FASTEST

Fast-track hybrid testing platform for the development of battery systems

FASTEST GOAL

The FASTEST project aims to develop and validate a fast-track testing platform able to deliver a strategy based on the Design of Experiments (DoE) and robust testing results, combining multi-scale and multi-physics virtual and physical testing. This will enable accelerated battery system R&D and more reliable, safer and long-lasting battery system designs.

The project's prototype of a fast-track hybrid testing platform aims for a new holistic and interconnected approach. From a global test facility perspective, additional services like smart DoE algorithms, virtualized benches, and DT data are incorporated into the daily facility operation to reach a new level of efficiency.

During the project, FASTEST consortium aims to develop the platform and its components: the optimal strategies according to three different use cases (automotive, stationary, and off-road). The development of a complete set of physic-based and data-driven models able to substitute physical characterization experiments and the overarching Digital Twin architecture managing the information flows and proven and integrated prototype of the hybrid testing platform.

CONTACT US

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FASTEST OBJECTIVES

1 To develop and test the fast-track hybrid testing platform.

2 To stocktake and propose efficient DoE strategies.

3 To set up a Digital Twin (DT) information management architecture.

4 To develop and validate physics-based and data-driven models for simulating and substituting critical physical characterisation experiments.

5 To lay down the pathway for results' exploitation and dissemination.

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