



PARTNER INTERVIEW

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How would you describe MOST-H2 in one sentence?

MOST-H2 represents the collective effort of 16 teams across Europe from both the academia and the private sector, towards the design, development and validation of new advanced materials and processes that can lead to novel practical, cost-efficient and safe hydrogen storage solutions facilitating thus the use of hydrogen in a broad range of stationary and heavy transport applications.

What is your role in the project?

Apart from my role as the coordinator of the overall project, having the main responsibility of closely following the progress of all activities and day-to-day management, I am also leading the research work performed by our group in NCSR "Demokritos" contributing to several parts of the project: from the reliable and accurate characterisation of the hydrogen storage performance and application potential of the new materials, to the design and testing of the prototype hydrogen storage tank that will be built at a later stage.

From your point of view: what will be the biggest impact of MOST-H2?

The successful outcome of the project will clearly contribute to demonstrating the viability of alternative hydrogen storage solutions that require milder operating conditions and can thus mitigate the safety, environmental and economic concerns related with the use of conventional compressed and liquid H2 systems.

Thank You

Learn more about Theodore's organisation

NATIONAL CENTRE FOR SCIENTIFIC RESEARCH “DEMOKRITOS” (NCSR)



The National Centre for Scientific Research “Demokritos” is the largest multidisciplinary Research Centre of Greece. The team participating in the MOST-H2 project has been formed from the collaboration of researchers from the Membranes and Materials for Environmental Separations Laboratory (MESL) at the Institute of Nanoscience & Nanotechnology (INN) and the Environmental Research Laboratory (EREL) at the Institute of Nuclear & Radiological Sciences & Technology, Energy & Safety (INRASTES).

NCSR D's role in MOST-H2

NCSR D is the coordinator of the project.

As one of the top-level European laboratories on gas adsorption measurements and nanoporous materials characterization, the NCSR D team is having a key role in the thorough assessment of the physicochemical and hydrogen storage properties of the new materials developed.

Furthermore, having long experience on modelling H₂ storage tanks, they are involved in the design of the prototype H₂ storage system. The complete MOST-H₂ system will be installed and tested in the pilot hydrogen refuelling station currently operating at NCSR D.

- ➔ Overall coordination and project management
- ➔ Material assessment: physicochemical and hydrogen storage properties
- ➔ Modelling and testing of the prototype H₂ storage system