

Processing of cathode composite materials for Aerospace applications



This project focuses on the development of cathode composites for a Lithium-sulfur battery system, which is to be used in aviation. One of the main challenges originates from the dissolution of polysulfides, which leads to a rapid loss in capacity and poor cycling stability.

For this purpose, sulfur can be trapped inside a porous carbon structure, which will increase the stability and structure of the cathode. The performance of the produced cathode will be electrochemically characterized against lithium metal and with a liquid electrolyte. The degradation of the battery will be investigated using various material characterization techniques such as TGA, FTIR, SEM/EDX, etc...



Li-Sulfur battery for aviation.

Suitable for all types of thesis

by students working on their degree in chemistry, material sciences, engineering, energy or any similar studies with training in laboratory practice. The range of the project can be adjusted to suit your interest and the requirements each thesis. Contact:

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