





NEXT GENERATION AUTOMOTIVE MEMBRANE ELECTRODE ASSEMBLIES

Grant agreement no.: 826097

Start date: 01.01.2019 – **Duration**: 36 months **Project Coordinator**: Dr. Deborah Jones - CNRS

DELIVERABLE REPORT

D7.3— COMMUNICATION AND DISSEMINATION PACK					
Due Date		30 September2020			
Author (s)		N. Cros			
Workpackage		WP7			
Workpackage Leader		PXO			
Lead Beneficiary		PXO			
Date released by WP leader		16 September 2020			
Date released by Coordinator		17 September 2020			
DISSEMINATION LEVEL					
PU	Public		Х		
PP	Restricted to other programme participants (including the Commission Services)				
RE	Restricted to a group specified by the consortium (including the Commission Services)				
со	Confidential, only for members of the consortium (including the Commission Services)				
NATURE OF THE DELIVERABLE					
R	Report				
Р	Prototype				
D	Demonstrator				
0	Other				





SUMMARY	MMARY		
Keywords	Dissemination and communication		
Abstract	During the first 21 months of the GAIA project the consortium undertook various dissemination and communication measures. Target groups include industry, academia, government bodies and the public.		
Public abstract for confidential deliverables	Same as above		

REVISIONS				
Version	Date	Changed by	Comments	
0.1	16 September 2020	N. Cros		
0.2	17 September 2020	D. Jones & N. Cros		





COMMUNICATION AND DISSEMINATION PACK COMPRISING 2 PUBLISHED ARTICLES, 6 CONFERENCE COMMUNICATIONS, A PROJECT BROCHURE, YEAR 1 NEWSLETTER, AND SHORT VIDEO CLIP ON FABRICATION STEPS TO AN AUTOMOTIVE MEA

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1. Introduction

Since the start of the GAIA project, the consortium has been engaged in conducting activities for promoting and disseminating the project results. The measures undertaken are detailed below.

It is important to highlight that each communication or dissemination of results generated by GAIA first receive the agreement of the partners to protect the intellectual property rights, confidentiality and legitimate interests according to the Grant Agreement Article II.30. A dissemination protocol was agreed by the Project Steering Committee. In summary, a draft of the intended publication, conference abstract or conference presentation is made available to all partners, who have a given time period in which to comment. If an objection is raised, partners work together to see how the document may best be modified to avoid divulgation of confidential or patentable information. Details of this protocol are provided in the deliverable report D7.2.

2. DISSEMINATION & COMMUNICATION ACTIVITIES DURING THE FIRST 21 MONTHS OF GAIA

a. Visual Identity Tools

Logo



A GAIA logo was designed to clearly identify the project. It is used in all dissemination or communication supports for the project. It is available to all partners on the Project Shared Workspace (PSW).

Presentation template

A GAIA presentation template, including the project and FCH-JU and EC logos, was prepared, distributed to partners, and is available on the PSW for use for project presentations at project meetings, and for conference presentations.

b. Brochure, newsletter and poster

To assist communication, different types of communication supports were designed and edited in agreement with all the consortium. These communication supports are available from the public website.

Furthermore, to increase their availability to different audiences, they were also printed and distributed to the partners for their use during attendance at conference and technical fair events.

Brochure

To assist communication from GAIA, a project brochure was edited, printed and distributed to partners for their use. This brochure is also available from the public website (<u>Brochure PDF for download</u>).

Newsletter

A newsletter was released and included main achievements of the project in the first 12 months.

This newsletter is available on the PSW, the public website (<u>PDF for download</u>) and was spread using partner's LinkedIn account: <u>LinkedIn post</u> (520 views)





Video clip

To provide accessible and understandable information also for a non-specialist audience, partners TUB and TUM recorded a jointly produced video clip of a total length of 6:26 min.

The team at TUB, whose focus within GAIA is the development of advanced electrocatalysts, illustrates the various steps in catalyst synthesis and in catalyst screening via the rotating disc electrode (RDE) technique. The TUM team, focusing on catalyst integration into MEAs and diagnosing MEA performance losses, shows the various steps involved in MEA preparation and in MEA testing/diagnostics in small-active-area single-cell PEM fuel cells.

The video, part of the Deliverable 7.3, contributes to attracting additional attention to the GAIA project, as well as providing an educational and technical resource.

The video is available on YouTube and the GAIA website:

- GAIA website: https://gaia-fuelcell.eu/index.php/activities/videos
- Youtube channel: https://www.youtube.com/channel/UCF Hj5PdYtXhHw3dYDmDNGg
- Video link: https://youtu.be/0MfyS8qliUo

3. DISSEMINATION OF PROJECT RESULTS

a. Conference Presentations

GAIA partners have disseminated project results at conferences through oral and poster presentations including:

236th ECS Meeting, 13-17 October 2019, Atlanta, GA, USA

- The evolution of membrane electrode assemblies for automotive applications, A. Martinez, JMFC (plenary lecture at the PEFC&C-19 Symposium)

Electrolysis and Fuel Cell Discussions 2019, 15-18 September 2019, La Grande Motte, France

- The labyrinth around low PGM fuel cells for the electrification of the power train, G. Spikes, A. Hodgkinson, D. Fongalland, L. Smith, D. Houghton, J. Sharman and A. Martinez, JMFC (Keynote presentation)
- Ternary Pt alloy catalysts for low Pt loaded fuel cell cathodes, F. Dionigi, C. C. Weber, L. Pan, P. Strasser, TUB (poster)
- Novel ORR electrocatalyst based on Pt-RE nanoparticles supported on nitrogen functionalised porous carbon, A. Parnière, P.-Y. Blanchard, S. Cavaliere, J. Rozière and D. J. Jones, CNRS (poster)

b. Publications

Review article

Current challenges related to the deployment of shape-controlled Pt alloy ORR nanocatalysts into low-Pt loaded cathode layers of Proton Exchange Membrane Fuel Cells (PEMFC), L. Pan, S. Ott, F. Dionigi, P. Strasser, *Current Opinion in Electrochemistry*, 18, 61-71 (2019).

DOI: https://doi.org/10.1016/j.coelec.2019.10.011

HAL repository: https://hal.archives-ouvertes.fr/hal-02925979

c. Networking - Workshop attendance

FCH JU PEMFC development workshop, 5-6 March 2019, Marseille, France

GAIA presented a poster on the project objectives during the workshop organised by the <u>INSPIRE project</u> hosted in Marseille on 5th-6th March 2019.





4. CONCLUSION AND FUTURE WORK

Concerning the deliverable's objectives, the project consortium, despite the interruptions of covid-19, almost achieved its planned communication and dissemination actions in the first 21 months. Effectively, conference presentation as well as publications within the project have been negatively impacted by the covid-19 epidemic. University/research organisation closures prevented partners from accessing their laboratories to complete the experimental work and by extension to draft the corresponding manuscripts. Further, even if the consortium has almost reached the target in terms of number of actual conference presentations (5 out of 6 planned), this is much lower than would have been reached at this point in the project since many conferences have been cancelled, moved online with restricted programmes, or postponed to next year. CNRS, TUB and TUM all had lectures, oral presentations or posters accepted for the ISE and ECS 2020 conferences, as well as other national meetings.

Within the next months, the GAIA partners will continue collectively to monitor all the dissemination and communication measures and evaluate them using internal feedback at progress meetings. Partners will report on communication activities carried out or planned, using indicators including the type of presentation at conference events, number of project flyers and newsletters distributed, as well as press release / media articles published and their impact on the project visibility.