



METAL MATRIX NANO-COMPOSITE COATINGS UTILIZATION AS ALTERNATIVE TO HARD CHROMIUM

2nd ISSUE
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1. MOZART Technologies and Society



MOZART technologies will benefit society and are aligned with the European Commission's (EC) Green and Digital transformation, check out how the main technological topics of the project will contribute to a safer and more sustainable world.

| MOZART technological topic | Related industry | Benefits to society | Importance to the EC |
|------------------------------------|--|---|--|
| Fundamentals of Electroplating | Coatings & surface engineering | Production of safer & more sustainable coatings for new applications | Fundamental knowledge on the topic is important for scientific advances inside and outside the EU, and for facilitating the adoption of new technologies by the industry |
| Electroplating & Applications | Finishing industry, Electroplating, formulation of baths, synthesis of nanoparticles | Facilitating the acceptance by the industry to replace hard chromium & benefiting European citizens by improving their quality of life | Plating is a large branch of industry and dominating this process can improve desired properties of new and more sustainable coatings, making Europe a reference in the field |
| Artificial Intelligence (AI) | Additive manufacturing | <ul style="list-style-type: none">▪ Benefits in the daily life of European citizens by providing more agile solutions for the design of coatings▪ Allowing the community to have access to a powerful tool with AI models to design new compounds and materials, and produce new data to complement datasets | <ul style="list-style-type: none">▪ Transmission of knowledge in the area of AI rising prominence of EU in the field▪ Development of a made-in-EU AI tool to be applied in the coating industry |
| Online process particle monitoring | Particle characterization, Nanotechnology in Biotech, Pharma & Material Research | Nanotechnology and particle research enabling new applications in nanomedicine, precision medicine and reducing the side effects of existing API developments | Advances in modern nanoparticle research and productions focusing on real-time characterization for waste reduction and performance control, leveraging the EU capacity in this scientific field and related market |

2. Latest News



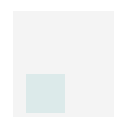
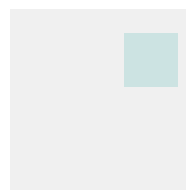
First online intra-training activity

On December 20th, the MOZART Project had its first training activity internal to the consortium. The online training was attended by all partners and aimed at familiarizing them with the technical aspects of MOZART, providing a better holistic understanding of the project. Our partner A.I.F.M – Galvanotecnica e nuove finiture hosted the activity and four technical partners presented the main technological topics related to their work inside the project.

- Politecnico di Milano which presented the Fundamentals of electrochemical deposition and simulation.
- Creative Nano which presented Electroplating and its applications.
- AIMEN Centro Tecnológico with the presentation “Designing with Artificial Intelligence” which focused on explaining what artificial intelligence (AI) is, as well as how the AI models are used in the project work.
- BRAVE Analytics with the presentation “OF2i Proceedings for Mozart: A BRAVE new way in online process particle monitoring” which introduced the specific physical background of OF2i, the characterization methodology used in Mozart, and presented the research to be done in the project regarding the problematics of the physical behavior of particles used for the electroplating process.



The consortium ended the training more familiarized with all the technologies that are being developed during the project and more aware of the tasks of each one inside MOZART for a smoother and more productive collaboration between them.



2. Latest News



MOZART at Fastener Fair Italy

From Nov 30th to Dec 1st, 2022, our partner A.I.F.M. – Galvanotecnica e nuove finiture participated in the Fastener Fair Italy, along with the project coordinator Politecnico di Milano (PoliMi). The fair took place in Milan, Italy, and is a business trade event covering all aspects of the fastener and fixing industry, offering the opportunity to make new contacts and build successful business relationships between producers, wholesalers, distributors, end-users, and the industry.

ASFIMET and PoliMi showcased the MOZART project together with other related projects they are involved in, showing to the visitors the project's main technologies and impacts, and contributing to the engagement of potential industrial stakeholders. They also distributed the project's flyer with the main information about MOZART and the technologies being developed in it, the flyer can be accessed and downloaded [here](#).



