



# Invitation

## NET-Tools 1<sup>st</sup> Education School

4<sup>th</sup> – 7<sup>th</sup> June 2019

**St. Konstantin & Elena (Varna) • Bulgaria**

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



**Organised and chaired by:**

NET-Tools Consortium

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





## Introduction

The NET-Tools project is a coordination and support action funded by the FCH-JU 2.0. The main objective of the NET-Tools consortium is to develop a technical infrastructure as an e-platform and provide digital e-tools and information service for educational issues and training within FCH technologies. The NET-Tools e-platform is leveraging robust and effective open source/free learning management systems while offering a unique blend of novel digital e-tools encompassing the spheres of information, education and research. With its two main pillars e-education and e-laboratory, the project addresses various target groups and levels of education - from high school and universities (undergraduate and graduate students) to professionals and engineers from industry, offering both e-learning modules and on-line experimental techniques.

The main goal of NET-Tools is to provide a technical infrastructure for educational reasons but also computer-intensive research to enhance the knowledge, productivity and competitiveness of those interested or already directly involved in the massive implementation of H2 and FCH technologies in Europe.

To achieve the major goal, NET-Tools 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.

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





## Scope of NET-Tools 1<sup>st</sup> Educational School

The 1<sup>st</sup> Educational School is organized as a practical experience aiming to explore the developed NET-Tools e-platform for developing and providing e-learning materials and e-tools related to fuel cells and hydrogen technologies to the respective Community but also particular groups.

The NET-Tools e-platform became developed as a technical infrastructure running as open access. Because NET-Tools offers the active participation of externals as user or developer of e-learning materials and/or e-tools, the 1<sup>st</sup> Educational School like to introduce and promote the basics and opportunities for use by presentations, demonstrations and exercises for own provision of e-tools and e-learning materials.

Moreover, the 1<sup>st</sup> Educational School aims also on the further development of the e-platform and compiles therefor critics, suggestions, opinions and potentials including technical improvements, thematic expansion and user-friendliness.

## Cooperation Request

The 1<sup>st</sup> Educational School will offer the opportunity for the consortium to engage with the wider fuel cells and hydrogen Community to:

- confirm areas of interests for the stakeholder groups targeted (academics, industry, education etc.) concerning thematic areas and educational materials developed
- initiate collaborations with these stakeholders and
- obtain recommendations for further developments

The first part of the event will focus on presentation from the teams working on the development of the e-laboratory toolboxes and e-learning contents to introduce the audience with the platform, whilst the second part of the event will focus on practical demonstration and introduction and test of the platform to allow the participants to test the platform tools and functionalities. Each day will end with open dialogue sessions between delegates and speakers.

Participants will:

- be presented with the latest developments of the NET-Tools technology platform and e-laboratory toolboxes and e-learning contents – to understand how the platform can support their teaching and training needs;
- be able to make suggestions regarding additional areas to be covered by the NET-Tools platform – so that the e-platform can support their teaching and training needs further (sustainability);
- be able to evaluate the potential for contributing with existing or planned educational materials and especially experimental data for inclusion in further processing and activities – to use the platform to reach out to new audiences and promote their activities.





To confirm your interest in contributing to the development of the platform beyond your participation to the 1<sup>st</sup> Educational School we would like to invite you to sign the template Letter of Intent that has been provided to you alongside this invitation.

**Yours sincerely,**

Prof h.c. Olaf Jedicke

Karlsruher Institute of Technology Germany

Coordinator NET-Tools project





# 1<sup>st</sup> Educational School Overview

Days	Tuesday 4 <sup>th</sup> June	Wednesday 5 <sup>th</sup> June	Thursday 6 <sup>th</sup> June
<b>Morning Session</b>	<i>Arrival of attendees and registration</i>	Introduction and Testing e-laboratory	Introduction and Testing e-learning
<b>Midday</b>	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>
<b>Afternoon Session</b>	General introductions from NET-Tools project and participants	Introduction on how to add and/or develop own content to the e-lab Open Discussion on e-lab	Introduction on how to add and/or develop own content to the e-learning Open Discussion on e-Learning
<b>Evening</b>	<i>Networking Dinner</i>	<i>Networking Dinner</i>	<i>Networking Dinner and end of event</i>

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



## Location

Hotel Estreya Palace & Residence  
<https://www.hotelestreya.com/en/>

The city of Varna is located in north-east of Bulgaria at the Black Sea. It is third largest city of Bulgaria and is called Bulgaria's Sea Capital. It's dynamic, young and surprisingly - home to the oldest gold treasure in the world. St. St. Constantine and Helena Resort is one of the most popular and beautiful Bulgarian tourist attractions. It is situated 8 km north of Varna city amidst an area of remarkably splendid natural beauty.

## General Contacts

Olaf Jedicke - Karlsruhe Institute of Technology (KIT) - [olaf.jedicke@kit.edu](mailto:olaf.jedicke@kit.edu)



### Logistical aspects

**By plane** - The nearest airport is in Varna (approx. 16 km from the venue)

Further airport: Burgas (approx. 129 km)

To the venue

**By taxi or bus** - Outside Terminal 2 you can take bus 409 (50 min to St. St. Constantine and Helena or taxi is ~ 1 km away from the hotel)



