

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 Applications 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 Ехро Bremen, 27 - 28-9-2023

Euro PM

Lissabon, 1 - 4-10-2023

formnext Frankfurt, 7 - 10-11-2023

Hagen, 30-11 - 1-12-2023

Hagener Symposium

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 Contact

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ter here. Of course, you can object to receiving information at any time. In this case, please hand

in your deregistration here.

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

MetFoam 2023 in Dresden

Parallel to the above mentioned conference, the 12th 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 const-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.

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.

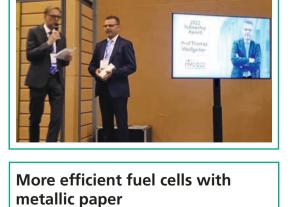


Science for breakfast As part of "Early Morning Science with

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 Manage-

ment: 🗪

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!



Alkaline Electrolysis This year, for the fifth time, we welco-

Industry Workshop Advanced

med 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 6th edition of the

industry workshop here at the Fraunho-

fer Institute Center Dresden on 20-21

September 2023.

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, Papiertechnischen 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.

