FURTHER UNDERSTANDING RELATED TO TRANSPORT LIMITATIONS AT HIGH CURRENT DENSITY TOWARDS FUTURE ELECTRODES FOR FUEL CELLS.

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ACKNOWLEDGEMENT

THIS PROJECT HAS RECEIVED FUNDING FROM THE FUEL CELLS AND HYDROGEN 2 JOINT UNDERTAKING (NOW CLEAN HYDROGEN PARTNERSHIP) UNDER GRANT AGREEMENT NO 875025. THIS JOINT UNDERTAKING RECEIVES SUPPORT FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAM, HYDROGEN EUROPE AND HYDROGEN EUROPE RESEARCH.

FURTHER-FC Workshop  
6.07.2022  
DLR Stuttgart, Germany

Face to Face meeting / online  
Free of charge
FURTHER-FC will benefit from the active role of renowned partners gathering significant experience on membrane electrode assembly manufacturing and testing (Toyota Europe (TME), French Alternative Energies and Atomic Energy Commission (CEA), German Aerospace Center (DLR)), state-of-the Art experimental techniques (CEA, DLR, Paul Scherrer Institut (PSI), University of Montpellier (IEM), Univ. of Applied Sciences Esslingen (UES), Imperial College London (ICL)) and modelling tools (CEA, DLR, National Polytechnic Institute of Toulouse (INPT)) supported by international entities (The Chemours Company (CC), University of Calgary(UCA)).

**Results**

3D rendered image showing the interior (blue) and exterior (yellow) Pt NPs

AFM: 3D height-image with superposed stiffness values

FIB-SEM: 3D rendered image of the segmented CCL volume

**Ambition**

FURTHER-FC will bring new knowledge on the catalyst coated layer (CCL, membrane or other substrate):

- Microstructure
- Correlation between transport properties, performance and components (Platinum, Carbon, Ionomer) and their structure
- local conditions during operation
- limitations induced by transport phenomena
- modelling of transport phenomena
- Propose and validate structure and composition of CCL with improved catalyst efficiency and durability

**Methodology**

DLR site Stuttgart
German Aerospace Center (DLR)
Hörsaal
Pfaffenwaldring 38-40
70569 Stuttgart

DLR Stuttgart is located on the University of Stuttgart Campus at Stuttgart-Vaihingen.

**Partners**

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