PRESS RELEASE

Fraunhofer IMM at the Hyvolution 2026

Fraunhofer IMM Presents Innovative Hydrogen Technologies at Hyvolution 2026 in Paris

Fraunhofer IMM will participate as an exhibitor at the international trade fair Hyvolution 2026. The three-day leading event for the hydrogen sector will take place from January 27 to 29, 2026, at Paris Expo Porte de Versailles. The Fraunhofer IMM team will welcome trade visitors at Booth N47 in Hall 1, where it will showcase its latest solutions for hydrogen production and power-to-gas processes.

The Hyvolution has established itself as a key global meeting point for the hydro-gen economy, covering the entire value chain from production and storage to application. The event brings together industry leaders, decision-makers, and innovation partners, providing sustainable momentum for projects, collaborations, and political as well as economic initiatives.

Focus of the Fraunhofer IMM presentation

Under the umbrella of its Division Decentralized & Mobile Hydrogen Technologies, Fraunhofer IMM will present application-oriented research and development results in three key technology areas:

- **Methanation technology** – Efficient CO_2 conversion using compact micro-structured reactors, particularly for deployment in biogas plants;
- **Ammonia cracking** – An autothermal process for reconverting green hydro-gen from ammonia, a high-performance energy carrier;
- **75 kW methanol reformer** – A compact and robust solution for de-central-ized hydrogen supply with a focus on fuel cell applications.

In detail, Fraunhofer IMM will present high-performance solutions for carbon dioxide methanation based on its microstructured reactor technology and in-house developed catalyst. An integrated, highly efficient thermal management system enables exception-ally high CO_2 conversion rates. The technology is specifically designed for biomethane production in biogas plants and makes an important contribution to the climate-neutral use of biogenic carbon dioxide.

For the transport and supply of green hydrogen, Fraunhofer IMM has also developed an innovative ammonia cracking process. Using microstructured reactors and specially tailored catalysts, ammonia is efficiently converted back into hydrogen. Thanks to its

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autothermal process design, the technology achieves a high overall efficiency and represents an economically and techno-logically attractive solution for future hydrogen infrastructures.

Another core focus is decentralized hydrogen supply. For more than a decade, Fraunhofer IMM has been developing a modular reformer technology platform for stationary and mobile applications, particularly for use in fuel cell systems. The 75 kW methanol reformer combines high power density with a com-pact design. A proprietary catalyst formulation ensures the system meets the highest standards for stability, efficiency, and operational reliability.

Portfolio and technology focus

At the booth, the team will also provide insights into key segments of modern hydrogen and energy technologies, including:

- Reformer technologies for mobile and stationary applications
- Catalyst development, synthesis, and testing
- Technological solutions for hydrogen supply

Meet the experts

Fraunhofer IMM scientists will be available for technical discussions, individual meetings, and in-depth insights. Join us to discuss pathways for scaling up and implementing hydrogen projects.

The Fraunhofer-Gesellschaft, headquartered in Germany, is one of the world's leading organizations for applied research. It plays a major role in innovation by prioritizing research on cutting-edge technologies and the transfer of results to industry to strengthen Germany's industrial base and for the benefit of society as a whole. Founded in 1949, the Fraunhofer-Gesellschaft currently operates 75 institutes and research units throughout Germany. Its nearly 32,000 employees, predominantly scientists and engineers, work with an annual business volume of 3.6 billion euros; 3.1 billion euros of this stems from contract research.

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