

PROJECT

DianaBatt

Diagnosis of aging, safety and recyclability of Li-ion batteries

Diagnostik zu Alterung, Sicherheit und Wiederverwertbarkeit von Li-Ionen-Batterien

Funding: National (Austria)

Duration: Nov 2016 - Apr 2019

Status: Complete



Objectives:

Online monitoring of the gases evolving in Lithium ion batteries with a Multiplex-GCMS-FTIR can determine the state of all cell components. Relevant parameters like voltage, charge and discharge current and age of the cell can be controlled and varied. Thus, potential dangers from emitted gases can be gauged and their toxicity determined. This significantly eases evaluation of solutions for recycling, disposal, and second life applications. It also contributes to safer battery systems. In sum, these results lead to lower lifetime cost and enable safe implementation of future active materials, which lead to higher energy densities.

Parent Programmes:

[MOTF - Mobility of the Future](#)

Institute type: Public institution

Institute name: FFG - Die Österreichische Forschungsförderungsgesellschaft

Funding type: Public (national/regional/local)

Other programmes: MdZ - 6. Ausschreibung 2015

Lead Organisation:

Ait- Austrian Institute Of Technology Gmbh

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Organisation Website:

<http://www.arcs.ac.at>

Partner Organisations:

Daxner & Merl Gmbh

Address:

Am Breitenstein 3
97922 Lauda-Königshofen
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Technische Universität Wien Institut Für Chemische Technologien Und Analytik

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1060 Wien
Austria

Technologies:

Electric vehicle batteries (and energy management)
EV battery recycling technologies

Development phase: Research/Invention

STRIA Roadmaps: Transport electrification, Vehicle design and manufacturing

Transport mode: Road transport

Transport sectors: Passenger transport, Freight transport

Transport policies: Environmental/Emissions aspects, Safety/Security

Geo-spatial type: Other