

SIGNE NEWSLETTER 5

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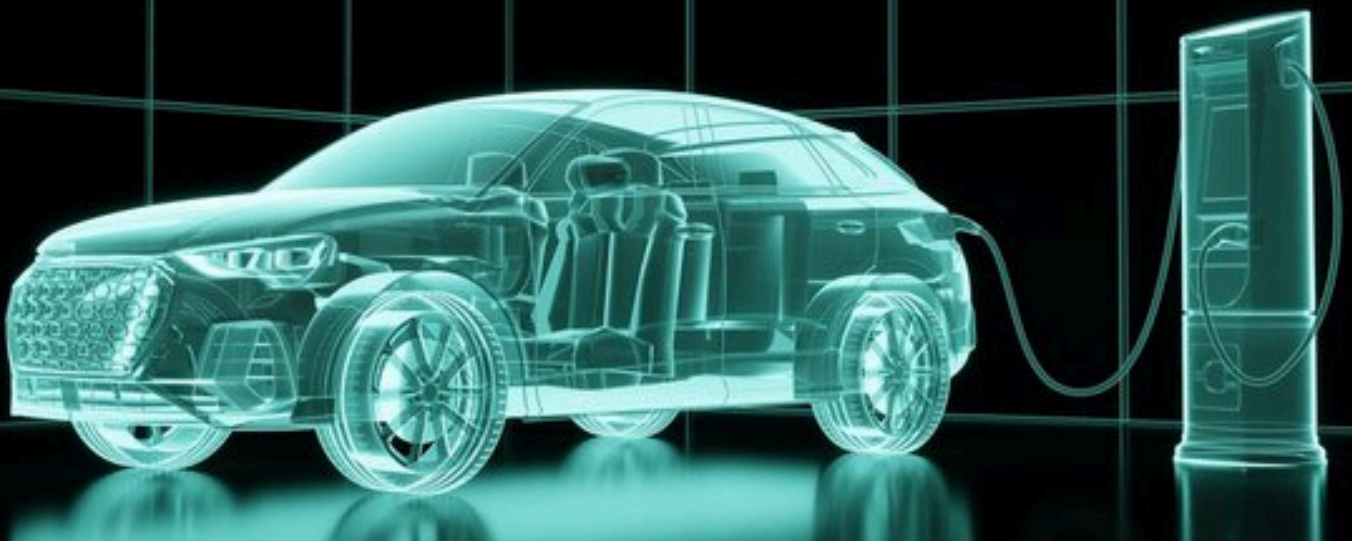
SiGNE Review Meeting Highlights

On 24 November, the SiGNE consortium came together virtually for our 2nd Review Meeting with CINEA, an important milestone as we move into the final phase of the project.

From advancing high-performance silicon-graphite anodes to successfully upscaling next-generation separators and pushing forward cathode innovation, the progress across the project has been both strong and exciting.

At the same time, the review provided valuable direction on key challenges ahead—particularly around material integration, cycle life performance, and ensuring smooth collaboration across work packages.

With a clear roadmap in place, the consortium is now entering its final phase with focus and momentum—working to translate cutting-edge research into real, scalable battery solutions that support Europe’s transition to a more sustainable and competitive energy future.



HighBatt EU Cluster



SHAPING EUROPE'S FUTURE BATTERIES



14 April 2026




10.00–11.30 CET

UL's Professor Hugh Geaney of The Horizon Europe SiGNE Project will be presenting at the upcoming #highBATTEU Cluster webinar, bringing together several EU-funded projects working on next-generation Li-ion battery technologies.


The event will feature contributions from the #highBATTEU Cluster (NEXTCELL project, HighSpin Project, IntelLiGent EU Project & SIGNE Project).

We are also delighted to welcome the BATMAX Project who will share complementary insights from the wider European battery research landscape.

