



# Hydrogen Europe: European Hydrogen & Fuel cell Project Database

## Project PROSOFC

Production and Reliability Oriented SOFC Cell and Stack Design

This project aims at improving the robustness, manufacturability, efficiency and cost of SOLIDpower's state-of-the-art SOFC stacks so as to reach market entry requirements. We propose a focused project addressing the key issues that have manifested themselves in the course of the ongoing product development efforts at SOLIDpower SA. The key issues are the mechanical robustness of solid oxide fuel cells (SOFCs), and the delicate interplay between material properties, stack design, and operating conditions of the SOFC stack. The novelty of the project lies in combining state of the art methodologies for cost-optimal reliability-based design (COPRD) with actual production optimization. To achieve the COPRD beyond state of the art multi-physical modelling concepts must be developed and validated for significantly improved understanding of the production and operation of SOFC stacks. The key to this understanding is validating experiments and models on multiple levels of the SOFC system and introduction of extensive test programs specified by the COPRD methodology.

## Project Information

**Type of project :** Research

**Timing :** 01/05/2013 > 31/10/2017

**Project website:** <http://prosofc-project.eu/>

**Project Budget :** 7.331.214 €

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## Funding

European Union through FCH JU: **Grant agreement 325278 - CORDIS link**

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## Project partners

**Coordinator :**

AVL

**Partners :**

DVGW - German Technical and Scientific Association for Gas and Water

JÜLICH - Forschungszentrum Jülich GmbH

KIT - Karlsruher Institut für Technologie

HTceramix SA

DYNARDO AUSTRIA GMBH

IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

JRC - JOINT RESEARCH CENTRE - EUROPEAN COMMISSION

ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE

TOPSOE FUEL CELL A/S

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**Sub project(s)**

**Sub project 1**

**Country:** Austria

**Address:**

HANS-LIST-PLATZ 1 8020 GRAZ

**Sub project categories**

Research

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Project Id: 1070

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