

BATTwin

Flexible and scalable digital-twin platform for enhanced production efficiency and yield in battery cell production lines

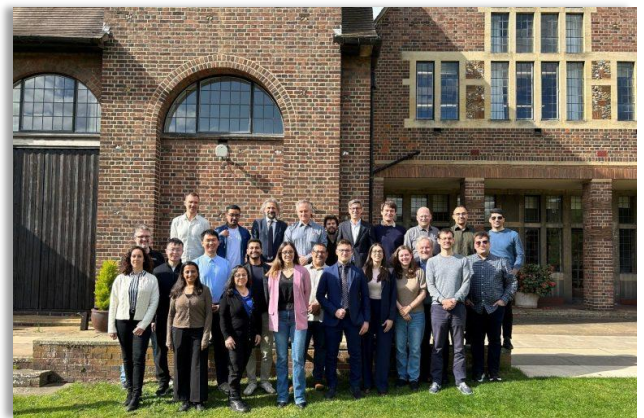
Newsletter

2026 – Issue 1

BATTwin Project

BATTwin Partners Meet in Cambridge

The BATTwin consortium met on 15 April at Homerton College in Cambridge to review project progress and plan the next steps toward the BATTwin digital twin platform. Hosted by partner Cambridge Nanomaterials Technology Ltd., partners shared recent achievements in digital-twin integration, workflow development, and validation activities. The meeting concluded with alignment on the upcoming milestones that will guide the next phase of the project. This meeting was followed by their Open Day: **Advanced Battery Manufacturing Workshop**.



BATTwin 1st Open Day Workshop

16–17 April 2026

The 1st BATTwin Open Day Workshop titled: **Advanced Battery Manufacturing**, took place on 16–17 April 2026 at Homerton College, University of Cambridge, and online. Organised in collaboration with the **AM4BAT** and **BatCAT** innovation projects, the two-day workshop brought together experts from across the battery manufacturing community.

Around 60 participants joined in person, with a further 100 attending online. Representatives from nine additional projects also took part, whose logos are featured below.



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UK Participants are supported by UK Research and Innovation (UKRI) under the UK government's Horizon Europe funding guarantee.

The workshop was featured in the **Cambridge Independent**, with a short article published both in the print edition (see below) and online.

For more information, and read the online article, please visit the [events page](#) on the [project website](#).



Logos of participating organisations





BATTwin Two-Day Technical Workshop

BATTwin partners met in Grenoble on 29–30 January 2026 for a focused technical workshop hosted by Verkor. The two-day meeting advanced modelling, integration, and workflow development, with end-user feedback helping refine the project’s digital tools and upcoming implementation plans.

News

BATTwin Reaches Key Milestones in Digital-Twin Development for Battery Cells

The BATTwin consortium has reached key milestones in developing its digital-twin framework for battery cells, advancing model integration at both micro and macro levels. Highlighted in a recent HUN-REN SZTAKI press release, these achievements strengthen understanding and optimisation of battery-cell production. Work now continues on integrating usage workflows and expanding verification and validation for real-world application. For more information, follow [this link](#).

BATTwin Showcases Latest Advances at Battery 2030+ Collaboration Workshop

BATTwin showcased its latest developments at the Battery 2030+ Collaboration Workshop on 27 February 2026. Representing the project, Gergely Horváth (HUN-REN SZTAKI) highlighted progress on the data-storage platform, digital-twin models at both process and system level, and ongoing integration efforts. The workshop also provided an opportunity to learn from sister projects BatCat and SafeLoop and to exchange ideas on improving efficiency in battery manufacturing. The event strengthened collaboration across Europe’s battery research community and reinforced shared momentum toward more sustainable and efficient battery technologies.

BATTwin at ICMRE 2026 – Advancing Battery Manufacturing through Digitalization

BATTwin showcased its latest research at the 12th IEEE International Conference on Mechatronics and Robotics Engineering (ICMRE), held at the University of Oldenburg from 2–4 March 2026. Representing the project, Andreas Rauh and Lisa Wunderlich presented new advances in battery manufacturing, process control, and control-system engineering to an audience of more than 60 industry and academic participants. Their contributions covered control-oriented modelling for notching and stacking, disturbance estimation in electrode calendaring, and verification of reconfigurable distributed control systems. Conference papers will be available soon. These results underline BATTwin’s commitment to digitalisation and intelligent control in next-generation battery production.

BATTwin at Upcell Lisbon: Advancing the Digital Twin

BATTwin presented its latest project developments during a dedicated session at the Upcell Alliance Lisbon Event on 8 April in Portugal. Project Coordinator Marcello Colledani, together with Elena Marra from Comau, showcased recent progress on BATTwin’s system-level digital twin, highlighting advancements that enhance production efficiency, predictive capabilities, and overall system performance across the battery manufacturing value chain. The event offered a valuable platform to share technical insights, engage with industry stakeholders, and reinforce BATTwin’s contribution to digital innovation within Europe’s battery ecosystem.



BATTwin Featured at the BATTERY 2030+ Annual Conference

BATTwin was featured at the BATTERY 2030+ 6th Annual Conference in Turin, where Maria Chiara Magnanini highlighted the project’s role in accelerating Europe’s battery-manufacturing scale-up. She stressed that effective defect management is essential for rapid industrial ramp-up, making Zero Defect Manufacturing a key competitiveness driver. BATTwin’s system-level integration of distributed digital twins supports better system design, stronger process control, and smarter quality-gate deployment—helping optimise productivity, yield, and product quality while reducing ramp-up time. Discussions focused on system-level approaches to process variability and the data needed to build and validate digital twins, reaffirming BATTwin’s relevance in advancing high-quality, digital European battery manufacturing.



BATTwin at the World DPP Summit 2026

BATTwin was featured at the **World Digital Product Passport Summit** in Berlin on 26–27 March 2026. At this event, Giacomo Grosa of **Bureau Veritas Italia** introduced attendees to the goals, methodologies, and technological developments behind the BATTwin project. Their presentation highlighted how BATTwin is contributing to the advancement of digital product lifecycle management and supporting industry-wide adoption of DPP frameworks.

Future events

BATTwin to Present New Research at MMAR 2026

BATTwin partners from COMAU and the University of Oldenburg will present their paper *Physics-Based Derivation of Scrap Probabilities in Battery Manufacturing* at MMAR 2026 in Międzyzdroje, Poland. The long-running conference gathers leading researchers in automation, robotics, modelling, and AI, offering strong visibility for BATTwin’s latest advances. More information on this event, please visit [this link](#)



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