

**Acronym**

DigiCell

Full Title

Battery Material Characterisation and Digital Twins for Cell to Pack Performance in Agile Manufacturing Pilot Lines and Automotive Field

Programme

HORIZON-CL4-2023-DIGITAL-EMERGING-01

Contract Number

101135486

Abstract

On the path to Europe's green industrial shift, reliability and innovation in battery technology stand at the forefront. With this in mind, the EU-funded DigiCell project will focus on the intricacies of advanced functional materials at a multi-scale level. It will introduce a digitally integrated framework. This framework enhances the manufacturing processes of high-performance Lithium-ion batteries and beyond. By employing innovative characterisation methods and machine learning, DigiCell significantly reduces production costs, materials waste, and CO2 footprint. The project's holistic approach emphasises open-source algorithms, data standardisation, and quality assessments, ushering in a new era of efficiency and sustainability in battery production.

Duration

36 months (01/01/2024 – 31/12/2026)

Project Funding

€ 5.405.098

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Project Website

www.digicell-project.eu