Online training on SSbD concept

On January 23rd the second intra-training activity was held online, with the participation of the entire MOZART Consortium. The activity gave continuity to the first one about the technical aspects of the project which was held in December.

This time, our partner, the University of Birmingham (UoB), presented an overview of the Safe and Sustainable by Design (SSbD) concept, aiming at ensuring that there is a common understanding of it within the Consortium in order to ease a fruitful collaboration and facilitate its applicability along the project lifetime.

The event was hosted by our partner A.I.F.M Galvanotecnica e nuove finiture and attended by all partners, who were thus able to become even more familiar with the SSbD strategy.

Stay tuned and get to know in advance about the next MOZART training activities and workshops!

2. Latest News



MOZART disseminated in Vicenza, Italy



One more time, our partner A.I.F.M. - Galvanotecnica e nuove finiture (ASFIMET) disseminated the MOZART project in Italy. Between January 20th and 24th, in the city of Vicenza happened the [VICENZAORO](https://www.vicenzaoro.com/en/t-gold), an international show for jewellery machinery and the most innovative technologies applied to gold and jewellery processing. ASFIMET disseminate the MOZART project in a press corner by distributing their magazine Galvanotecnica e nuove finiture with MOZART advertisement and the more recent press release. The show contributes to broadening the impact of the project since it focuses on jewellery sector operators offering an opportunity to present MOZART technologies to potential stakeholders in a different industrial field.

To know more visit VICENZAORO website: www.vicenzaoro.com/en/t-gold



3. MOZART on Press



Our partner A.I.F.M. – Galvanotecnica e nuove finiture (ASFIMET) published the MOZART 2nd Press Release in the 5th edition of their magazine Galvanotecnica e nuove finiture. It is the third time ASFIMET publishes the project in the magazine, which was founded in 1949 by Prof. Eugenio Bertorelle and is the reference publication for Italian galvanic companies and the metal finishing market sector.

The press release details how was the first in-person consortium meeting that took place in Athens, in September 2022. The partners got together for 2 days in Greece to discuss their activities inside the project, the progress until the aforementioned month, and the next steps planned.

Check it out! The MOZART consortium can't wait for the next in-person meeting!

To access the magazine, just click [here](#).

To download MOZART press releases, click [here](#).

[Visit the project's website for more](#)



4. Important Achievements



By the end of November, the MOZART project achieved the end of its 6th month and some important deliverables and milestones have been achieved within the expected deadline.

In the context of WP2: Specifications & Requirements based on SSbD strategy, the Specification & Requirements report containing the materials and methods and the end user's specifications was submitted by M4 by [Creative Nano](#) with the collaboration of the whole consortium. Aligned with that, the first milestone was reached: the agreement upon specifications and requirements between all partners.

Related to WP8: Dissemination, Exploitation & Communication, the partners have worked on:

- A report on updates and implementation of the Dissemination, Communication and Exploitation Plan, IPR activities, and clustering, elaborated by [AXIA Innovation](#) in close collaboration with all partners, and
- A report containing the Data Management Plan (DMP), elaborated by the [University of Birmingham](#), also with the participation of all beneficiaries.

Both of them were submitted respecting the due date by the end of November. The DMP is a public deliverable with access available on the MOZART website and can be downloaded [here](#).

The MOZART consortium is happy with the last achievements and looks forward to the next steps of the project!



