

**SICT 2025 / PlasmaTech 2025 / Tribology 2025 Joint Conferences Preliminary Program**

**23– 25 April 2025 | Albufeira, Portugal**

<b>23 April 2025</b>		
<b>09:00 - 12:00</b>	<b>Participants registration</b>	
<b>09:30 - 10:30</b>	<b>Welcoming Coffee</b>	
<b>SICT 2025 / Plasma Tech 2025 / Tribology 2025 Joint Plenary Session</b>		
<b>Conference Room</b>		
<b>Session's Chairs:</b>		
<b>10:30 - 11:00</b>	Advancing plasma technologies: innovations and insights from the N-PRiME group <b>L.L. Alves</b>	<b>Prof. Luis Alves</b> , IPFN- Univ. Lisbo, <b>Portugal</b>
<b>11:00 - 11:30</b>	Production of thermally sprayed HEBM High-Entropy Alloy coatings <b>S. Dosta</b> , G. Clavé, L. Betancor, K. Rozema, F. Touwen, G. Bolelli, L. Bortolotti, E. Forlin, E. Rossi5, G. Gigante, M. Sebastiani and C. Barreneche	<b>Prof. Sergi Dosta</b> , University de Barcelona, <b>Spain</b>
<b>11:30 - 12:00</b>	Exploring multi-modality and adaptivity of low-temperature plasmas for biomedical applications <b>M. Keidar</b>	<b>Prof. Michael Keidar</b> , The George Washington University, <b>USA</b>
<b>12:00 - 14:00</b>	<b>Lunch Break – Restaurant</b>	
<b>SICT 2025 Session I. A: Surface treatments and coatings deposition and functionalization / Characterization / Properties Multifunctional composite and hybrid coatings</b>		
<b>Conference Room</b>		
<b>Session's Chairs:</b>		
<b>14:00 - 14:30</b>	The role of energetic species during the growth of thin films <b>D. Depla</b>	<b>Prof. Diederik Depla</b> , Ghent University, <b>Belgium</b>
<b>14:30 - 15:00</b>		<b>Dr. David Ruch</b> , Luxembourg Institute of Science and Technology, <b>Luxembourg</b>
<b>15:00 - 15:15</b>	Dealkalization of the internal surfaces of pharmaceutical glass vials: comparison between gaseous and liquid Sulfur-based treatments <b>G. Legrottaglie</b> , G. Trevisi, D. Costa, R. Martini, M. Poncini and D. Faverzani	<b>Dr. Giuseppe Legrottaglie</b> , University of Parma, <b>Italy</b>
<b>15:15 - 15:30</b>	Ion Implantation for Sustainable Surface Modification: A Case Study in Electrical Connector Industry for Enhanced Corrosion Resistance <b>A. Nasiri</b>	<b>Dr. Aida Nasiri</b> , IONICS Surface Technologies, <b>Belgium</b>
<b>15:30 - 15:45</b>	Manufacture of the Invar Fine Metal Mask Using an Electroforming Technique I.G. Kim, J.H. Lee, S.E. Shin and <b>Y.B. Park</b>	<b>Prof. Yong Bum Park</b> , Suncheon National University, <b>Rep. of Korea</b>
<b>15:45 - 16:00</b>	Stability of Expanded Austenite During Annealing in Vacuum <b>D. Manova</b> , H. Oh, D. Hristov and S. Mändl	<b>Dr. Darina Manova</b> , Leibniz Institute of Surface Engineering (IOM), <b>Germany</b>
<b>16:00 - 16:30</b>	<b>Coffee Break / Posters Session</b>	
<b>16:30 - 16:45</b>	Multidimensional Elemental and Molecular Analysis for Surface & Interface studies <b>P. Chapon</b> and A. Stankova	<b>Mr. Patrick Chapon</b> , HORIBA France, <b>France</b>

<b>16:45 - 17:00</b>	Combined in-situ PM-IRRAS and XPS analysis of nitrogen plasma surface modification of polylactide thin films <b>S. Gołębiewska</b> , M. Voigt, T. de los Arcos and G. Grundmeier	<b>Ms. Sandra Gołębiewska</b> , Paderborn University, <b>Germany</b>
<b>17:00 - 17:15</b>	Characterization of electroplated zinc-iron coatings : Influence of organic additives and pulsed current <b>O. Solh</b> , J. Grosseau-Poussard, J. Creus and C. Savall	<b>Mr. Omar Solh</b> , La Rochelle University, <b>France</b>
<b>17:15 -17:30</b>	Boosting Additively Produced Magnesium via Ceranod's ULTRACERAMIC® <b>A. Sharma</b> , J. Zerrer, A. Abel, M. Müller, J. Hermsdorf, S. Kaielerle and A. Buling	<b>Mr. Anutsek Sharma</b> ELB - Eloxalwerk Ludwigsburg Helmut Zerrer GmbH, <b>Germany</b>
<b>17:30 -17:45</b>	Transfer Matrix Method Approach for ex and in situ LASER Interferometry Analyses of Growing Thin Films – Applied on Initiated Chemical Vapor Deposition Grown Thin Films <b>G. Ehlers</b> , L. Storcks, T. Pogoda, S. Schröder and T. Ameri	<b>Mr. Gunnar Ehlers</b> , Kiel University, <b>Germany</b>
<b>17:45 - 18:00</b>	Self-healing and recyclable intumescent flame retardant coatings <b>F. Samyn</b> , K. Apaydin and Maude Jimenez	<b>Dr Fabienne Samyn</b> , Univ. Lille, <b>France</b>
<b>18:00 - 18:15</b>	Novel Photoprotective Solution for Rosé Wine: TiOx-AZO Coatings on Glass Bottles <b>E. Almandoz</b> , J. Moriones, B. Navarcorena, B. Garín, P. Amézqueta, J.F. Palacio, J. Osés, J. Fernández De Ara and G.G. Fuentes	<b>Dr. Eluxka Almandoz</b> , AIN - Industry Association of Navarra, <b>Spain</b>
<b>18:15 - 18:30</b>	Enhanced Conductivity Paraffin PCM Microcapsules for Textile Coating <b>A.Sankauskaite</b> , V. Skurkytė-Papievienė, V. Rubežienė, J. Baltušnikaitė-Guzaitienė and S. Varnaitė-Žuravliova	<b>Dr. Audrone Sankauskaite</b> , State research institute Center for Physical Sciences and Technology, <b>Lithuania</b>

