



NET-Tools Workshop

19th and 20th March 2018

Novel Education and Training Tools based on digital applications related to Hydrogen and Fuel Cell Technology



Organised and chaired by:

Prof h.c. Olaf Jedicke, Karlsruhe Institute of Technology Germany

Dr Giovanni Cinti, University of Perugia, Italy

Ben Madden, Element Energy LTD, United Kingdom





Introduction

The NET-Tools project is a coordination and support action funded by the FCH-JU 2.0. The major target of the NET-Tools consortium is to develop e-Tools related to fuel cells and hydrogen technologies, applications and its safe use. These e-tools will get provided as open access through an internet-platform and are intended to be used by industry, first responders, owners and operators of transportation facilities, and last but not least academic institutions. We expect the tools to be used for individual training and general educational activities. To raise common interest and acceptance, NET-Tools main objective is to develop this unique European platform to support training and education in FCH technologies and businesses leveraging existing knowledge and enabling the development of future novel educational training based on digital content, accessible worldwide independent from the art of electronic device.

To achieve the major goal, NET-Tools project will follow the specific objectives:

- Deliver an open source based e-infrastructure dedicated to FCH knowledge and science
- Offer teaching user interfaces adapted to the different target audience: students and professionals
- Implement a digital laboratory workspace
- Consolidate existing e-education and e-knowledge
- Develop novel training delivery methods together with new digital practices
- Engage with and gain traction from a wide community of companies and universities

Scope of NET-Tools Workshop

A first list of tools has been proposed and a number are under development. The scope of the workshop is to engage with and gain traction from a wider FCH community of industry, institutions, research organisations and universities concerning the further development of digital educational content. In particular, the NET-Tools partners wish to incorporate the demands and requests from industry and institutions others than the academic ones, have formed the basis of the work to date.

Cooperation Request

The NET-Tools consortium wishes to share the major project targets and especially the already developed e-tools and e-platform with the wider FCH community to obtain feedback and request recommendations for further project progress and specific developments via critical discussions and general feedback by attendees. To create a fruitful discussion on:

- status of already developed e-Tools concerning usability and comprehensibility
- topic areas to be tackled and/or covered specifically by e-Tools and educational materials to be developed further
- principal demands of industry concerning thematic areas and educational materials
- quantitative measures to be used for the development of educational materials





- availability of existing educational materials and especially experimental data for inclusion in further processing and activities
- existing demands on training and education courses
- business aspects to be tackled

The NET-Tools consortium wishes to introduce into the project targets and e-tools by different talks to be followed up with questions and answers and a round table.

Your participation is appreciated in following our presentations, specific discussions and round tables completed by a specific half day work shop on topics listed above in separated groups.




Yours sincerely,

Prof h.c. Olaf Jedicke, Karlsruhe Institute of Technology Germany

Coordinator Net-Tools project

Attachments

- Workshop Overview (agenda, travel and location information)
- List of invited organisations

<p>Fuel cells and hydrogen technologies</p>    <p>Funded by European Commission Contract No. 736648</p>	
<ul style="list-style-type: none"> ➤ Learn ✓ Massive open online courses (MOOCs) <ul style="list-style-type: none"> ✓ Workshops ✓ Flying teachers ➤ Improve ✓ Advanced topics and problems <ul style="list-style-type: none"> ✓ Scientific database 	<ul style="list-style-type: none"> ➤ Test ✓ E-Laboratory ➤ Share ✓ Knowledge and experience among other members of FCH community





Workshop Overview

Days	Monday 19 th March	Tuesday 20 th March
Morning Session	<i>Arrival of Attendees</i>	Welcome, Registration, Formalities Round Table
Midday	<i>Welcome, Registration, Formalities Lunch</i>	<i>Lunch</i>
Afternoon Session	Introductions of Attendees Presentations from NET-Tools project Round Table	<i>Departure of Attendees</i>
Evening	<i>Networking Dinner</i>	

Additional information can be found here: <https://www.h2fc-net.eu/>



Location

Grand Hotel Imperial Levico Terme
<http://www.hotel-imperial-levico.com>

Levico Terme – Trentino Alto Adige – Italy

Travel Information

Closer airport is Verona Airport
Transport to the venue will be organised

General Contacts

Olaf Jedicke - Karlsruhe Institute of Technology (KIT) - olaf.jedicke@kit.edu
Giovanni Cinti – University of Perugia – giovanni.cinti@unipg.it



Logistical aspects

By car - It is compulsory for all vehicles to have winter tyres / snow chains.

By train - Regional trains departing from Trento stop in Levico Terme. The train station is ~ 1 km away from the hotel.

By plane - The nearest airport is in Verona (approx. 100 km). Other airports: Venice (140 km) and Milan (250 km). You can continue your journey from the airports by rail and bus.





Organisations invited

Hydrogen Europe
Hydrogen Europe Research
Air Liquide
Daimler
BMW
AREVAH2Gen
Linde
Shell
Hydrogenics
Solid Power
Sunfire
Ballard Power
Siemens
ITM Power
Riversimple
ULEMCO
Attaway
Symbio
Michelin
Engie
Nel
Toyota
JRC
Arcola
Swiss hydrogen
E-trucks
Van Hool
Wrightbus
Audi
McPhy

University of Birmingham

Coventry University

University NTNU Trondheim

Brussels University

Liege University

Project Consortium

Karlsruher Institute of Technology

University of Perugia

Element Energy

PersEE

University of Ulster

National Center for Scientific Research

Demokritos

Danmarks Tekniske Universitet

Institute of Electrochemistry and Energy
Systems

