

*This project has received funding from  
the European Union's Horizon 2020  
research and innovation programme  
under grant agreement No 875193*



# MODALIS<sup>2</sup>

**MODelling of Advanced LI Storage Systems**

## **PROJECT WEBSITE**

This project has received funding  
from the European Union's Horizon 2020 research and innovation programme  
under **Grant Agreement No. 875193**

Deliverable number: D6.1

Due date: 28.02.2020

Nature<sup>1</sup>: DEC

Dissemination Level<sup>1</sup>: PU

Work Package: WP6

Lead Beneficiary: K&S

Contributing Beneficiaries:

---

<sup>1</sup> **Nature:** R = Report, P = Prototype, D = Demonstrator, O = Other  
**Dissemination level** PU = Public  
PP = Restricted to other programme participants (including the Commission Services)  
RE = Restricted to a group specified by the consortium (including the Commission Services)  
CO = Confidential, only for members of the consortium (including the Commission Services)  
Restraint UE = Classified with the classification level "Restraint UE" according to Commission Decision 2001/844 and amendments  
Confidential UE = Classified with the mention of the classification level "Confidential UE" according to Commission Decision 2001/844 and amendments  
Secret UE = Classified with the mention of the classification level "Secret UE" according to Commission Decision 2001/844 and amendments

<b>Version</b>	<b>Date</b>	<b>Description</b>
0.1	25.05.2020	S. Alpman (K&S)
0.2	27.05.2020	Review by M.Petit (IFPEN)
0.3	03.06.2020	Steering Committee approval

<b>1</b>	<b>Executive Summary</b> .....	<b>4</b>
<b>2</b>	<b>Project Website Structure</b> .....	<b>5</b>
2.1	Main Page	5
2.2	Main Menu	5
2.3	Means to achieve good referencing of the website	8
<b>3</b>	<b>Conclusion</b> .....	<b>9</b>

# 1 Executive Summary

This report, i.e. the MODALIS<sup>2</sup> Deliverable 6.1, describes the website <https://modalis2-project.eu> created for external communication about and on the project. This deliverable relates to the MODALIS<sup>2</sup> work package (WP) 6 ‘Communication and dissemination’, which includes the following objectives:

- Set-up and apply a dissemination strategy to spread MODALIS<sup>2</sup> results EU-wide
- Plan and coordinate the participation in conferences, fairs, clustering events and inter-project harmonization, especially synchronization with other H2020 activities
- Identify and implement exploitation mechanisms with the partners and other EU industries to ensure uptake and portability of MODALIS<sup>2</sup> results beyond the planned applications within the project with consent of the partners owning the respective results
- Summarize the overall MODALIS<sup>2</sup> outcome in an evaluation report for wide-spread communication validated by all partners
- Plan and coordinate the project’s dissemination activities to spread the project results EU-wide, such as participation in conferences, project website, fairs, journal articles etc.
- Contribute to clustering events and inter-project harmonization, especially for synchronization with other activities in the H2020 programme

The MODALIS<sup>2</sup> website will continue to be maintained and updated as the project progresses.

## 2 Project Website Structure

The website of the H2020 MODALIS<sup>2</sup> project is available at <https://modalis2-project.eu>.

### 2.1 Main Page

The main page is comprised of a brief introduction of the project – also showing the logos of the project partners. For further information on the project content, the reader can be redirected to the pages “Objectives”, “Methodology” and “Implementation”.



Figure 1: Screenshot of the MODALIS<sup>2</sup> website's main page

### 2.2 Main Menu

The MODALIS<sup>2</sup> website contains five specific tab pages:

- The first page is a general “**home**” page and contains a basic project overview as described above.
- The second page denotes the “**news**” page with the latest news and information on the progress of the project as well as information about meetings/conferences visited by the partners.



Figure 2: Screenshot of “news” page

- The third page denotes the “**project**” page and contains the following sub-pages:
  - Project – summarizing the project’s goals and objectives
  - Consortium – showing the project partners together with their specific contributions
  - Methodology - summarizing the methodology to create an effective modelling tool-chain
  - Implementation – summarizing the project’s approach
  - Work package structure – summarizing the WP structure and WP interactions
  - Impact – summarizing the impact the project has on the cell and battery development in Europe

**Project**

material scale    mechanical    public R&I actors

physico-chemical    MODALIS<sup>2</sup>    thermal

hard & soft industrials    electrical & electrochemical    prototype scale

The main achievement and contribution of MODALIS<sup>2</sup> is to develop and validate modelling and simulation tools for the following next generation batteries:

- Gen 3b: aiming for higher capacities for the positive and negative electrodes. The new materials used in this technology are challenging in terms of modelling due to their high volumetric expansion which will require specific new development in order to account for this phenomenon at material and cell level. Specific care will be taken to model the interfaces and their behaviour during volumetric expansion.
- Gen 4b: enabling the use of solid electrolytes for improved safety and to facilitate the use of Li-M for the negative electrode. These solid electrolytes will require new developments in order to account for the specific mechanisms responsible of solid state ionic conductivity as well as the interfacial phenomena occurring in hybrid solid electrolytes and at the interface between active material and electrolyte.

MODALIS<sup>2</sup> will add relevant effects for next Gen Lithium Ion batteries to state-of-the-art simulation tools. This will enable industry to incorporate new and innovative materials within their next generation Lithium Ion battery cells.

**Objectives**

MODALIS<sup>2</sup> will provide degrees of freedom for the cell and battery development processes that will then allow to address the following design challenges:

1. The need for faster development of batteries with higher energy density with new materials
2. The need for faster development of materials with higher optimized performances for higher-energy battery applications
3. Improved battery safety, both during transport and operation
4. Optimization of cyclability by using MODALIS<sup>2</sup> tools
5. Lower development costs
6. Better understanding of material Interactions within the cell

**MODALIS<sup>2</sup> integrating models, tools, measurement data and methods for future generation battery**

Experimental tools and sensors    Digital tools for data processing, model calibration, data management

Electrothermal/electrochemical behavior modeling    Methods    Data based on experimentation or public databases

Models    Data

Experimental and digital methods

Home  
News  
Project  
Dissemination  
Links

Imprint  
Disclaimer - GDPR

 This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No. 875193

Figure 3: Screenshot of the MODALIS<sup>2</sup> “project” page

- The “**dissemination**” tab will contain a link to all publications and public deliverables of the project. In order to keep the website attractive for external users, all partners are requested to report to modalis<sup>2</sup>@lists.ks-pm.de any potential news related to the project that could be added.
- Finally, a “**contact**” page is added leading the visitor to the project coordinator and project office of MODALIS<sup>2</sup>.

## **2.3 Means to achieve good referencing of the website**

Links to the official websites of the consortium partners were added. Additionally, all partners were asked to create hyperlinks from their official website to the MODALIS<sup>2</sup> website.

As often as possible the website will be updated, mainly with news from project meetings, articles produced by partners, information about events where MODALIS<sup>2</sup> was presented as well as with public deliverables.

### 3 Conclusion

This document aimed at describing the MODALIS<sup>2</sup> project website as well as its aims and objectives and how they will be achieved throughout the lifetime of the project. The consortium acknowledged that a successful implementation of the website aims and objectives also hinges on the combined efforts of all consortium members. Hence, all partners will inform the project management team when disseminating any project activities, including:

- Public deliverables
- Key project results
- Attendance of conferences