

2022 - 2026



ADVAGEN

Development of advanced next generation solid-state batteries for electromobility applications

NEWSLETTER #4 - NOVEMBER 2024

ADVAGEN is a Horizon Europe project gathering 14 partners from 9 European countries. It aims at developing, manufacturing and validating the most performant, stable and safe 10Ah solid-state pouch cells by developing novel materials for each of the parts that constitute a battery (i.e., the electrolyte, anode and cathode). In particular, an innovative hybrid oxide-sulfide ceramic electrolyte to be integrated with a lithium metal anode and a high Ni-rich content-based cathode.

In this newsletter, you will learn more about the ADVAGEN latest activities, as well as the ones to come.

Willing to know more about ADVAGEN and its latest developments? Visit our website and follow us on LinkedIn and Twitter!



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WHAT IS NEW?

• LATEST EVENTS

- **The first reporting period checkpoint has been successfully completed!**

A fantastic first checkpoint outcome for ADVAGEN was announced!

ADVAGEN has successfully progressed beyond M18, marking a significant accomplishment for all partners involved in the consortium. By viewing barriers, bottlenecks, and challenges as stepping stones, ADVAGEN partners are demonstrating their unwavering commitment to addressing these issues with all available resources.

The first reporting period yielded impressive scientific and engineering results. Congratulations to all ADVAGEN consortium partners!

- **5th Consortium Meeting in Turin:**

In October 2024, ADVAGEN held its 5th Consortium Meeting at POLITO in Turin, Italy. This venue provided an opportunity for the consortium to explore the labs and equipment utilised for ADVAGEN's initiatives. Additionally, it served as a chance to engage in comprehensive workshops about (1) Relevant Stakeholders for the ADVAGEN's Key Exploitable Results organised by TechConcepts, and (2) Intellectual Property Rights Management for ADVAGEN project led by ABEE, reflecting on the stakeholders involved and IPR concerns in ADVAGEN's developments.



- **IKERLAN Patent applications**

During the Consortium Meeting, Ikerlan took the opportunity to present the mock-up of the innovative module design, resulting from ADVAGEN's research.

This design resulted in a patent application, congratulations to IKERLAN for this great achievement!



WHAT IS NEW?

SOLID4B CLUSTER'S NEWS



Going solid for safer batteries



The [SOLVE project](#) joins the Solid4B cluster

SOLVE is an EU-funded project aiming to develop the batteries of the future: safer, with enhanced performance and fast-charging capabilities, and with highly sustainable and circular manufacturing.

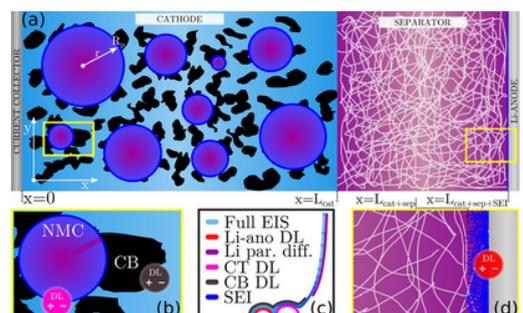
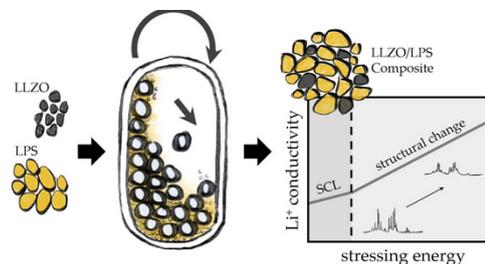
By joining the Solid4B cluster, SOLVE will gain access to experienced members and foster relationships with various initiatives. This collaboration enhances SOLVE's visibility and support among stakeholders while benefiting from Solid4B's expertise in SSB research, strengthening the European network for research and development in this field.

SCIENTIFIC PUBLICATIONS

The collaborative efforts of all partners are beginning to engage a broader audience, thanks to [scientific publications](#) stemming from the project's advancements! Don't miss the chance to explore our work in the following papers:

- **TechConcepts and ABEE:** [Drivers for Clustering and Inter-Project Collaboration—A Case of Horizon Europe Projects](#)
- **TUBS:** [Effect of Mixing Intensity on Electrochemical Performance of Oxide/Sulfide Composite Electrolytes](#)
- **Univ. of Ljubljana:** [Enhanced Porous Electrode Theory Based Electrochemical Model for Higher Fidelity Modelling and Deciphering of EIS Spectra](#)

Figure 2. Primary drivers for collaborating and clustering with other projects.



WHAT IS NEXT?

• UPCOMING DISSEMINATION ACTIVITIES

As the ADVAGEN project progresses, we are excited to announce a series of upcoming dissemination activities aimed at sharing our research advancements with the broader scientific and industrial community. In the coming months, partners will be working on scientific publications and patents focused on materials manufacturing, eco-conception guidelines, and much more. Additionally, the ADVAGEN team will be presenting at key conferences to discuss our latest findings, exchange insights, and showcase the project's impact.

Stay tuned for more details on where to find us and how to engage with our work!

• NEXT CONSORTIUM MEETING

The next ADVAGEN Consortium Meeting is scheduled for April 2025 and will be held online. This session will allow us to review progress just before the project's third anniversary, ensuring that all partners are aligned in terms of ideas, work, and solutions as we move toward the end of the second reporting period in August 2026.

Stay tuned for more updates and insights in our next newsletter, scheduled for April 2025. In the meantime, feel free to reach out with any questions or to learn more about ADVAGEN!

