### **AddMorePower**

# **ADVANCED MODELLING**

# **AND CHARACTERIZATION**

# FOR POWER SEMICONDUCTOR

# **MATERIALS AND TECHNOLOGIES**

FOSTERING A MORE RESILIENT POWER ELECTRONIC INDUSTRY

## Project status after one year

Close collaborations are starting to shape our project. AddMorePower presents a unique team of many experienced and hard-working experts, working on building and shaping promising outcomes. In the past year, we worked hard on our idea, defended imaging protocols, prepared community standards for CHADA and MODA and so much more.

📓 Fraunhofer





🔞 AI





KU LEUVEN

(infineon





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### NEWSLETTER

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orepower.eu



#### Project Coordinator

Fraunhofer Institute for Ceramic Technologies and Systems

andre.clausner@ikts.faunhofer.de

#### Coordination Support

Technikon Forschungs- und Planungs-gesellschaft mbH



Budget

€ 5.9 Million 100% EU-funded



Consortium

9 Partners



Duration

48 Months



### **Consortium meeting**

On 4<sup>th</sup> and 5<sup>th</sup> July 2023, there was a consortium technical meeting, hosted by Infineon in Villach, Austria. Meeting at Infineon gave us the chance to get a guided tour of company's cleanroom and devolve into important research activities. During the meeting many important topics were discussed, such as capacitation, modelling and data handling, followed by rich ad-hoc discussions.

### **Conferences and events**

We are happy to share the participation of AddMorePower in the following events:

## 01

#### Introducing AddMorePower to Nexparia

28.06.2023

@Hamburg (Germany) The coordinator, André Clausner visited the PC of AddMorePower. In this meeting, the project AddMorePower was introduced to a big Nexperia audience.

## 02

#### EMMC Webinar "Introduction to Ontologies"

30.06.2023

@online

Olivia Pfeiler from KAI participated in the online webinar. In this webinar an introduction to the general concepts of ontologies was presented and an overview about ongoing activities in the EMMC to create domain level ontologies.

## 03

#### Le brunch France Bleu interview

27.08.2023

@Metz (France)

Antoine Guitton (CNRS – LEM3) was interviewed by the French radio station France Bleu, due to the pre-release of his book: "La Science en 4 Saisons; l'hiver" (EDP Science, 2023). In the interview he also talked about the AddMorePower framework that and how it is transforming and impacting the science community.



IWAC09 workshop

26.09.2023 @Limoges (France)

Antoine Guitton (CNRS – LEM3) gave popularisation talk "Save the world with materials Science", with the main message: "As scientists, our goal is to impact and transform the world, but it is our responsibility to communicate and elucidate how we bring about those changes, especially in the framework of the AddMorePower project. The role of science in our society positions scientific knowledge as an indispensable asset for every European citizen, encompassing not only knowledge itself but also methods and values. For many years, I have been actively involved in various initiatives aimed at popularizing science."

# 05

#### European School for young material scientist

6-7.11.2023 @Brno (Czech Republic)

Laura Neumann, a PhD student at Fraunhofer IKTS working on lab-based high-photon energy X-ray microscopy in the frame of AddMorePower showed here first results in a poster at the 11th European School for young material scientist in Brno on 6th and 7th November, 2023. Her poster with the title "X-ray microscopy radiation studies of thermo-mechanically degraded Cu metallization layers" was well received amongst the audience of the school.

# 06

#### EMCC and MAM workshop

17.01.2024 & 18.01.2024 @Madrid (Spain)

A workshop organised jointly by NMBP-35 H2020 Projects CHARISMA, NanoMECommons, and EASI-STRESS, entitled "From Research to Industry: How Characterisation & Digitisation Chanes the Game" took place at CSIC central headquarters in Madrid.

At the workshop our project advisor, Yanaris Ortega Garcia, was present, as well as the representatives of the EMMC (European Materials Modelling Counsel) and the EMCC (European Materials Characterisation Counsel) community. All together roughly 10 projects and industries in the

frame of European Projects on Characterisation and Modelling were present. The main points presented and discussed were the digitalisation in the frame of characterisation

and modelling. Especially the creation of CHADAs and MODAs and ontologies beyond. At the workshop AddMorePower gained some more information on CHADAs and MODAs, that will help us organize the European-wide mapping of CHADA/MODA. In the next future there will be also a series of workshops on this topic led by NanoMECommons.

## Outlook

The first project year is behind us, and we are proud of all the progress achieved so far. As we are officially entering the second year of the project, we cannot wait for all the upcoming conferences, talks and events where we will share more technical achievements with you.

## We are eager for all that is yet to come. Stay tuned.



#### Video material created

#### **Explainer video**

Short video prepared by TEC
Presenting the vision of the project
Including main aims for the next year

#### Interviews

Presenting the key researchers and scientists of the project:

André Clausner, project coordinator and head of department for Microelectronic Materials and Nanoanalysis (IKKTS, Fraunhofer) Peter Imrich, group lead of Material Science and Simulation (KAI) Antoine Guitton, Associate Professor of Materials Phy-



#### Upcoming Events

Pan Pacific Strategic Electronics Symposium (Pan Pac) Conference 29<sup>th</sup> January – 1<sup>st</sup> February 2024 @Hawaii (USA)

AddMorePower Review meeting Spring 2024 @Leuven (Belgium)

European Microscopy Congress 2024 Summer 2024 @Copenhagen (Denmark)

All past and upcoming events can be found on the AddMorePower official webpage:

addmorepower.eu/events/