5. Upcoming Events



NEXT CONSORTIUM MEETING IN SPAIN

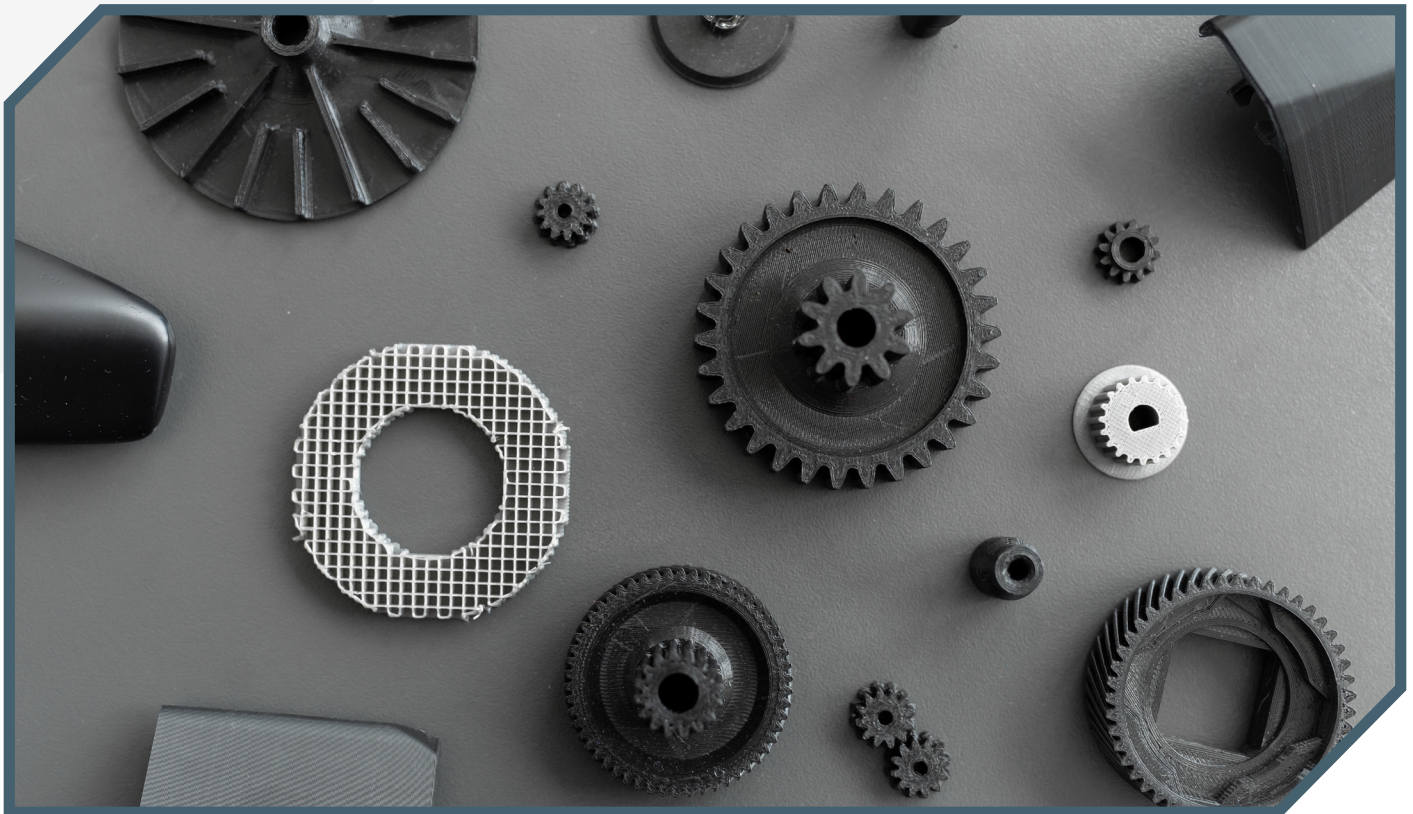
The next in-person meeting is scheduled for May 2023 and will be hosted by our partner Asociacion de Investigacion Metalurgica del Noroeste – [AIMEN](#). There, all consortium members will have the chance to meet again and share their thoughts and the progress of their activities until this stage of the project.

We can't wait for it!

MOZART TO BE EXHIBITED IN POLAND AND ITALY

Our partner ASFIMET is planning to be an exhibitor in one event in Poland and five in Italy where they will have a booth showcasing the MOZART roll-up and distributing the project's flyer and a magazine with MOZART advertisement and press release for targeted audiences from the surface and finishing industry.

Stay tuned and keep up to date with all MOZART project news and events!





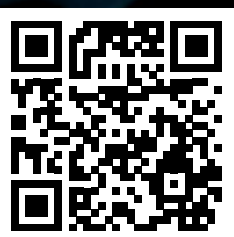
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