23 April 2025

**SICT 2025 - BEYOND PFAS Workshop**

**Conference Room**

**Session's Chairs:**

<b>14:00 - 14:30</b>	Biopolymer-based hydrophobic textile coatings: development within the PROPLANET project <b>A. Verbic</b> , U. Novak, B. Likozar and B. Stres	<b>Dr. Anja Verbic</b> , National Institute of Chemistry, <b>Slovenia</b>
<b>14:30 - 15:00</b>	Waterborne PFAS-free coatings for packaging and textile sectors <b>R. Rodriguez</b> , O. Echeverria, B. Perez and H. Villaverde	<b>Dr. Raquel Rodriguez</b> , TECNALIA, Basque Research and Technology Alliance, <b>Spain</b>
<b>15:00 - 15:30</b>	PFAS-free sol-gel hybrid coatings with hydrophobic and non-stick properties for low-maintenance glass and food-packaging machines (PROPLANET) <b>F. Brusciotti</b> , A. Suárez-Vega, K. Nalyvayko, L. Arce and N. Casanova	<b>Dr. Fabiola Brusciotti</b> , TECNALIA, Basque Research and Technology Alliance, <b>Spain</b>
<b>15:30 - 16:00</b>	PFAS-free non-stick coatings for kitchenware applications (TORNADO) <b>F. Brusciotti</b> , A. Suárez-Vega, L. Arce and G. Adversi	<b>Dr. Fabiola Brusciotti</b> , TECNALIA, Basque Research and Technology Alliance, <b>Spain</b>
<b>16:00 - 16:30</b>	<b>Coffee Break / Posters Session</b>	
<b>Session's Chairs:</b>		
<b>16:30 - 17:00</b>	Synthesis of safe and sustainable PFAS-free omniphobic coatings <b>T. Piock</b> , S. Nique, F. Somorowsky, C. Stauch and D. Lau	<b>Mrs. Tamara Piock</b> , Fraunhofer Institute for Silicate Research (ISC), <b>Germany</b>
<b>16:45 - 17:00</b>	Safe and Sustainable by Design PFAS-free Hybrid Coating for Cosmetic Glass Packaging Application within BIO-SUSHY Project <b>M. Poelman</b> , E. Khouzakoun, A.-L. Dechief, B. Belloncle, A. Mezy, A. Ballesteros Riaza, J. Alcodori, P. Camilleri Lledo, A. Rashid and A. Nelson	<b>Mrs. Mireille Poelman</b> , Materia Nova, <b>Belgium</b>

**Plasma Tech Session I. B:  
Plasma fundamentals / Modelling / Atomic and Molecular Processes**

**Conference Room**

**Session's Chairs:**

<b>14:00 - 14:30</b>	Non-Conventional diagnostics for the investigation of atmospheric pressure discharges <b>H. Kersten</b> , L. Hansen, H. von Wichert, T. Hahn, D. Solodov, M. Gaal and M. Klette	<b>Prof. Holger Kersten</b> , University Kiel, <b>Germany</b>
<b>14:30 - 15:00</b>	From VLEO to Space: Selected EP systems analyzed by modeling and experiment <b>J. Schein</b>	<b>Prof. Jochen Schein</b> , University of Federal Armed Forces Munich, <b>Germany</b>
<b>15:00 - 15:30</b>	Overview of Electric Propulsion Thruster and Diagnostic Developments at TU Dresden E. Berka, G. Hentsch, J. Hertel, R. Nerger, O. Neunzig, L. Peiffer, C. Peter, F. Prochnow, T. Reichelt, J.-Ph. Wulfkühler and <b>M. Tajmar</b>	<b>Prof. Martin Tajmar</b> , Dresden University of Technology, <b>Germany</b>
<b>15:30 - 16:00</b>	Conventional and non-conventional diagnostics on micro discharges <b>L. Hansen</b> , G. Bilgin, N. Kohlmann , F. Köhler , U. Schürmann , L. Kienle, H. Kersten and J. Benedikt	<b>Dr. Luka Hansen</b> , Kiel University, <b>Germany</b>
<b>16:00 - 16:30</b>	<b>Coffee Break / Posters Session</b>	
<b>Session's Chairs:</b>		
<b>16:30 - 16:45</b>	Numerical Modeling of Approximate Plasma Evolution through Gaussian Functions for Magdrive Devices - An MPI-Parallelised Approach <b>M. J. Warrick</b> , C. K. Stavrou and M. Drolia	<b>Mr. Michael Warrick</b> , Magdrive, <b>UK</b>
<b>16:45 - 17:00</b>	Using remote plasma emission spectroscopy for monitoring and control of vacuum processes <b>L. Maroto</b> , J. Brindley, B. Daniel, V. Bellido-Gonzalez and D. Monaghan	<b>Ms. Lara Maroto</b> , Gencoa Limited, Liverpool, <b>UK</b>
<b>17:00 - 17:15</b>	Extended self-similarity in a 2D complex plasma with active Janus particles <b>V. Nosenko</b>	<b>Dr. Volodymyr Nosenko</b> , German Aerospace Center DLR, <b>Germany</b>
<b>17:15 - 17:30</b>	AI-Driven Modelling for Predictive Optimisation of Atmospheric Plasma Treatment in Microporous EVAs <b>C. Ruzafa-Silvestre</b> , V.M. Serrano-Martínez, J.M. Carot-Sierra , M.D. Romero-Sánchez and E. Orgilés-Calpena	<b>Mr. Carlos Ruzafa Silvestre</b> , INESCOP, <b>Spain</b>

