



**Leonardo da Vinci**  
Proyectos piloto

# TRAINING and SENSITIZE

## H2-Training Project



European Leonardo da Vinci Programme, (ES/06/B/F/PP-149461)

**Curricula design** and elaboration of **training contents** validated on an international scale focused on hydrogen-based technologies and fuel cells.

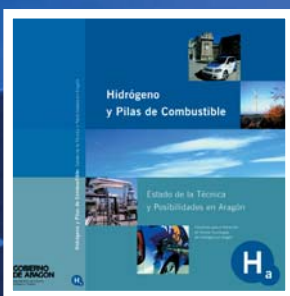
New emerging professional profile: "Installation and maintenance of hydrogen fuel cells"

**10 partnerships** from Five European Countries: plural participation of public and private entities:



San Valero Foundation, San Jorge University and Hydrogen Foundation from Aragón (Spain), Graz Energy Agency and Eco4ward (Austria), Kolping-Bildungswerk and Weiter Bildungszentrum (Germany), Wales University (England), Environment Park and Italian Hydrogen and Fuel Cell Association (Italy). October 2006-September 2008

## Other actions



Publication of the book: Hydrogen and Fuel Cells, technical state and its possibilities in Aragón.

Summers Courses: National University of Distance Learning (UNED) and Teruel University.

Diploma in Hydrogen Technologies Specialization and Fuel Cells. Zaragoza University

Organization of the EHEC 2005, European Hydrogen Energy Conference.





**Leonardo da Vinci**  
Proyectos piloto

# H2-TRAINING PROJECT

## H2-TRAINING



UNIVERSIDAD  
SAN JORGE



**H2-Training Project:** (INN7/030625):  
**Hydrogen Technologies Transfer Project European Leonardo da Vinci Programme**

**Curricula design** and elaboration of **training contents** validated on an international scale focused on hydrogen-based technologies and fuel cells.

**10 partners from Five European Countries:** plural participation of public and private entities

**Spain:** San Valero Foundation (Promoter), San Jorge University and Foundation for the Development of New Hydrogen Technologies in Aragón.

**Austria:** Graz Energy Agency and Eco4ward.

**Germany:** Kolping-Bildungswerk and Weiter Bildungszentrum

**England:** Wales University.

**Italy:** Environment Park and Italian Hydrogen Association.

New emerging professional profile,  
"technician for fuel cell installation and maintenance"

Promote and reinforce the professional training for improving the innovation process and the competitiveness in order to develop new job opportunities.

Start up: September 2006

Duration: 24 months



**H<sub>2</sub>** COMITÉ PARA EL DESARROLLO DE LAS ACTIVIDADES TECNOLÓGICAS DEL HIDRÓGENO EN ESPAÑA

Logo of the Hydrogen Committee for the Development of Technological Activities in Spain, featuring a stylized H<sub>2</sub> molecule.

A large grid of logos representing various stakeholders and partners of the committee, including government bodies, research institutions, and industry companies.

**THE FOUNDATION** **H<sub>2</sub>**

**OBJECTIVES**

- Private non profit organization: its Council covers all the sectors of interest for the new AMIS.
- Develop the renewable hydrogen pathway. Promote the settlement of the regional companies and SMEs into the hydrogen economy.
- Encourage research and technology development to enhance industrial competitiveness.
- Incorporate the renewable energies to new products and industrial processes.

**PRESENCE**

- Associated and being part in the Management Board of the Spanish Hydrogen Association (AHE) and the Spanish Fuel Cell Association (AFCE).
- Participating in the Standardization Technical Committee (AENOR CTE 183) and in the Workgroups.
- Founding of the Spanish Hydrogen and Fuel Cells Platform, taking care of interest of the companies and partners in the European Platform.
- Participation in the Joint Technology Initiative Launch (European 7th Framework Programme) and in Committee of the International Energy Agency.

**TRAINING and SENSITIZATION** **H<sub>2</sub>**

**Workshops**

- Workshop on Hydrogen and Fuel Cells (2018-2019)
- Workshop on Hydrogen and Fuel Cells (2019-2020)
- Workshop on Hydrogen and Fuel Cells (2020-2021)

**Workshops**

- Workshop on Hydrogen and Fuel Cells (2021-2022)
- Workshop on Hydrogen and Fuel Cells (2022-2023)

**TECHNOLOGY TRANSFER AND CONSULTANCY** **H<sub>2</sub>**

**Workshops**

- Workshop on Hydrogen and Fuel Cells (2018-2019)
- Workshop on Hydrogen and Fuel Cells (2019-2020)
- Workshop on Hydrogen and Fuel Cells (2020-2021)

**Workshops**

- Workshop on Hydrogen and Fuel Cells (2021-2022)
- Workshop on Hydrogen and Fuel Cells (2022-2023)





### H2-TRAINING PROJECT

**H2 TRAINING**

The Training Project: international Hydrogen Technologies Transfer Project European Initiative de Vici Programme

Curricula design and elaboration of educational units focused on hydrogen based technologies and fuel cells

10 partners from five European countries and participation of public and private entities

Spain: Esp. Valenci. Foundation (Promoter), Univ. Jaume I University and Foundation for the Development of New Hydrogen Technologies in Aragón

Austria: Inno Energy Agency and EcoEnergy

Germany: Kitzing-Billingen and other Institutions

England: Vales University

Italy: Eneconet Park and Italian Hydrogen Association

**NEW ENERGY PROFESSIONAL PROFIT**

Initiative for skill and vocational and professional training

Provide and promote the professional training for improving the innovation process and for development of trade to improve the job opportunities

start up: September 2008

Duration: 14 months

### H<sub>2</sub> FOUNDATION

PROCESO DE FUNDACIÓN DE LA ASOCIACIÓN DE EMPRESAS ESPAÑOLAS DE H<sub>2</sub>

### THE FOUNDATION

**OBJECTIVES**

Private non profit organization to Council covers all the sectors of interest for the new hydrogen economy.

**AIMS**

- Develop the renewable hydrogen pathway
- Promote the settlement of the regional companies and SMEs into the hydrogen economy
- Encourage research and technology development to enhance industrial competitiveness
- Incorporate the renewable energies to new products and industrial processes

**PRESENCE**

Associated and advisory part in the Management Board of the Spanish Hydrogen Association (ASH) and the Spanish Fuel Cell Association (SPFCAS)

Participating in the International Technical Committee (IADC/ICTM 101) and in its Workgroups

Foundator of the Spanish Hydrogen and Fuel Cells Platform, taking part in several of its Committees and Subgroups in the European Platform

Participation in the most Technology related Spanish Government's Programmes and in Committees of the International Agency for Energy

Vertical banner on the right side of the booth, featuring the H<sub>2</sub> logo and text related to the foundation's activities and objectives.



**ITHER Project**

Walqa Technology Park: Huesca (Spain)

ITHER: Technology Infrastructure for Microelectronics

**H2-TRAINING**

H2-Training Project: (2007-2008)  
Hydrogen Technologies Transfer  
European Leonardo da Vinci



Fig. 3.1.1  
Objective: Characterize the dynamic operation of a polymeric electrolyte  
to integrate it with a wind turbine.  
January 2006-June 2006

maintained  
Promote and reinforce the professional  
training for improving the innovation  
process and the competitiveness in order  
to develop new jobs in the sector.



