



IMPROVED LIFETIME STACKS FOR HEAVY DUTY TRUCKS THROUGH ULTRA-DURABLE COMPONENTS

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DELIVERABLE REPORT

D7.1: PROJECT WEBSITE		
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Workpackage	WP7	
Workpackage Leader	PXO	
Lead Beneficiary	PXO	
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DISSEMINATION LEVEL		
PU	Public	X
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)	
NATURE OF THE DELIVERABLE		
R	Report	
P	Prototype	
D	Demonstrator	
O	Other	X

SUMMARY	
Keywords	Website
Abstract	<p>The IMMORTAL project website is designed to fulfil project communication and dissemination needs for the benefit of the whole scientific community and the public through relevant information including:</p> <ul style="list-style-type: none"> - project overall objectives, partner & work packages information - project activities: news, meetings - project progress: technical publications, conference presentations, public domain reports - project resources: links, related events ... - project contact information <p>All the partners will collectively participate in the dissemination objective of the website by providing up-to-date information</p>
Public abstract for confidential deliverables	<i>Same as above</i>

REVISIONS			
Version	Date	Changed by	Comments
0.1	19/04/2021	PXO	

PROJECT WEBSITE

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1 INTRODUCTION

This deliverable report documents the implementation of the project website for the FCH JU supported IMMORTAL project. This website is available at the following address: www.immortal-fuelcell.eu

The deliverable 7.1 is the first deliverable from Work Package 7 - Communication, Dissemination and Maximising Impact. The aim of WP7 is to ensure the highest visibility of the project activities, promote awareness of specific target groups and to accelerate the implementation of the research findings. Deliverable 7.1 is specifically related to Subtask 7.2 – Communication activities, which aims to communicate to a non-specialist audience and the public using a range of media channels. The website will be one of several tools used to fulfil the objectives of this task.

2 SCOPE

The public website will promote the IMMORTAL project by making relevant information publically available including project objectives, partner descriptions, publically deliverable progress reports, dissemination activities, and news aimed at the broader scientific community and beyond. It will be a key tool for the exploitation of the project and will promote the overall achievements of the project as well as directing users to specific publications, presentations and results created by the project. It will keep users up to date on project progress as well as informing them of upcoming events that partners will be attending. The website aims to be understandable for a non-specialist audience as well as provide information interesting to the scientific community. All public deliverables created in the project will be available on the project website while confidential deliverables will be introduced through a public summary.

3 HOSTING & STRUCTURE

3.1 Hosting

The IMMORTAL website is online from 19th April 2021. This website is hosted on a dedicated server. The server, property of PXO, is hosted on a SSD Virtual Private Servers (Host: OVH), - OpenStack KVM, 2 vCore(s), From 2 GHz, 8 GB RAM, 80 GB SSD, Local RAID, Bandwidth 100Mbps - Unlimited traffic, Anti-DDoS Protection. It runs under Linux : CentOS 7, PHP 7.3 and Apache 2.4.41.

A weekly server backup is scheduled, and each time an update is implemented.

3.2 Structure

a. Permanent information

Home: General information on the project

This includes information that describes the project in a way that can be understood by non-specialists and the general public. It lists the project objectives and provides background information on the funding body and project duration.

The screenshot shows the homepage of the IMMORTAL project website. At the top, there is a navigation bar with the IMMORTAL logo and links for HOME, ABOUT IMMORTAL, ACTIVITIES, RESOURCES, and CONTACT. Below this is a large hero image of a truck on a road with the text: "Improved lifetime stacks for heavy duty Trucks through ultra-durable components".

The main content area is divided into two columns:

- About IMMORTAL**
 - Exceptionally durable and high power density MEAs**: IMMORTAL will develop exceptionally durable and high power density MEAs well beyond the current state of the art up to TRL4 by building on understanding of fuel cell degradation pathways specific to heavy-duty truck operation and developing lifetime prediction models from extensive real-life stack operation, accelerated stress test and load profile cycles on short stacks.
 - Expertise in fuel cell science and technology**: IMMORTAL encompasses OEMs, tier 1 suppliers, leading industrial and academic/research organisation partners with long expertise in fuel cell science and technology. Building on best developments from the FCH JU, the project will not only develop significantly more durable MEAs (transferable to other fields), but will accelerate competitiveness of the European fuel cell truck sector by providing recommendations at system level to improve durability, and designs that contribute to increasing stack power density and to reducing the PEMFC system cost.
- IMMORTAL Objectives**

Below the objectives is a carousel of two main objective cards:

- Develop New materials Concepts**: Develop new materials concepts for world-leading components (electrocatalysts, membranes) by building mitigation strategies to fuel cell operation-induced degradation into their design to ensure both their activity and their stability, and improve the interfaces between them to minimise resistances.
- Novel Electrode & MEA constructions**: Realise the potential of these components in MEAs by introducing novel electrode and MEA constructions to deliver a step change in durability while exceeding 1.2 W/cm² at 0.675 V.

At the bottom of the carousel are five small thumbnail images representing different aspects of the project: a truck, laboratory equipment, a person working, a globe, and a factory interior.

The **IMMORTAL Consortium** section lists the following partners:

- CNRS** (Centre National de la Recherche Scientifique - Coordinator)
- BOSCH** (Robert Bosch GmbH)
- JM Johnson Matthey** (Johnson Matthey Fuel Cells Ltd)
- FPT** (FPT Motorenforschung AG)
- AVL** (AVL List GmbH)
- IMTEK** (University of Freiburg, Engineering IMTEK)
- PRETEXO** (PRETEXO)

The footer contains the copyright notice "© IMMORTAL 2021 - 2023" and a small text block: "This project has received funding from the Fuel Cells and Hydrogen 2 Joint Undertaking (FCH2 JU) under grant agreement No 875155. The JU receives support from the European Union's Horizon 2020 research and innovation programme." It also includes the FCH and EU logos.

Figure 1: Screenshot of the project website HomePage

About IMMORTAL: Project, partners & work packages presentation

This section gives more detail on the project including a description of how the project will be carried out and of the different work packages.

It also provides information on the partners, including their background and a link to each partner's website.

Contact: Online form for information request

This form is designed so that members of the public and the scientific community can get in touch with the project coordinator. This will contribute to facilitating links within the scientific community, other FCH JU/H2020 and Horizon Europe projects, and networks or other organisations related to fuel cells.

a. Live information

Activities: news, meetings, deliverables, publications ...

This section will be updated regularly with news of upcoming project meetings, events and publications as well as communicating top-level project results. Details such as the address of the project meetings will not be available, but for events that project partners are attending, full details and links to the event website will be given in this section and also the 'Resources' section of the website if appropriate. Publications created from the research in the project will be summarised in brief in this section and links and details of the full publication will be given in this section. News will also be updated on project partner websites, so wherever possible, this section will give links and background on specific partner updates.

Resources: related European projects and conferences

The links section of the website will have all project partner websites as well as links to related third party websites, other FCH JU/H2020/Horizon Europe projects, networks and organisations related to fuel cells. This will help non-specialist members of the public gain a deeper understanding of the subject and also facilitate information sharing, mutual benefits and added value for members of the scientific community and all IMMORTAL partners.

4 CONCLUSIONS AND FUTURE WORK

The IMMORTAL website has been designed to fulfil the project communication and dissemination requirements for the benefit of the whole scientific community and the public.

All the partners will collectively participate in the dissemination objective of the website by providing up-to-date information, project highlights, job opportunities, related events announcements, and lists of IMMORTAL publications.