23 April 2025

**SICT 2025/ Tribology 2025 Joint Session I. C:  
Surface Engineering, Coatings and Tribology**

Conference Room

**Session's Chairs:**

14:00 - 14:30	Post-processing treatments to enhance the interlayer strength of extrusion-based 3D printed polymer composites <b>S. Bhandari and R.A. Lopez-Anido</b>	<b>Prof. Roberto Lopez-Anido</b> , University of Maine, <b>USA</b>
14:30 - 14:45	Electroplated Metal-Graphene Coatings as Solid Lubrication <b>S. Zhao</b> , L. Fabbri, N. Savjani, E. Johansson, A. M. Andersson, E. Piciollo, G. Bartolini, F. Bertocchi, M. A. Bissett and I. A. Kinloch	<b>Dr. Su Zhao</b> , ABB AB Motion, <b>Sweden</b>
14:45 - 15:00	Multilayer Cu-graphene composite coating system for high-load solid lubrication – Exploring dynamic and quasi-static friction <b>E. Johansson</b> , S. Zhao, A.M. Andersson, L. Fabbri, E. Piciollo, G. Bartolini and F. Bertocchi	<b>Dr. Erik Johansson</b> , ABB AB, Motion, <b>Sweden</b> .
15:00 - 15:15	The Influence of Methods for Distributing the IF-WS2 Modifier into the Structure of Al <sub>2</sub> O <sub>3</sub> Aluminum Oxide Coatings on Their Micromechanical Properties <b>J. Korzekwa</b> , A. Barylski, M. Niedźwiedz and M. Bara	<b>Dr. Joanna Korzekwa</b> , University of Silesia in Katowice, <b>Poland</b>
15:15 - 15:30	Low-Friction Coatings for the External Surface of Glass Vials: From Dipping to Spray Deposition for Industrial-Scale Applications <b>T. Pastore</b> , G. Trevisi, F. Casoli, L. Savio, M. Remešová, V. Bednaříková, L. Čelko, M. Doubrava, O. Sharifahmadian, M. Krbata, D. Costa, M. Poncini and D. Faverzani	<b>Ms. Tiziana Pastore</b> , University of Parma, <b>Italy</b>
15:30 - 15:45	The Microstructure and Properties of Carbon Coatings Produced by Low-Temperature RFPACVD Processes on Nanobainitic and Martensitic 35CrMnSi-5-5-4 steel K. Wunsch,, K. Kulikowski, A. Roguska , R. Chodun, E.Skołek and <b>J. R Sobiecki</b>	<b>Prof. Jerzy R. Sobiecki</b> , Warsaw University of Technology, <b>Poland</b>
15:45 - 16:00	Wear Behavior of Chromium and Chromium Nitride Coatings Subjected to Different Probe Geometry During Impact Fatigue Tests <b>J. Krupa</b> and S. Zimowski	<b>Ms. Jolanta Krupa</b> , AGH University of Krakow, <b>Poland</b>
16:00 - 16:30	<b>Coffee Break / Posters Session</b>	
16:30 - 16:45	Relationship between Acoustic Emission Signals and Surface Conditions in Rolling Contact Fatigue Tests <b>Y. Mukai</b> and A. Hase	<b>Mr. Yu Mukai</b> , Nippon Steel Technology Co., Ltd., <b>Japan</b>
16:45 - 17:00	The effect of milling-induced surface topography on the tribological behavior of chromium-molybdenum alloyed steel. <b>A. Dzierwa</b> , J. Sep and P. Pawlus	<b>Prof. Andrzej Dzierwa</b> , Rzeszow University of Technology, <b>Poland</b>
17:00 - 17:15	Analyzing area roughness parameters of ground and superfinished components: toward the description of surface performance <b>M. Gragnanini</b> , A. Fortini, A. Fantini and A. Blum	<b>Mr. Michele Gragnanini</b> , University of Ferrara, <b>Italy</b>

24 April 2025

**SICT 2025 Session II. A:  
Surface and coatings Characterization / Properties  
Multifunctional composite and hybrid coatings**

