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HORIZON 2020 PROGRAMME - TOPIC H2020-LC-BAT-2020  
Sodium-Ion and sodium Metal BAteries for efficient and sustainable  
next-generation energy storage

GRANT AGREEMENT No. 963542



SIMBA – Deliverable Report

<< D2.3 – Prussian white cathode optimized and tested  
at coin cell level >>

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## Publishable summary

The SIMBA project spans from material development to module assembly of sodium-ion batteries (SIBs). Two main classes of cathode materials are investigated in the project, i.e. layered oxides and Prussian blue analogues (PBAs). Among the latter ones, special focus is dedicated to the Prussian White (PW) system developed by Altris, composed by iron, nitrogen, carbon and oxygen, representing a low-cost and sustainable cathode material.

This deliverable reports on the development and optimization of the PW cathode material adopted in the SIMBA project. The work performed within this project has led to a process with shorter reaction time, higher output, and less waste while maintaining the material and electrochemical properties. This report also shows that PW half cells maintain 80 % capacity retention after >1000 cycles, thus proving that this material is a valid and promising cathode material for SIBs.

## Appendix B- Acknowledgement

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Project partners:

#	Partner	Partner Full Name
1	TUDa	TECHNISCHE UNIVERSITAT DARMSTADT
2	UU	UPPSALA UNIVERSITET
3	UBham	THE UNIVERSITY OF BIRMINGHAM
4	WMG	THE UNIVERSITY OF WARWICK
5	KIT	KARLSRUHER INSTITUT FUER TECHNOLOGIE
6	CEA	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES
7	IFE	INSTITUTT FOR ENERGITEKNIKK
8	SAS	USTAV ANORGANICKEJ CHEMIE SLOVENSKA AKADEMIA VIED (Institute of Inorganic Chemistry, Slovak Academy of Sciences)
9	FHG	FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.
10	JM	JOHNSON MATTHEY PLC
11	Elkem	ELKEM AS
12	YUN	YUNASKO-UKRAINE LLC
13	SAFT	SAFT
14	Altris	ALTRIS AB
15	Recupyl	TES RECUPYL SAS
	UNR	UNIRESEARCH BV

## Appendix C – Disclaimer/Acknowledgement



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