### **SAVE THE DATE**



JATHER

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Disruptive pemfc stack with nOvel materials, Processes, arcHitecture and optimized INterfaces



Wednesday 11.12.2024 **CEA Grenoble (France)** 

## **DOLPHIN** and **FURTHER-FC FINAL WORKSHOPS**

New insights in PEM Fuel cells for automotive applications

Ionomer numerical reconstruction based on 3D FIB-SEM images of catalyst layer

### What to expect:



**Structural Analysis** 



Multiscale Modelling

- Innovative manufacturing processes
  - Stack improvement

### **FREE PARTICIPATION ON-SITE OR ONLINE**

Projects coordination/contact: joel.pauchet@cea.fr

**Registration to the event:** 

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**Visit Our Websites** 

www.further-fc.eu www.dolphin-fc.eu

Short stack tests to evaluate KPIs: up to 8.4 kW/kg, 6.6 kW/l, 1.8 W/cm<sup>2</sup>, 28 €/kW

**Registration is mandatory**, Limited number of on-site participants

# AGENDA





Chemours



### **MORNING SESSION: DOLPHIN**

with nOvel materiaLs, and optimized INterfaces Improve short stack with innovative technologies

08h30	Opening of the room, breakfast		
09h00	Welcome (J. Pauchet, CEA)		
	Strategic research challenges (L. Feola, Clean Hydrogen Partnership)	<i>C</i> (22)	2 <sub>SW</sub>
09h30: DOLPHIN project			
	Overview of DOLPHIN (J. Pauchet, CEA)		
	Development of new MPL (F. Wilhelm, S. Saadat, ZSW)		
	Innovative cell architecture up to large single cell (F. Micoud, CEA)	A FRONT-RUNNER HYDROGEN COMPANY	
	Break	HEXCEL	MANCHESTE
	Validation into innovative short stack (JP. Poirot, CEA)		1824 The University of Manche
	Industrial point of view (C. Vacquier, J. Rapior, Symbio)	DMG MO	RI
	Discussion on stack performance increase (J. Pauchet, all)		
	Discussion with the audience, concluding remarks		
12h30: Lunch/Networking			



### **AFTERNOON SESSION: FURTHER-FC**

Better understand performance limitations in the cathode

#### CQ214h00: FURTHER-FC project Overview of FURTHER-FC (J. Pauchet, CEA) ESSLINGEN Characterization of the CCL structure by electron and AFM UNIVERSITY microscopy (T. Morawietz, Univ. Esslingen; L. Guetaz, CEA) Imperial College Characterization of transport properties (A. Kucernak, ICL; A. Morin, London CEA) Break PAUL SCHERRER INSTITUT ΤΟΥΟΤΑ Multiscale modeling performance from µm to cell scales (T. Jahnke, DLR) Discussion on MEA performance limitations (A. Morin, all) **Deutsches Zentrum** Discussion with the audience, concluding remarks für Luft- und Raumfahrt UNIVERSITY OF German Aerospace Center

17h30: End of the workshop

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