This first webinar will:

-  Introduce the #highBATTEU Cluster and its vision
-  Strengthen collaboration across EU battery projects
-  Highlight advances in battery materials, modelling, and high-performance technologies

 Event Details

 Date: 14 April 2026

 Time: 10:00 – 11:30 (CET)

 Register here to join: <https://lnkd.in/eJbjSWau>

highBATTEU Cluster Webinar

Shaping Europe's Future Batteries



AGENDA 14 April 2026 | 10:00 - 11:30 (CET)

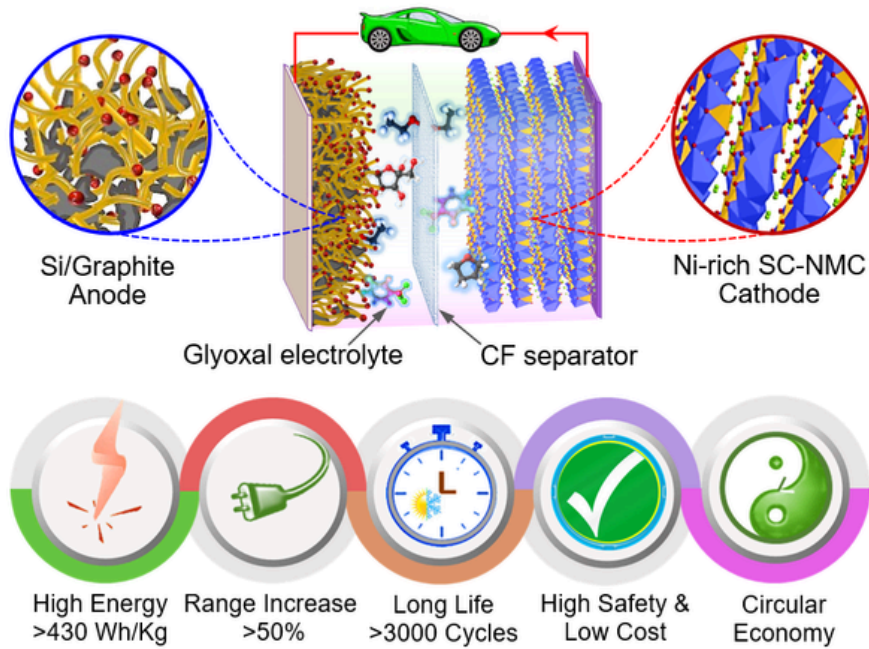
TIME	TITLE
10:00 - 10:05	Opening Rocío García (Sustainable Innovations) - C&D Manager NEXTCELL
10:05- 10:20	Overview of the HighSpin Project Ganev Boschidar (AIT)– Project Coordinator
10:20- 10:35	Overview of the IntelliGent Project Nils Peter Wagner (SINTEF) – Project Coordinator
10:35- 10:50	Overview of the NEXTCELL Project Zahra Daneshi-Far (FEV) –Project Coordinator
10:50- 11:05	Overview of the SiGNE Project Hugh Geaney (University of Limerick) - UL coordination team
11:05- 11:15	Overview of the BATMAX Project Singh Prashant (VTT) – Senior Scientist
11:15 – 11:30	Q&A and Closing Remarks



Funded by
the European Union

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SIGNE Dissemination



SIGNE's specific objectives are to :

Develop high energy density, safe and manufacturable Lithium ion battery

Optimize the full-cell chemistry to achieve beyond state of art performance

Demonstrate full-cell fast charging capability

Show high full-cell cycling efficiency with >80% retentive capacity

Demonstrate high sustainability of this new battery technology and the related cost effectiveness through circular economy considerations and 2nd life battery applications

built upon demonstrator and

Demonstrate high cost-competitiveness, large-scale manufacturability and EV uptake readiness.

- Uni Roma presented on Molecular dynamic simulation of model systems in highly concentrated electrolytes at the Winter modelling Conference in Naples
- Ul presented on Revealing seed-mediated structural evolution of copper-silicide nanostructures: Generating structured current collectors for rechargeable batteries at the ACS Conference in San Diego
- UL also presented on Optimizing Slurry Formulation for Silicon Blended Graphite Anodes: A Scalable Route to High-Capacity Li-Ion Storage at the One day Symposium on Energy Storage and Conversion in London
- We are pleased to highlight a new peer-reviewed publication from SIGNE partner Karlsruhe Institute of Technology (KIT) Karlsruhe Institute of Technology (KIT) Dominic Bresser Markus Binder

Impact of residuals on recovered nickel-rich $\text{LiNi}_{1-x-y}\text{Mn}_x\text{Co}_y\text{O}_2$ cathodes for direct recycling and reuse"

Published in Journal of Power Sources Advances (2026)



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