
Coatings

2026
Conference

Coatings 2026: Safe and Sustainable by Design Surface Treatment and Coatings

List of Posters

Sci**forum**

Poster Session A

Tuesday, 21 April 2026 (11:00–11:30, 13:00–14:15, 16:00–16:30 EEST)

Session	Number	Author	Title
A	1	Dimitrios Bikiaris	Tyrosine-Modified Surface-coated Lignin as a Bio-Based Filler in HDPE Matrix
A	2	Sofia Paraskevi Makri	Phosphorus- and nitrogen-modified lignin additives for multifunctional polymer coatings
A	3	Tsvetanka Babeva	Deposition temperature effect on properties of electrosprayed ZnO thin films
A	4	Gabriela Ryczek	Formation and Oxidation Studies of Thermal Barrier Coatings with Polymer-Derived Ceramic Bond Coats on TiAl Alloys
A	5	Rafail O. Ioannidis	Sustainable bioplastics as durable cast film substrates for printed electronics, digital printing, and biosensor applications
A	6	Katerina Lazarova	Design of Hygro-Swelling Polymer Films Exhibiting Thickness-Based Color Shifts
A	7	Guillaume Votte	Impact of Deposit Homogeneity on Sunscreen Efficacy: A Novel Quantitative Method Using LC-OCT
A	8	Kata Berkesi	Electrochemical Deposition of Ni/Ti ₃ C ₂ T _x MXene Nanocomposite Coatings from a Boric Acid-Free Electrolyte
A	9	Gabriel Taillandier	Nanoscale droplet simulations: A computational framework to quantify wetting
A	10	Athanasios Tzanis	One-step electrodeposition of superhydrophobic Ni/MoS ₂ nanocomposite coatings
A	11	Krystian Prusik	Microstructural Evolution of Magnetic Ni-Mn-Co-In Alloy Powders for Coatings and/or Additive Manufacturing
A	12	Michele Ponzelli	PFAS-Free Coatings: Capturing a €1.8 Billion Market Opportunity
A	13	Antonio Borrego Ortega	Multiobjective optimization framework for the sustainable-by-design assessment of industrial coating production processes
A	14	Juliana P. S. Sousa	Sustainable Fluorine-Free Hydrophobic Solutions to Prevent Paint Overspray Adhesion
A	15	Esther Bermejo	The Role of Standardization in Research and Innovation Projects: Case study of Ni-based materials testing for energy applications
A	16	Ângela Lima	Enhanced Visible-Light Photocatalysis Using TiO ₂ /C ₃ N ₄ Composites for Indoor Air Quality Improvement

A	17	Maite Redín Azcona	Effect of Mo, W, and Cr over the mechanical properties of clean and sustainable magnetron-sputtered AlTiN layers
A	18	Ioanna Katsavou	Assessing Market Readiness and Business Models for PFAS-Free SSbD Coating Solutions
A	19	Carla F. Martins	PFAs-free surface finishing in the automotive sector: A comprehensive mapping of approaches for safety, sustainability, and functionality
A	20	Maria A. Patras	From Strain to Solution: The Integrated Natural Product Discovery Platform at Fraunhofer IME
A	21	Guillaume Brunin	Machine learning–driven optimization of oxygen reduction reaction performance in electrodeposited Ni–W nanoparticles
A	22	Kyriazis C. Rekos	Effect of biochar functionalization on the properties of poly(butylene succinate) for sustainable coating applications
A	23	Dimitrios Bikiaris	Surface-Engineered PLA-Based Nanoparticles via Folic Acid–Functionalized Chitosan Coatings: Performance Evaluation and Targeted Drug Delivery Potential
A	24	Francisco Ferreira	Migration and Safety Assessment of Bio-Coating for Frozen Fish Packaging
A	25	Ioanna Deligkiozi	Decision support tool for selection of SSbD metallic coating alternatives

Poster Session B

Wednesday, 22 April 2026 (11:00–11:30, 13:15–14:30, 16:15–16:45 EEST)

Session	Number	Author	Title
B	1	Panagiota Eleni	Life Cycle Assessment and Costing of Metal Plating Processes on Resin-Based 3D-Printed Components
B	2	Reza Jafari	Multilayer Functional Coatings Incorporating Phase Change Materials and Aqueous Self-Lubricating Layers for Improved Anti-Icing Performance
B	3	Ioanna Deligkiozi	Financial Evaluation of Advanced Gear Coatings
B	4	Alvise Bianchin	Data collection and organization to support decision making process in material selection
B	5	Nikolaos Mekras	Machine learning for metallic coatings modeling & quality prediction
B	6	Fabian Cezar Lupu	Using thermal deposition for ballistic protection plates of bulletproof vests
B	7	Eleonora Marta Longhin	Tiered Hazard Assessment Implementing New Approach Methodologies for PFAS-Free Coatings in a Safe and Sustainable by Design Context
B	8	Pegah Zahedifar	Hydrophobic and Bio-Designed Waterborne Polyurethane Formulations for Eco-Friendly Textile Finishes
B	9	Giovanni Bolelli	Role of substrate hardness on the adhesion of DLC-based coatings deposited on L-PBF Al-Si-Mg alloys
B	10	Adam Kowalik	Light-induced thermal drying process of sol-gel layers obtained by ultrasonic atomization
B	11	Natalia Kaczmarczyk	Sol-Gel Oxide Barrier Coatings on PET Substrates for High-Pressure Hydrogen Storage Applications
B	12	Konstantina-Roxani Chatzipanagiotou	Decision Support System for Safe & Sustainable Innovation in NICKEFFECT
B	13	Aliona Nicolenco	Three-Dimensional Current Density Distribution Simulations and Experimental Determination of Electrodeposited Porous Nickel-Tungsten on Fiber Cloths Substrate
B	14	Luca Magagnin	REACH-Compliant Nickel-Based Metal Matrix Composites for Tribological Applications: A Sustainable Alternative to Hard Chromium from the MOZART Project
B	15	Srikanth Guntoju	Cardanol-Based Sustainability as an Alternative for Petroleum-Based Corrosion-Protective Coatings for Al 6061

B	16	Luana de S. C. Carnaval	Environmental pH Effects on the Stability of Sustainable Pickering Emulsions for Edible Coating Applications
B	17	Vassilios Constantoudis	Theoretical and ML-based method for thickness estimation of coatings on rough substrates using nondestructive SEM imaging
B	18	Paschalis Spinthakis	Ni-Based Coatings as Sustainable Alternatives to Hard Chromium for Aeronautical Applications
B	19	Diego Pascual Fernández	Tailoring the SSbD approach to surface treatment processes: a streamlined framework for sustainability and safety
B	20	Michalis Kartsinis	Enzyme-assisted pretreatment of PA12 for sustainable plating on plastics: Replacement of Cr ⁶⁺ etching and Pd activation
B	21	Despoina Georgopoulou	Fabrication of fluorine-free superhydrophobic coatings via sol-gel method and spray deposition
B	22	Mirica Karlovits	The impact of measurement geometry on colorimetric properties of coatings based on cellulose nanocrystals (CNCs) and pearl luster pigments
B	23	Maria Pia Pedferri	Recycling of dispersion-coated paper-based packaging: tracking methodology to discover and quantify microplastics
B	24	Zoi-Lina Koutsogianni	Development of Sustainable Sugar-Derived Thermosetting Resins for Eco-Friendly Plating on Plastics (PoP) Applications