

# Fröhliche Weihnachten

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## News from Fraunhofer IFAM Dresden



### Events

**EPMA HIP-Seminar**  
Dresden, 7 - 8-3-2023

**Hannover Messe**  
Hannover, 17 - 21-4-2023

**DGM-Fortbildung  
Pulvermetallurgie**  
(German)  
Dresden, 9 - 11-5-2023

**Industry Workshop  
MoldJet**  
Dresden, 16-5-2023

**Additive Manufacturing  
Forum**  
Berlin, 4 - 5-7-2023

**International Conference  
on Emerging Applica-  
tions of PM & AM  
Materials and Technologies**  
Dresden, 5 - 7-7-2023

**MetFoam 2023**  
Dresden, 5 - 7-7-2023

**EPMA Summer School**  
Dresden, 17 - 21-7-2023

**decarbXpo**  
Düsseldorf,  
September 2023

**6th Industry Workshop  
Advanced Alkaline  
Electrolysis**  
Dresden, 20 - 21-9-2023

**Hydrogen Technology  
Expo**  
Bremen, 27 - 28-9-2023

**Euro PM**  
Lissabon, 1 - 4-10-2023

**formnext**  
Frankfurt, 7 - 10-11-2023

**Hagener Symposium**  
Hagen, 30-11 - 1-12-2023

The dates listed are as planned  
in December 2022.

The Dresden Frauenkirche, printed with LMM. An example of the various possibilities with additive processes at Fraunhofer IFAM. Here in Dresden, you can find all available technologies from Selective Electron Beam Melting, 3D screen printing, MoldJet, FFF and Gelcasting to LMM united under one roof in the Innovation Center Additive Manufacturing ICAM®. [➔](#)

### Contact

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Ladies and gentlemen, dear partners, customers and companions,

Once again, a year is drawing to a close. And as always, it seems that the weeks and months have gone by increasingly quickly. At the same time, we must not forget how rich in content this period has been. We have successfully launched, worked on or completed many exciting projects. We also had many opportunities to meet you in person at conferences, trade fairs or events here at the institute. Many thanks to all of you for the great, trustful cooperation!

We are already looking forward to working with you again in 2023 to find innovative, tailor-made solutions to your problems. Please feel free to contact me and my team at any time.

But first of all, we wish you a Merry Christmas and a good start to a successful New Year!

Above all, we wish you good health and personal well-being!

Yours sincerely,  
Prof. Dr. Thomas Weißgärber

### International Conference on Emerging Applications of PM & AM Materials and Technologies, Dresden, 5-7 July 2023

The major challenges of the energy transition from fossil to renewable sources and the change in transportation technology require new technical solutions in which sustainability is becoming increasingly important. Powder metallurgy faces major challenges. However, there are also numerous opportunities for new products and innovative and sustainable solutions for applications in existing markets, but in new markets especially. Innovation in the processes, particularly in sinter-based additive manufacturing, also contributes to this.

This conference serves as a platform for the presentation and discussion of the latest material and technology developments for applications in the future. There will be a clear focus on energy technologies during these three days. You are welcome to present your latest products, technologies, or developments.

Please submit your abstract until 31 January 2023 to one of the following categories: Materials for power-to-X technologies, Energy Harvesting and Materials for electrical drives. [➔](#)

### MetFoam 2023 in Dresden

Parallel to the above mentioned conference, the 12<sup>th</sup> International Conference on Porous Metals and Metallic Foams **MetFoam 2023** will take place in Dresden.

The MetFoam conference series is the largest interdisciplinary, international symposium dealing exclusively with the manufacturing processes, properties and applications of porous/cellular metallic materials. The focus is on both functional applications and lightweight construction.

You are still welcome to submit your abstract. We still have a few slots available - first come, first serve.

The highlight: You can participate in both conferences with one registration. [➔](#)

### Science for breakfast

As part of „Early Morning Science with Fraunhofer“ on 21 September 2022, we presented the project highlight „Heat2Comfort“. This deals with the thermal management of fuel cell trains: in the future, regional trains will be equipped with fuel cells that convert oxygen and hydrogen into electrical energy. The project aims at effectively utilizing the fuel cell waste heat for temperature control of the vehicle interior. At the same time, the comfort of the passengers is to be increased from both a thermal and an acoustic point of view. [➔](#)

More on the activities of the Competence Center Energy and Thermal Management: [➔](#)

### Industry Workshop Advanced Alkaline Electrolysis

This year, for the fifth time, we welcomed more than 200 participants to our AEL workshop, both on-site and online. Due to the high demand, topics around innovative catalysts and materials, manufacturing of parts and components, electrolyzer equipment as well as operation modes were covered on two days for the first time. Many thanks to all presenters and participants who contribute to the growing success of this event. Save the date already: we are looking forward to welcoming you to the 6<sup>th</sup> edition of the industry workshop here at the Fraunhofer Institute Center Dresden on 20-21 September 2023.

### Reduced risk after cardiac surgery thanks to resorbable pacing leads

This is the goal of the project „ReMoTe CarE“. In collaboration with the Faculty of Medicine Carl Gustav Carus – TU Dresden, the researchers want to avoid the complications that have so far been associated with non-resorbable pacing leads. This would not only provide great relief to patients but also significantly relieve the burden on both healthcare professionals and the healthcare system. [➔](#)



### EPMA Fellowship Award

Prof. Thomas Weißgärber received the EPMA Fellowship Award at the WorldPM 2022 Congress & Exhibition in Lyon. On 10 October 2022, he accepted the award as a recognition from the scientific/academic community for his significant contribution to the development of the powder metallurgy industry. Thanks to EPMA for this honor! [➔](#)



### More efficient fuel cells with metallic paper

In the SinterGDL project, Fraunhofer IFAM Dresden is developing an innovative gas diffusion layer (GDL) for mobile fuel cells that is made entirely of metal. Together with the partners Papierfabrik Louisenthal GmbH, balticFuelCells GmbH, FHR Anlagenbau GmbH, Pa-piertechnischen Stiftung PTS and the German Aerospace Center (Deutsches Zentrum für Luft- und Raumfahrt e. V.) improvements are to be achieved in both the application and assembly properties of the GDL, but also in the manufacturability itself. [➔](#)

