National Center for Scientific Research "Demokritos"

Leading in Scientific Excellence

Promoting Innovation and Entrepreneurship

National Center for Scientific Research “Demokritos”

“Demokritos” is the largest interdisciplinary Research Center in Greece, with approximately 800 employees in a single campus covering an area of 600.000m^2. The campus has currently 55.000m^2 building facilities.

NCSR “Demokritos” at a glance

Human Resources

PERSONNEL	836		
Scientific Personnel	539	Technical Personnel	137
Administrative Personnel	89	Auxiliary Personnel	71

Financial Resources (2012)

TOTAL INCOME

25.586.113€ 100%

✓Public Grants

13.110.000€ 51%

✓Income from EU Programs & Services

12.476.113 49%

Institutes of NCSR "Demokritos"

Informatics & Telecommunications	Biosciences & Applications	Nuclear & Radiological Sciences & Technology, Energy & Safety	Nanosciences & Nanotechnology	Nuclear & Particle Physics

www.demokritos.gr/erel

H_2 safety activities

- In house/commercial software for hydrogen release, dispersion and combustion (ADREA-HF CFD code)
- Safety studies for hydrogen applications
- Member of International Association of Hydrogen Safety

H_2 storage activities

- Fluid Dynamics and Heat Transfer in Porous Media
- Experiments on H_2 absorption in metal hydrides

Environmental Research Lab / Hydrogen Safety

EC-projects

- SUSANA (FCH-JU, CSA, 2013-2016), SUpport to SAfety ANalysis of Hydrogen and Fuel Cell Technologies
- HyIndoor (FP7-CP, 2011-2014), Pre-normative research on safe indoor use of fuel cells and hydrogen systems
- H2FC (FP7, 2011-2015), Integrating European Infrastructure to support science and development of Hydrogen- and Fuel Cell Technologies towards European Strategy for Sustainable, Competitive and Secure Energy
- HYAPPROVAL (FP6 STREP, 2005-2007), Handbook for Approval of Hydrogen Refueling Stations
- HYPER (FP6 STREP, 2006-2009), Installation Permitting Guidance for Hydrogen and Fuel Cells Stationary Applications
- HYSAFE (FP6 NOE, 2004-2009), Safety of Hydrogen as an Energy Carrier
- EIHP-2 (FP5, 2001-2003), European Integrated Hydrogen Project – Phase 2
- EIHP (FP5, 1998-2000), European Integrated Hydrogen Project

Studies under contract

- Safety study for the use of H_2 busses in Hong Kong (2005)
- Safety study for hydrogen installation at Ai-Stratis island / Greece (2014)

EC-projects

- H2FC (FP7, 2011-2015), Integrating European Infrastructure to support science and development of Hydrogen- and Fuel Cell Technologies towards European Strategy for Sustainable, Competitive and Secure Energy
- NESSHY FP6-IP: Novel Efficient Solid Storage for Hydrogen
- HYCONES FP6-STREP: Hydrogen Storage in Carbon Cones
- STORHY FP6-IP: Hydrogen Storage for Automotive Applications
- HYSTORY FP5: Hydrogen Storage in Solids for Stationary Applications