



D8.7 – Online tools made available to the whole community

VERSION

VERSION	DATE
1.0	2024/02/01

PROJECT INFORMATION

GRANT AGREEMENT NUMBER	957189
PROJECT FULL TITLE	Battery Interface Genome - Materials Acceleration Platform
PROJECT ACRONYM	BIG-MAP
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DURATION	3 years
CALL IDENTIFIER	H2020-LC-BAT-2020-3
PROJECT WEBSITE	big-map.eu

DELIVERABLE INFORMATION

WP NO.	8
WP LEADER	Alexis Grimaud, CNRS
CONTRIBUTING PARTNERS	CNRS
NATURE	Websites, patents filing, etc.
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DISSEMINATION LEVEL (PU/CO)	PU

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ABSTRACT

This deliverable describes how the electrochemical analysis software fully described in the D8.6 is now accessible to the public.

Electrochemistry analysis software availability

The electrochemistry analysis software (described in D8.6) is named Electrochemistry Visualization Application (EVA) and is available in the <u>BIG-MAP App Store</u>. On its page, it is possible to find the links to download it and video showcases of its installation and use. For this software, a concept article is available, *"Electrochemistry Visualization Tool to Support the Electrochemical Analysis of Batteries*, Batteries & Supercaps, 2022", https://doi.org/10.1002/batt.202200378 or in the open access https://hal.science/hal-03878812/document. Herein, the basis for the analysis of the V vs. Q curves through the use of the dV/dQ vs. Q and dQ/dV vs. V is presented, clarifying to its potential user how to optimize cycling protocols in order to obtain data suited for the techniques: isotherm conditions, low current density and current density parity between cells used in the dV/dQ vs. Q fitting. Another emphasized aspect in the article is the design of the visualization screen. Comments about the preference for mass ratio parameters and the absence of normalized capacities clarify why an interface that relies on simplicity was chosen to make the visualization experience more direct and accessible for the user. Finally, all the EVA functionalities, from cycling data files upload to the download of the fittings or differential techniques curves, are individually exemplified with images. For this part, an extended instruction video is available as supporting information.