve the lifespan of lithium-sulfur batteries. Key to achieve this is to stabilize the electrolyte and lithium anode interface through material innovations. New electrolytes or protective films have to be discussed and evaluated as potential solutions.

Recently, IWS scientists have introduced a new electrolyte composition with drastic effect on the cathode and anode chemistry. This approach allows to reduce the volume of electrolyte in the system in order to increase the volumetric and gravimetric energy density on cell level. Anode corrosion, the main reason for cell failure, is much less severe and the electrolyte's low flammability is an additional safety advantage. First results on prototype cells will be presented during this year's Lithium-Sulfur-Workshop.

Please visit our 5th Workshop "Lithium-Sulfur-Batteries" November 21 - 22, 2016, at the International Congress Center in Dresden. The program and registration form you will find at www.iws.fraunhofer.de/battery-workshop.



Lithium sulfur batteries: electrodes and prototype cells
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