

# All the best for 2025

## News from Fraunhofer IFAM Dresden



Fraunhofer

IFAM



Dresden Branch

### Events 2025

**IHK-Thementreff PLUS  
3D-Druck in Metall –  
reif für die Anwendung  
im Mittelstand**  
Dresden, 11-2-2025

**intec**  
Leipzig, 11 - 14-3-2025

**Fraunhofer Direct  
Digital Manufacturing  
Conference DDMC**  
Berlin, 12 - 13-3-2025

**Additive Manufacturing  
Forum**  
Berlin, 17 - 18-3-2025

**Expert group Additive  
Manufacturing**  
Dresden, 24 - 25-3-2025

**Industry Workshop  
Nachhaltigkeit in pul-  
vertechnologischen  
Prozessen – Ihr praxis-  
naher Einstieg für eine  
nachhaltige Zukunft**  
Dresden, 25 - 26-3-2025

**VOLTA-X**  
Stuttgart, 25 - 27-3-2025

**Hannover Messe**  
Hannover, 31-3 -  
4- 4-2025

**DGM training  
Pulvermetallurgie**  
Dresden, 6 - 8-5-2025

**EuroPM**  
Glasgow, 15 - 17-9-2025

**7<sup>th</sup> Industry Workshop  
Advanced Alkaline  
Electrolysis**  
Dresden, 25 - 26-9-2025

**Hydrogen Technology  
Expo**  
Hamburg, 21 - 23-10-2025

**formnext**  
Frankfurt, 18 - 21-11-2025

**Hagener Symposium**  
Hagen, 27 - 28-11-2025

The dates listed are as planned  
in January 2025.

### Contact

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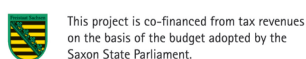
## #PrinterTalk

An online video series  
of  
Fraunhofer IFAM Dresden

Funding of the projects  
"Simsalabim" and  
"SmartPASTE"



Co-funded by  
the European Union



This project is co-financed from tax revenues  
on the basis of the budget adopted by the  
Saxon State Parliament.

Ladies and gentlemen, dear partners, customers and companions,

The year 2025 is still in the starting blocks. Above all, I would like to wish you personal well-being, confidence and energy.

We look back proudly on all that we achieved in 2024 and at the same time look forward with motivation. 2025 promises many challenges, which we anticipate to take on. Because we can rely on a strong team, great partners and networks as well as extensive expertise. We are convinced that this foundation will enable us to master the tasks we have been set.

So let's look ahead together and drive forward the pioneering research and development work that our economy urgently needs.

Here's to continuing our great, trusting collaboration!

Yours sincerely,  
Prof. Dr. Thomas Weißgärber

### 2nd place at INNOspace Masters Competition

Dr. Georg Pöhle was awarded the second prize in 2024 for the project "AGREE – Avoiding Greenhouse Gas Emissions in Rare Earth Element production by transferring space resource technology to Earth". The solution developed by the partners Fraunhofer IFAM Dresden, TU Bergakademie Freiberg and Airbus Defence and Space is called ROXY and offers unique features: high current efficiency, no greenhouse gas emissions and virtually no consumables.

INNOspace Masters, an international innovation competition organised by the German Space Agency at DLR in cooperation with ESA, the ESA Business Incubation Centres in Germany, as well as Airbus, Mercedes-Benz and OHB, promotes ideas for the transfer of technology and expertise from other sectors to the space sector or from the space sector to non-space sectors. The overall theme for 2024 was "Space up your Life – Innovations for a smarter Earth and Space". [➔](#)



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### EMATec 2026 in the planning

Following the success of the first "International Conference on Emerging Applications of PM & AM – Materials and Technologies", short EMATec, we are now in the midst of planning the next edition in summer 2026. Please mark your calendar for 2 to 5 June 2026 to meet international experts under the heading "Sustainable Materials and Manufacturing" and to contribute your own expertise. With the support of a high-calibre International Liaison Board, we are currently fine-tuning the programme and will be sending you the call for abstracts soon. We look forward to seeing you at EMATec 2026 in Dresden! [➔](#)

### Pioneering work for scalable hydrogen technology in Saxony

The "SmartPASTE" project aims to develop the innovative POWERPASTE technology from Fraunhofer IFAM Dresden into a central component of the energy transition. This technology enables safe, compact and easily transportable hydrogen storage in the form of a paste that releases hydrogen by adding water, which can be used in fuel cells to generate electricity. "SmartPASTE" focuses on the development and scaling of hydrogen generators in the power range from 5 kW to 50 kW. This range is crucial for applications in electromobility, emergency power supply and potentially even in aviation. [➔](#)

### Development of a Saxon network: Cost-effective production of high-temperature components using 3D printing

The development of a continuous process chain for the sinter-additive production of nickel-based alloys is at the centre of the "Simsalabim" project. Fraunhofer IFAM Dresden together with the Dresden University of Applied Sciences (HTW) and the Fraunhofer Institute for Material and Beam Technology IWS are addressing all steps from design and sintering simulation through to verification on real parts. In dialogue with manufacturers and users, industrial requirements and use cases will guide developments from the outset. [➔](#)

### Co-operations - Together we are strong

Exchanges with partners and customers are our daily routine in research and development. This includes joint events and cooperation with organisations such as the European Powder Metallurgy Association, the Fachverband Pulvermetallurgie, the German Society for Materials Science and the Chambers of Industry and Commerce. We also maintain close international contacts. In 2024, for example, a cooperation agreement was concluded between the Fraunhofer Institutes IFAM, IMWS and IWES and the Korean Institute of Energy Research to support the faster establishment of a hydrogen economy and sustainable energy supply in South Korea and Germany. [➔](#)

### Video series #PrinterTalk

We have launched #PrinterTalk to present the possibilities of additive manufacturing at our institute in more detail and make them more tangible. The first technology to take centre stage is MoldJet. In a total of 14 episodes, our experts take a closer look at this still young process: Experiences with the process, insights into how to use the machine and the advantages and challenges of the technology. You can find all videos in our LinkedIn group "[#PrinterTalk: Alles rund ums MoldJet](#)". Here, our experts invite you to exchange ideas and discuss all aspects of the MoldJet process and additive manufacturing in general. Because: If AM – then IFAM! [➔](#)

### Flexible and cost-effective: generative production of high-frequency filters for satellite communication

Modern communication systems such as satellites or mobile telephony require higher data rates and capacities. This is why higher frequency bands in the millimetre wave range are increasingly being used. However, as the frequency increases, the wavelength decreases and the components of such systems become smaller. Miniaturisation is progressing accordingly and requires technologies to produce components with the lowest possible losses in a simple way, cost-effectively and in large quantities. Additive screen printing has proven to be the ideal process for these components. [➔](#)