

Press Release

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Hydrogen Technologies: Armenian Prime Minister Visits the Fraunhofer Institute for Structural Durability and System Reliability LBF

Safe hydrogen systems were the focus of the visit by Nikol Pashinyan, Prime Minister of the Republic of Armenia, to the Fraunhofer Institute for Structural Durability and System Reliability LBF in Darmstadt. Following the presentation of the Hessian Peace Prize on September 18, 2026, he, along with Armenian Foreign Minister Ararat Mirzoyan and the Armenian Ambassador to Germany, Viktor Yengibaryan, learned about the institute's research and development expertise in the field of hydrogen technologies.

How can hydrogen technologies be implemented safely, reliably and in a practical manner? The Fraunhofer Institute for Structural Durability and System Reliability LBF investigates materials, components and systems—from production through storage and transport to utilization. Realistic tests, simulations, sensor technology and digital models make stresses, aging and damage visible at an early stage.

Shaping a Safe and Reliable Hydrogen Economy

Institute Director Prof. Dr. Tobias Melz welcomed Prime Minister Nikol Pashinyan, Foreign Minister Ararat Mirzoyan and the other Members of the Armenian delegation and introduced the Fraunhofer LBF as well as its research and development expertise. Prof. Dr. Saskia Biehl then provided an overview of the institute's research work in the field of hydrogen technologies. Using a test setup, the group also demonstrated how the behavior of materials under the influence of hydrogen and realistic loads can be investigated.

The exchange focused on how assessment and monitoring methods can contribute to the safety and reliability of hydrogen systems.

Researchers are developing holistic methods that allow for the practical investigation of the reliability of materials, components and systems along the hydrogen value chain. These include material testing under pressurized hydrogen, realistic testing of components and systems and the use of simulations, digital models and integrated sensor technology. This approach enables the early identification of critical vulnerabilities, the design of safer components and the reduction of development risks.

Hydrogen Technology Research, Hydrogen System Safety and Reliability, Hydrogen Materials Testing

More about Hydrogen Technology: www.lbf.fraunhofer.de/wasserstoff-en



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Institute Director Prof. Dr. Tobias Melz (right) welcomes Nikol Pashinyan (left), Prime Minister of the Republic of Armenia, to the Fraunhofer LBF showroom in Darmstadt.

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