Conference Room

**Session's Chairs:**

09:00 - 09:30	Nanoporous/nanocomposite thin films by magnetron sputtering deposition in Helium: New materials and applications <b>A. Fernández</b>	<b>Prof. Asunción Fernández</b> , Materials Science Institute of Seville, <b>Spain</b>
09:30 - 09:45	Next generation Surface Treatments to Preserve Buildings <b>M.J. Mosquera</b> , R. Zarzuela, M. Luna, A.B. Mosquera, A. Peñalozza and M.J. Ruíz-Bejarano	<b>Prof. María J. Mosquera</b> , University of Cádiz, <b>Spain</b>
09:45 - 10:00	A new route to produce smart coatings with switchable superhydrophobic-superhydrophobic surface in response to metal ions and pH <b>R. Zarzuela</b> , C. Porras-Ketterer and M. J. Mosquera	<b>Dr. Rafael Zarzuela</b> , University of Cadiz, <b>Spain</b>
10:00 - 10:15	g-C <sub>3</sub> N <sub>4</sub> -TiO <sub>2</sub> -SiO <sub>2</sub> nanocomposites for producing multifunctional building with hydrophobic, self-cleaning and depolluting properties <b>M. Luna</b> , C.G. Silva, J.M. Gatica, M.J. Mosquera and J.L. Faria	<b>Mr. Manuel Luna</b> , University of Cádiz, <b>Spain</b>
10:15 - 10:30	Fluorine-free Superhydrophobic Treatment for Textiles <b>A.B. Mosquera</b> , R. Zarzuela and M.J. Mosquera	<b>Mr. Alfonso B. Mosquera</b> , University of Cadiz, <b>Spain</b>
10:30 - 11:00	<b>Coffee Break / Posters Session</b>	
<b>Session's Chairs:</b>		
11:00 - 11:30	Surface engineering of stainless steel for dairy fouling management <b>M. Jimenez</b> , S. Zouaghi, M. Grunlan, S. Bellayer, F. Samyn and G. Delaplace	<b>Prof. Maude Jimenez</b> , Univ. Lille, <b>France</b>
11:30 - 11:45	Development of nanocomposite coatings to enhance leather surface properties S.A.F. Neves, L. Lima, S. Pinho <sup>1,2</sup> , M.A. Lopes and <b>C. Fonseca</b>	<b>Prof Carlos Fonseca</b> , University of Porto, <b>Portugal</b>
11:45 - 12:00	New Approach for Evaluating Surface Heterogeneity in Nanostructured Coatings <b>R. Griffo</b> , M. Sirignano, M. Minale and C. Carotenuto	<b>Mrs. Raffaella Griffo</b> , University of Campania Luigi Vanvitelli, <b>Italy</b> .
12:00 -12:15	Carbon Nanoparticles at Liquid Interface: An investigation on different surface functionalization processes with Pendant Drop Tensiometry <b>R. Esposito</b> , R. Griffo, A. Caputo, M. Sirignano, M. Minale and C. Carotenuto	<b>Ms. Rosada Esposito</b> , University of Campania Luigi Vanvitelli, <b>Italy</b>
12:15 - 12:30	Expanding Transparent Covalently Attached Liquid-like Surfaces for Icephobic Coatings with Broad Substrate Compatibility <b>A. Jalali Kandeloo</b> s, T. Eder, D. Hetey, A. Bismarck, M. R. Reithofer, M. J. Cordill and JM. Chin	<b>Mr. Amirhossein Jalali Kandeloo</b> s, University of Vienna, <b>Austria</b>
12:00 - 14:00	<b>Lunch Break – Restaurant</b>	
<b>Group Photo at 13:45</b>		

**SICT 2025 - FreeMe project workshop on safe and sustainable coatings**

**Conference Room**

**Session's Chairs:**

<b>14:00 - 14:30</b>	Development of tuned SOEC electrode by spray coating <b>A. Glukharev</b> , H. Witters, Z. Chen, J. Song, M. Jacobs and V. Middelkoop	<b>Dr. Artem Glukharev</b> , Flemish Institute for Technological Research-VITO, <b>Belgium</b>
<b>14:30 - 15:00</b>	A Multiscale Model for the Etching Mechanism of a Piranha Solution on an ABS Substrate <b>F. D. García</b> , I. Bellanato and A. Martos	<b>Mr. Francisco Daniel García</b> , IDENER Research and Development, <b>Spain</b>
<b>15:00 - 15:30</b>	A process optimization tool for emerging Plating on Plastics Processes <b>K. A Pyrgakis</b> , D. Zoikis-Karathanassis, E. Poupaki, M. Kartsinis, A. Grigoropoulos and A-Z. Karathanassis	<b>Dr. Konstantinos A Pyrgakis</b> , EXELISIS IKE, <b>Greece</b>
<b>15:30 -16:00</b>	Boosting the Research and Development of Safe and Sustainable-by-Design Ni-Based Materials for Energy Applications <b>A. Nicolenco</b> , F. Alcaide, U. Huizi, E. García-Lecina, E. Pellicer, R. de Paz-Castany, K. Eiler, G. Brunin, D. Waroquiers, G.M. Rigagnese, B. van den Bossche, J. Steck, F. Petrakli and R. Chatzipanagiotou	<b>Dr. Aliona Nicolenco</b> , CIDETEC, <b>Spain</b> Spain
	Self-Activating Sprayable Resins for Toxic-Free Plating on Plastics R. Bernasconi and <b>L. Magagnin</b>	<b>Prof. Luca Magagnin</b> , Polytechnic Milan, <b>Italy</b>
<b>16:00 - 16:30</b>	<b>Coffee Break / Posters Session</b>	

**Conference Dinner**

**Conference venue hotel – From 19:30**

**SICT 2025 / Plasma Tech 2025 Joint session II. B:  
Bio-interfaces, Biomedical / Bioactive surfaces and coatings  
Plasma applications for biology, medicine, and agriculture**

