

THE

BATTERY

CHRONICLES



Oleksandra Hrytsaienko

Lead Project Engineer at UkrNIIElectrotherm (UNE)



How the Horizon Programme's STREAMS project Enhances Cross-border collaboration between S&T Community in Ukraine, the EU, USA, and Australia

Hello, I represent an engineering organization, the Ukrainian Research & Design Institute of Electrothermal Equipment (UkrNIIElectrotherm, UNE), a leading engineering firm in furnace engineering across Ukraine and in the post-Soviet region. In the international lithium-ion battery materials development project STREAMS, my responsibilities center on managing communication and coordination with representatives from all member companies within the consortium. Although I had not encountered a project of this specific nature before, my background as a Lead Project Engineer proved useful in fulfilling these duties, particularly in maintaining a holistic, high-level view of the entire scope of work given to UNE. Since UNE participates across all eight of the project's work packages, my role requires me to interface with a wide range of international colleagues from Europe, Australia and the USA.

When our institute was invited to participate in this international S&T initiative, it was profoundly inspiring. Being involved in the scale up of at least 11 technologies which treat critical minerals and spent batteries with a potentially much lower carbon and environmental footprint than the extraction of primary raw materials for Li-ion battery production is deeply motivating.



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This work has also provided invaluable experience in communicating with specialists from various countries, including developers, scientists, engineers, and project managers. It has helped me refine my English language skills, especially in specialized and highly technical domains, and has broadened my expertise in managing large-scale international projects.

The work has not always been easy, but these challenges have built resilience and enhanced my professional competence. By now, we, at UNE, all know what we need to do and how to raise the technology readiness level of lab-scale processes which various consortium partners are working on in WP2 through WP7. I received the highest possible level of support from AETC specialists, without whom resolving certain issues would have been difficult, delayed, or even impossible. I am deeply grateful to these experienced, highly qualified, and supportive professionals.

A STREAMS project of this magnitude, both in terms of the number of stakeholders and the diversity of technical and technological fields involved, serves as an excellent proving ground for UNE. The uniqueness of our involvement is in addressing scale up and tying together multiple technologies at once, as opposed to working on a singular project for a client (a more traditional way of work at an engineering company). I am confident that upon successful completion of STREAMS, this model will be scaled to establish several production facilities worldwide, contributing to the post-project activity as part of exploitation strategy of STREAMS. For me personally, STREAMS project continues to be an outstanding opportunity to advance my career, both as an experienced communications specialist and as a Lead Project Engineer. I sincerely hope that Ukraine, and our institute in particular, will be invited to participate in equally engaging and impactful initiatives in the future.



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