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## WORKSHOP 6-7 JUNE 2017

# HYDROGEN FUEL QUALITY ASSURANCE FOR PEM FUEL CELLS

### 3<sup>rd</sup> HYCORa workshop

Hydrogen quality assurance is a guarantor for PEM fuel cell life; thus, key to the success of hydrogen as an energy carrier.

Identifying critical needs to develop nozzle sampling methods and hydrogen contaminant analysis tools through data collection and modelling to guide research on impact on PEM fuel cells of selected hydrogen fuel contaminants by qualitative and quantitative risk assessment is in the focus of the HyCoRa project funded by FCH-JU.

The workshop will combine R&D and industry in the whole value chain, from hydrogen production via distribution/dispensing to end use, to discuss relevant hydrogen fuel quality topics.

Presentations will also summarize the final research results of the HyCora project to steer panel discussion eventually to allow OEM proving feedback and their views.

## WORKSHOP OBJECTIVES:

HYDROGEN FUEL QUALITY ASSURANCE

RISK ASSESSMENT MODEL

OEM FEEDBACK

HYDROGEN FUEL SAMPLING

CONTAMINANT ANALYSIS

## VENUE:

TRONDHEIM, NORWAY



SINTEF



POWERCELL



## AGENDA - Day 1

6 June 2017		Speaker
11:00-12:00	Tour SINTEF H2 labs	
13:00	Arrival, registration and light lunch	
13:30-13:40	Welcome & opening remarks	
13:40-14:00	HyCoRA project objectives, scope and brief summary of results	Jaana Viitakangas, VTT
14:00-14:20	The importance of fuel quality	Felix Blank, Daimler
14:20-14:40	Catalyst/MEA vs fuel quality	NN, TBC
14:40-15:20	Break	
15:20-15:50	HYCORA impurity measurements: HCHO and HCOOH	Jaana Viitakangas, VTT
15:50-16:10	HYCORA risk assessment model	Jari Ihonen, VTT
16:10-16:30	Impact of CO and H <sub>2</sub> S on single cell and stack performance	Sylvie Escribano / Irina Profatilova, CEA
16:30-17:30	Discussions first day	All
20:00	Dinner	





## Day 2

7 June 2017		Speaker
09:00-09:20	Results from 3 <sup>rd</sup> HyCoRA sampling campaign	<i>Ole Kjos, SINTEF</i>
09:20-09:40	Summary of HRS sampling and analysis in HyCoRa	<i>Thor A. Aarhaug, SINTEF</i>
09:40-10:00	Impurity sourcing from HRS	<i>Bjørn Gregert Halvorsen, NEL Hydrogen</i>
10:00-10:30	Break	
10:30-10:50	Analytical methods for hydrogen fuel QC	<i>Thomas Baquart, NPL</i>
10:50-11:10	Impurities from hydrogen production	<i>Bruno Gozlan, Air Liquide</i>
11:10-11:30	Hydrogen fuel quality activities in USA/Germany	<i>TBC</i>
11:30-11:50	Fuel quality standard revision	<i>Thor A. Aarhaug, SINTEF</i>
11:50-13:00	Lunch	
13:00-14:00	Discussion, feedback & recommendations	<i>All</i>
14:00	Closing remarks	
	End of workshop	

There is no participation fee. **Registration** [here](#) before May 31st.

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