**Conference Room**

**Session's Chairs:**

<b>14:00 - 14:30</b>	Changes in morphology and physiology of carrot calli in relation to selected plasma treatment <b>N. Puac, M. Milutinović, S. Živković, G. Malović and N. Škoro</b>	<b>Dr. Nevena Puac</b> , Institute of Physics Belgrade, <b>Serbia</b>
<b>14:30 - 14:45</b>	Surface-designed biocidal TiO <sub>2</sub> -based nanohybrids for enhanced photocatalytic and antimicrobial activity <b>E.R. Silva, A. Barreto, A. Carapeto, M. Pereira, L.C. Gomes, R. Teixeira-Santos and F.J.M. Mergulhão</b>	<b>Dr. Elisabete R.Silva</b> , University of Lisbon, <b>Portugal</b>
<b>14:45 - 15:00</b>	Tannic acid-assisted green in situ reduction of antimicrobial silver na-noparticles on clinoptilolite surface <b>M. Miola, F. Gattucci, M. Lallukka, N. Grifasi, M. Armandi and M. Piumetti</b>	<b>Prof. Marta Miola</b> , Polytechnic of Turin, <b>Italy</b>
<b>15:00 - 15:15</b>	Sputtered deposition and laser structuration of multimetallic thin films for antibacterial/antiviral applications <b>P. Birnal, P. Brault, D. Boivin, N. Semmar, B. Aspe, L. Lounis, P. Andreatza, E. Bourhis, T. Vaubois, E. Menou, M. Cavarroc-Weimer, C. Andreatza and A.L. Thomann</b>	<b>Mr. Pierre Birnal</b> , University of Orleans, <b>France</b>
<b>15:15 - 15:30</b>	A Fluidized Bed Approach to Nonthermal Plasma Inactivation of Foodborne Pathogens in Presence of Low Water Content <b>J. Espitia, D. Verheyen, E. Dankwa, R. Serhan, S. Akkermans, D.S. Kozak and J.F.M. Van Impe</b>	<b>Mr. Julian Espitia</b> , KU Leuven, <b>Belgium</b>
<b>15:30 - 15:45</b>	Synergistic Antibacterial Effect of Photoactivated, Plasma-Synthesised Copper Oxide and Zinc Oxide Nanoparticles <b>B. Erol, S. Akkermans, M. Pradhan, R. Ní Dhomhnaill, D. Kozak and J. F.M. Van Impe</b>	<b>Mrs. Busra Erol</b> , KU Leuven, <b>Belgium</b>
<b>15:45 - 16:00</b>	Design and Development of a Non-Thermal Plasma based Handheld Device for Sterilisation of Surfaces in Spacecraft Applications <b>E. N. Skariah, M. K. Kim, K. Olsson-Francis and B. P. Stephens</b>	<b>Dr. Emil Ninan Skariah</b> , University of Southampton, <b>UK</b>
<b>16:00 - 16:15</b>	CAP-generated RONS disrupt leukemia cells' function by mitochondria-related damage <b>B. Stańczyk, B. Szymczak, B. Maciejewski, M. Świdziński, K. Roszek and M. Wiśniewski</b>	<b>Ms. Beata Stańczyk</b> , Nicolaus Copernicus University, <b>Poland</b>
<b>16:00 - 16:30</b>	<b>Coffee Break / Posters Session</b>	

**Conference Dinner**

**Conference venue hotel – From 19:30**



24 April 2025

**SICT 2025 / Plasma Tech 2025 Joint Session II. C:  
Plasma fundamentals / Modelling / Atomic and Molecular Processes  
Plasma Processing / Materials Interactions / Coatings**

Conference Room

**Session's Chairs:**

09:00 - 09:30	Plasma devices for surface treatment – specific applications <b>T. Minea</b>	<b>Prof. Tiberiu Minea</b> , Paris-Saclay University, <b>France</b>
09:30 - 10:00	Advanced Spatio-Temporal Modulation Control of Induction Thermal Plasma Fields for High-Rate Production of Nanomaterials <b>Y; Tanaka</b>	<b>Prof. Yasunori Tanaka</b> , Kanazawa University, <b>Japan</b>
10:00 - 10:30	Bipolar HiPIMS Discharges: Principles, Diagnostics, and Thin Film Deposition Strategies <b>P. Baroch</b> , A.D. Pajdarová, T. Kozák, M. Farahani, T. Tölg and J. Čapek	<b>Dr. Pavel Baroch</b> , University of West Bohemia, <b>Czech. Rep</b>

10:30 - 11:00

Coffee Break / Posters Session

**Session's Chairs:**

11:00 - 11:30	HiPIMS Sputtering for Thin Film Deposition for Applications <b>A.P. Ehasarian</b>	<b>Prof. Arutiun Ehasarian</b> , Sheffield Hallam University, <b>UK</b>
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11:30 - 12:00

