

ZABAT




ZINC-AIR BATTERIES

First Newsletter
August 2023

Coordinator:
LEITAT
managing technologies

 **Fraunhofer**
 Politechnika Wroclawska

Heraeus
 **SINTEF**

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 ZABAT Project
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ZINC BATTERIES

We are thrilled to present our first ZABAT newsletter. This newsletter will be regularly and will provide you updates from the project, consortium, information on publications and in-depth information. Enjoy reading this newsletter!

ZABAT is a three-years project with 5 partners from different European countries that are joining forces to create a new battery system.



First press release

In a context of climate crisis and high environmental awareness, ZABAT is presented to help meet the EU's energy storage and climate challenges in the medium (2030) and long term (2050). In particular, batteries are crucial for feeding intermittent energy such as wind and solar into the grid to be used when needed, e.g. at night when there is no solar power production, thus ensuring the stability and security of the European energy supply.

In this sense, ZABAT will develop and validate an electrical zinc-air rechargeable battery that allows energy storage. The project will develop long lasting batteries based on abundant zinc and without using critical raw materials as well as avoiding the use of environmentally toxic organic-based electrolytes.

ZABAT will also address the environmental impact, toxicity of materials and processes related to electrical rechargeable zinc-air batteries through sustainability and circularity assessments. In this way, the consortium claims to develop an energy storage system with an environmental impact as low as possible. Therefore, air will be used in the cathode, thus reducing the weight of the battery and improving its characteristics and environmental impact.

Leitat will play a crucial role with the coordination of the activities, facilitating its expertise in formulations of the rechargeable zinc-air battery and will be supported by a consortium formed by 5 entities: SINTEF Industry (electrolyte and cell development), Fraunhofer (innovative air electrodes), Politechnika Wroclawska and HERAEUS (both dealing with alternative materials for air electrodes).



Upcoming events project-related:

- ZSW: 3rd International Zinc-air and other Zinc batteries workshop (IZABW) (zsw-bw.de)

The 3rd IZABW will take place at the Stadthaus in Ulm, Germany, on September 18 and 19. It is organized by ZSW, the University of Ulm, DLR and HIU.

The aim of this conference is to discuss the current state of zinc-based battery technologies on an international level and to identify promising research and development opportunities. This third edition will include for the first time other zinc-based battery technologies such as Zn-ion, NiZn, Zn-MnO₂, Zn redox flow, etc.

From ZABAT we will:

- Project presentation
- Bookmark dissemination
- Poster presentation

Three members of the project will attend:

- Khrystyna Yezerska, Fraunhofer
- Luis Colmenares, SINTEF
- Marc Belenguer Rizo, Leitat

Last meeting:

The project has already held two consortium meetings. This last one was in SINTEF, Norway. The experience was very positive, as we were able to explain the status of the project as well as to discuss the future steps.

SINTEF, gave us a very warm welcome, offering an impeccable service and showing us their facilities.

The meeting also served to make a great group cohesion that will surely be seen in the work that we will present in the coming months.



ZABAT on media:

After the launch of our first press release of the project, we have reached many media outlets. For instance, In August 2023, a TV channel visited the Leitat laboratories where ZABAT is being researched. It was a very interesting interview in which the objectives and approach of the project could be explained in a visual format!



We hope you enjoyed this first edition of our newsletter, and we look forward to sharing new updates soon! Consider following us on LinkedIn.

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