

Advanced European lithium sulphur cells for automotive applications

MISSION

Li-S cell in 18650 configuration with energy density of 500 Wh/kg showing high cycle efficiency and durability reflected by automotive industry.

FOCUS

- * To understand the electrochemical environment;
- * To optimize cathode composite and electrolyte;
- * To develop analytical tools for better understanding;
- * To produce 3 generations of cells.

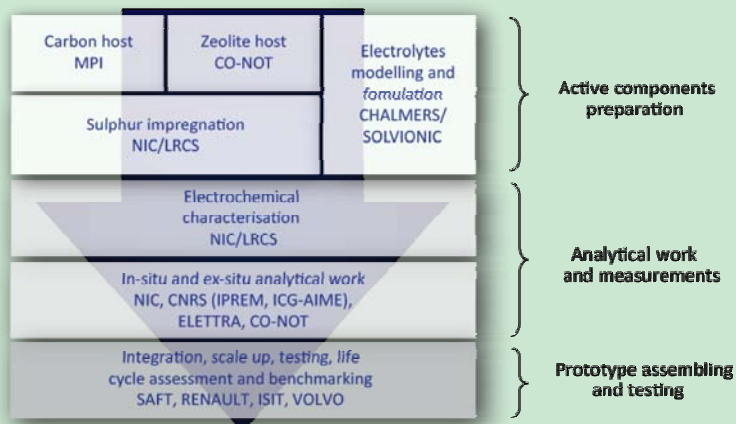
RESEARCH TOPICS

- * Cathode composite, electrolyte and separator (mesoporous carbonaceous host structures)
- * Ionic liquids and modelled electrolytes
- * Analytical tools
 - Spectroscopic (XPS, XAS, UV-Vis)
 - Electrochemical (4-electrode cell,...)
- * Benchmarking of other technologies (Redox flow, all solid state and Si-Li2S)
- * Integration, scale up, testing, LCA and benchmarking of Li-S batteries

PARTNERS

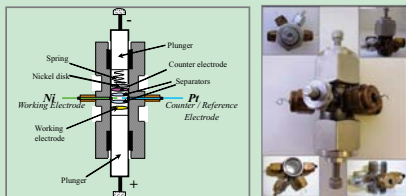
5 countries, 11 partners

Academia and research institutions	Industry

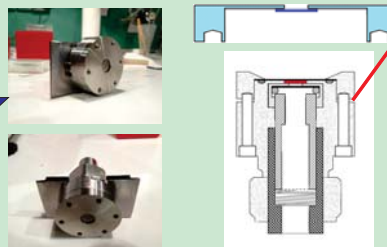


RESULTS - ANALYTICAL CELLS FOR OPERANDO MODE

4-electrode modified Swagelok cell

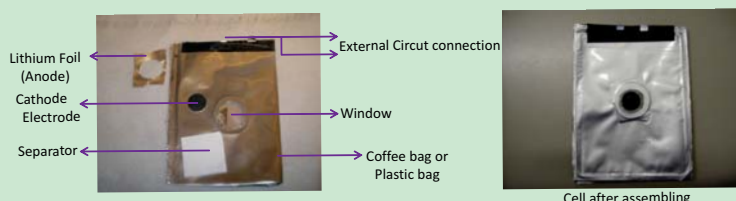


Swagelok type XAS cell



Analytical tools for Li-S batteries

UV-VIS cell



PROJECT COORDINATOR OR CONTACT PERSON

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