12:00 - 14:00

Lunch Break – Restaurant

Group Photo at 13:45

**Session's Chairs:**

14:00 - 14:30	Interplay of plasma processes and diffusion during solid carbon active screen plasma nitrocarburizing of AISI 316L <b>S. Mandl</b> , D. Manova, A. Dalke and H. Biermann	<b>Dr. Stephan Mandl</b> , Leibniz Institute of Surface Engineering (IOM), <b>Germany</b>
14:30 - 14:45	Simulating the influence of nanopores and chemical structure on gas permeation through silicon-based PECVD coatings <b>J. Franke</b> and R. Dahlmann	<b>Mr. Jonas Franke</b> , RWTH Aachen, <b>Germany</b>
14:45 - 15:00	Technological approaches for plasma-assisted thermochemical diffusion treatments of steels <b>S. Jafarpour</b> , A. Dalke and H. Biermann	<b>Dr. Saeed M. Jafarpour</b> , TU Bergakademie Freiberg, <b>Germany</b>
15:00 - 15:15	Automatic Feature Extraction from Optical Emission Spectra of Reactive Ion Etching Using Dynamic Mode Decomposition <b>M.A. Sayyed</b> , S. Zieger, T. Seifert, T. Rothe, J. Langer, M. Haase and, H. Kuhn	<b>Mr. Mudassir Ali Sayyed</b> , TU Chemnitz, <b>Germany</b>
15:15 - 15:30	O <sub>2</sub> plasma degradation of space-technology polymers <b>C.A.P. da Costa</b> , N. Laidani, G. Gottardi, L. Maines, M. Michielan, L. M. Martini, P. Tosi and D. Ascenzi	<b>Dr. Cintia Aparecida Pires da Costa</b> , Univ. Trento, <b>Italy</b>
15:30 - 15:45	Synthesis of quantum dots in non-thermal plasma: tuning the energy-storage properties and surface reactivity via dominant faceting <b>F. Matejka</b> , P. Galar, J. Kopenec, R. Kral, P. Zemenova, M. Dopita, P. Hapala, D. König, P. Vrbka and K. Kusova	<b>Mr. Filip Matejka</b> , Institute of Physics of the CAS, <b>Czech Rep.</b>
15:45 - 16:00	Development of ceramic-based composite coatings by combining cold-spray deposition and plasma electrolytic oxidation <b>J. Martin</b> , A. Maizeray, G. Marcos, M.P. Planche, H. Liao, A. Cappella, S. Philippon, T. Czerwiec and G. Henrion	<b>Dr. Julien Martin</b> , Univ ; Lorraine, <b>France</b>

16:00 - 16:30

Coffee Break / Posters Session

**Session's Chairs:**

<b>16:30 - 16:45</b>	Deposition of copper-containing carbon-based nanocomposite thin films in laboratory environment and process transfer into industrial-size PECVD reactor <b>R.Příbyl</b> , M.Karkuš, Š. Kelarová, R.Václavík, O.Jašek, E.Staňková, I.Sedláček and V. Buršíková	<b>Mr. Roman Příbyl</b> , Masaryk University, <b>Czech Rep.</b>
<b>16:45 - 17:00</b>	Characterization of the surface forces on smooth hydrophobic plasma polymer films M. Góra, P. Navascués, D. Hegemann, M. Heuberger and <b>A. Southam</b>	<b>Dr. Astrid Southam</b> , Empa, Swiss Federal Lab. for Materials Science and Tech., <b>Switzerland</b>
<b>17:00 - 17:15</b>	Surface Characterization and Interaction Dynamics of Hydrophilic Plasma Polymer Films <b>M. Gora</b> , P. Navascués, U. Schütz, D. Hegemann and M. Heuberger	<b>Mr. Michal Gora</b> , Empa, Swiss Federal Laboratories for Materials Science and Technology, <b>Switzerland</b>
<b>17:15 - 17:30</b>	Properties of a-C:H:F produced with tetrafluorethane <b>B.B. Ramos</b> , F. A. Vicente, N. Androni, G. Hammes, J.D.B. de Mello and C. Binder	<b>Mr. Bruno Ramos</b> , Federal University of Santa Catarina, <b>Brazil</b>

**Conference Dinner**

**Conference venue hotel – From 19:30**

24 April 2025

**Tribology 2025 Session II. D:  
Coatings and Surfaces Corrosion / Tribological Properties /  
Physics or Chemistry of Tribo-Surfaces/ Nanotribology**

Conference Room:

**Session's Chairs:**

08:30 - 09:00	Prediction of total HIP replacement wear: perspectives considering synovial lubrication of rough surfaces and multibody dynamics <b>A. Ruggier</b>	<b>Prof. Alessandro Ruggiero</b> , University of Salerno, Italy
09:00 - 09:30		<b>Prof. Daniele Dini</b> , Imperial College London, UK
09:30 - 10:00	The Electro-Mechanical Tribology of Rough Lubricated Interfaces <b>R. L. Jackson</b>	<b>Prof. Robert L. Jackson</b> , Auburn University, USA
10:00 - 10:30		<b>Prof. Auezhan Amanov</b> , Tampere University, Finland

10:30 - 11:00 Coffee Break / Posters Session

**Session's Chairs:**

11:00 - 11:15	Surface Study of Additively Manufactured Steel Processed through Vibration Assisted Ball Burnishing <b>A. Travieso-Disotuar</b> , R. Jerez-Mesa, J.A. Travieso-Rodríguez and M. Vilaseca	<b>Mr. Adrián Travieso</b> , Eurecat, Spain
11:15 - 11:30	Effect of Tribological Conditions on Organic Friction Modifiers tribofilm <b>M. Homayoonfard</b> , A. Ghanbarzadeh, S.L M Schroeder, P. Dowding and A. Morina	<b>Mrs. Marjan Homayoonfard</b> , University of Leeds, UK
11:30 - 11:45	Comparative Tribological Analysis of Conventional and Cyclic Deep Cryogenic Treatment on AISI D2 Tool Steel <b>V. Yarasu</b> , B. Podgornik, B. Batic, M. Sedlacek, Č. Donik and F. Zepeda	<b>Dr. Venu Yarasu</b> , Institute of Metals and Technology, Slovenia
11:45 - 12:00	Nitrogen ion implantation of a refractory high entropy HfMoNbTaTiVWZr thin film metallic glass <b>K. Stępnia</b> k and M. Jarząbek	<b>Ms. Karolina Stępnia</b> k, Institute of Fundamental Technological Research, Poland

