



30 SEPTEMBER 2014

WORKSHOP

HYDROGEN FUEL QUALITY ASSURANCE FOR PEM FUEL CELLS – NEEDS & STATUS

OEM workshop supporting risk assessment

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 hydrogen fuel contaminants by qualitative and quantitative risk assessment is in the focus of the HyCoRa project funded by FCH-JU.

A strategy to the risk assessment is the primary aim of this workshop. OEM feedback and support is vital to identify issues requiring most attention before extensive research is conducted in HyCora.

Presentations will summarize state-of-the-art and a panel discussion is to allow OEM expressing their views and providing feedback.

**WORKSHOP
OBJECTIVES**

**HYDROGEN FUEL
QUALITY
ASSURANCE**

**DEVELOP RISK
ASSESSMENT
MODEL**

**DATA COLLECTION &
OEM FEEDBACK**

**HYDROGEN
SAMPLING
METHODS**

**CONTAMINANT
ANALYSIS TOOLS**

European Commission
Berlaymont building
Room JREY
200, Rue de la Loi
1040 Brussels, Belgium

30 September 2014

09.00 hrs – 17.15 hrs



AGENDA

30 September 2014		Speaker
08:30-09:00	Arrival	
09:00-09:20	Welcome and opening remarks on hydrogen fuel quality workshop	<i>Georgios Tsotridis, EC DG JRC-IET</i>
09:20-09:50	HyCoRA project objectives, scope and first results	<i>Jari Ihonen, VTT</i>
09:50-10:30	Risk assessment in HyCoRA project – qualitative model	<i>Risto Tuominen, VTT</i>
10:30-11:00	Break	
11:00-11:30	Hydrogen fuel purification – different technologies and quality failure risks issues	<i>Marco Succi, SAES Pure Gas</i>
11:30-12:00	OEM Needs on hydrogen fuel quality assurance – consequences of hydrogen quality failure	<i>tbd (automotive OEM)</i>
12:00-12:30	Pre-concentration strategies for hydrogen fuel quality control	<i>Shabbir Ahmed, US DoE-ANL</i>
12:30-13:00	Performing hydrogen fuel quality control - sampling strategies and challenges	<i>Thor Aarhaug, SINTEF</i>
13:00-14:00	Lunch	
14:00-14:30	Analytical methods for quality control - potentials for cost reduction	<i>NPL</i>
14:30-15:00	PEFC testing procedures assessing consequences of hydrogen fuel quality assurance	<i>VTT</i>
15:00-15:30	Risk assessment in HyCoRA project – need of data for the quantitative model	<i>Risto Tuominen, VTT</i>
15:30-16:00	Break	
16:00-17:00	OEM panel discussion concerning the focus of HyCoRA project	<i>All</i>
17:00-17.15	Workshop conclusions & closing remarks	<i>Georgios Tsotridis, EC DG JRC-IET</i>
17:15	End of workshop	