12:00 - 14:00 Lunch Break – Restaurant

Group Photo at 13:45

**Session's Chairs:**

14:00 - 14:30		<b>Dr. Stefan J. Eder</b> , AC2T research GmbH/ TU Wien, Austria
14:30 - 14:45	Wear on Radial Shaft Seals- Wear Models and Influencing Parameters <b>J. Gerhard</b> and F. Bauer	<b>Ms. Jacqueline Gerhard</b> , University of Stuttgart, Germany
14:45 - 15:00	Determination of the contact temperature of rotary shaft seals without compromising the tribological system <b>C. Olbrich</b> , N. Piechulek; S. Feldmeth and F. Bauer	<b>Mr. Christoph Olbrich</b> University of Stuttgart, Germany
15:00 - 15:15	Optimization of Laser Engraved Pumping Structures on Lip Seals for Pressure Loaded Applications <b>M. Gohs</b> and F. Bauer	<b>Mr. Marco Gohs</b> , University of Stuttgart, Germany
15:15 - 15:30	Rolling Contact Fatigue Prediction of 42CrMo4 Steel Using Multi-axial Fatigue Parameters <b>I. Ulacia</b> , I. Llavori, M. Maiztegui, A. Iñurritegui, A. Arana and J. Larrañaga	<b>Dr. Ibai Ulacia</b> , Mondragon University, Spain
15:30 - 15:45	Effect of Surface Roughness on Contact Area Measurements: Experimental and BEM Analysis <b>M. Maiztegui</b> , J. Larrañaga, A. Arana, A. Oyanguren, I. Ulacia and J. F. Molinari	<b>Mr. Mattin Maiztegui</b> , Mondragon University, Spain

<b>15:45 - 16: 00</b>	Micropitting resistance of bearing steels in hybrid contacts <b>V. Brizmer</b> , P. Andric, B. Minov, T. Nuijten, R. van der Zwaan, G.E. Morales-Espejel and C. Vieillard	<b>Dr. Victor Brizmer</b> , SKF Research & Technology Development, <b>The Netherlands</b>
<b>16:00 - 16:30</b>	<b>Coffee Break / Posters Session</b>	
<b>16:30 - 16:45</b>	Experimental study of the influence of the mechanical design of a tribometer on the friction response for a pin-on-disk configuration <b>P. Jolly</b> , N. Brunetière and L. Ravaut	<b>Dr Pascal Jolly</b> , Univ. of Poitiers, <b>France</b>
<b>16:45 - 17:00</b>	Microstructural and tribological investigations of M2 high-speed steel alloy fabricated by directed energy deposition process <b>N.K. Sah</b> , G. Singh, P.M. Pandey and S. Ghosh	<b>Mr. Neetesh Kumar Sah</b> , Indian Institute of Technology Delhi, <b>India</b>
<b>17:00 - 17:15</b>	Studying the ligand chain length effect on wear resistance of nanostabilized greases <b>B. Soltannia</b> , A. Milani and D. Grecov	<b>Dr. Babak Soltannia</b> , The University of British Columbia, <b>Canada</b>
<b>17:15 - 17:30</b>	Friction of the PtSe <sub>2</sub> layers with different grain sizes in ambient air and vacuum <b>A. Kozak</b> , M. Sojkova, J. Hrda, M. Hulman and M. Tapajna	<b>Dr. Andrii Kozak</b> , Institute of Electrical Engineering, <b>Slovakia</b>

**Conference Dinner**

**Conference venue hotel – From 19:30**

25 April 2025

**Tribology 2025 Session III. A:  
Lubricants and hydrodynamic lubrication / Biotribology**

Conference Room:

**Session's Chairs:**

08:30 - 09:00		<b>Prof. Maria Clelia Righi</b> , University of Bologna, <b>Italy</b>
09:00 - 09:30	Lubrication with liquid-air mixtures in industrial applications <b>M. Arghir</b> , A. Voitus and M-A. Hassini	<b>Prof. Mihai Arghir</b> , Univ. Poitiers, <b>France</b>
09:30 - 09:45	Control of lubricant film thickness by using electro-responsive biolubricants <b>M. García-Pérez</b> , S. D. Fernández-Silva, C. Roman, R. Glovnea, M. A. Delgado and M. García-Morales	<b>Ms. Maria Garcia Perez</b> , University of Huelva, <b>Spain</b>
09:45 - 10:00	Exploring Surface Microtexture Parameters with OpenFOAM <b>A. L. Nagy</b> and G. Laki	<b>Dr. Andras Nagy</b> , Szechenyi Istvan University, <b>Hungary</b>
10:00 - 10:30	<b>Coffee Break / Posters Session</b>	
10:30 - 10:45	Optimization of Artificial Oil Aging Process for E20-contaminated Oils Using Design of Experiment Methodology <b>D. Pinter</b> and A. L. Nagy	<b>Ms. Dominika Pinter</b> , Szechenyi Istvan University, <b>Hungary</b>
10:45 - 11:00	Design and experimentation of a tribometer for non-lubricating fluid studies in journal bearing applications <b>F.Cammelli</b> , G.Brignolo, G. Ferrarese and M. Dabalà	<b>Mr. Francesco Cammelli</b> , University of Padova, <b>Italy</b>
11:00 - 11:15	Multi-scale friction model for finite element analysis of automotive brake pad-disc components <b>J. Yun Won</b> , H. Seo, Y. Kim, H. Jeong, J. Kyeong and M-G. Lee	<b>Mr. Jung Yun Won</b> , Seoul National University, <b>Rep. of Korea</b>
11:15 - 11:30	Tribological Study on Friction and Wear Mechanisms of Neodymia, Yttria, and Tungstic Oxide Nanoparticles in a Partially Formulated Engine Oil <b>A.I. Szabo</b>	<b>Mr. Adam Istvan Szabo</b> , Széchenyi István University, <b>Hungary</b>
11:30 - 11:45	Anisotropic visco-pseudo-hyperelasticity constitutive model for creep behavior in brake friction materials <b>Y. Kim</b> and M-G. lee	<b>Mr. Youngjae Kim</b> , Hyundai Motor Company, <b>Rep. of Korea</b>
11:45 - 12:00	A Study on improving performance and energy efficiency using self-powered triboelectric sensor <b>H.S. Shin</b> , Y.K. Kim , J.M. Baik, G.H. Han and S.H. Lee	<b>Mr. Heesup Shin</b> , Hyundai Motor Group, <b>Rep. of Korea</b>

25 April 2025

**SICT 2025 / Plasma Tech 2025 Session III. B:  
Coatings for Energy and Environmental Applications**

Conference Room:

**Session's Chairs:**

<b>09:00 - 09:30</b>	Fabrication and Characterizations of SnO <sub>x</sub> -based Flexible and Invisible Synaptic Memristor and Their Application <b>T-Y. Tseng</b> , P-X. Chen and D. Panda	<b>Prof. Tseung-Yuen Tseng</b> , National Yang Ming Chiao Tung University, <b>Taiwan</b>
<b>09:30 - 09:45</b>	Surface Magnetic Structures in Flexible Composite Glass Covered Microwires <b>A. Chizhik</b> and A. Zhukov	<b>Dr. Alexander Chizhik</b> , University of Basque Country, <b>Spain</b>
<b>09:45 - 10:00</b>	AlxTayOz thin films deposited by pulsed direct current reactive magnetron sputtering for dielectric applications <b>R. Drevet</b> , P. Souček, P. Mareš, P. Ondračka, M. Fekete, M. Dubau and P. Vašina	<b>Dr. Richard Drevet</b> , Masaryk University, <b>Czech Rep.</b>
<b>10:00 - 10:30</b>	<b>Coffee Break</b>	
<b>10:30 - 10:45</b>	Durable VO <sub>2</sub> @SiO <sub>2</sub> -based Thermochromic Coatings on Building Ex-terior Structures for Enhanced Energy Efficient and Thermal Comfort <b>X. Guo</b> , J. Vitse, J. Li, H. Hallez and V. Vandeginste	<b>Mrs. Xinyu Guo</b> , KU Lueven, <b>Belgium</b>
<b>10:45 - 11:00</b>	Adaptation of a paper surface functionalization driver for the manufacture of a lithium-ion battery negative electrode. J. Luneau, R. Passas and <b>C. Martin</b>	<b>Mrs. Celine Martin</b> , Univ. Grenoble Alpes, <b>France</b>
<b>11:00 - 11:15</b>	Thin-film coating development for enhanced conductivity and corrosion resistance of stainless steel bipolar plates in hydrogen applications <b>M. Steinhorst</b> , M. Giorgio, N. Fredebeul-Beverungen, T. Roch and C. Leyens	<b>Mr. Maximilian Steinhorst</b> , Fraunhofer Institute for Material and Beam Technology IWS, <b>Germany</b>
<b>11:15 - 11:30</b>	Self-stratifying and self-healing vitrimer coatings <b>J. Bratanu</b> , K. Bui, F. Samyn, Maude Jimenez	<b>Mrs. Julie Bratanu</b> , Univ. Lille, <b>France</b>
<b>11:30 - 11:45</b>	Migration of LiFePO <sub>4</sub> particles inside a self-stratifying system epoxy vitrimer and PVDF <b>A. Kerrache</b> , F. Samyn, J-F. Gohy and M. Jimenez	<b>Mr. Alban Kerrache</b> , Univ. Lille, <b>France</b>
<b>11:45 - 12:00</b>	Thin ZnO films prepared by plasma-enhanced atomic layer deposition (PEALD) for future photocatalytic applications <b>A. Omerzu</b> , D. Jardas Babic, R. Peter, K. Salamon, T. Radosevic, D. Vengust and M. Podlogar	<b>Prof. Ales Omerzu</b> , University of Rijeka, <b>Slovenia</b>

25 April 2025

**SICT 2025 / Plasma Tech 2025 Session III. C:  
Plasma application in Energy and environment**

Conference Room:

**Session's Chairs:**

<b>09:00 - 09:30</b>	Development of a diffuse reflectance infrared Fourier transform spectroscopy (DRIFTS) flow cell for characterizing nonthermal plasma catalysis under conditions close to dielectric-barrier discharge (DBD) reactors J. Niu, Y. Chen, S. Chen, H. Chen, J. Huang and <b>X. Fan</b>	<b>Prof. Xiaolei Fan</b> , University of Manchester, <b>UK</b>
<b>09:30 - 10:00</b>		
<b>10:00 - 10:30</b>	<b>Coffee Break</b>	
<b>10:30 - 10:45</b>	Revealing Cooperative Role of Non-thermal Plasma and Copper-Zinc Catalysts in the Hydrogenation of CO <sub>2</sub> to methanol <b>S. Xu</b> , X. Fan and C. Hardacr	<b>Dr. Shanshan Xu</b> , University of Manchester, <b>UK</b>
<b>10:45 - 11:00</b>	Reaction engineering approach for a stable rotating glow to arc plasma – key principles of effective gas conversion processes <b>S. Kaufmann</b> , P. Rößner, V. Seithümmner, H. Chinnaraj and K. Peter Birke	<b>Mr. Samuel Kaufmann</b> , University of Stuttgart, <b>Germany</b>
<b>11:00 - 11:15</b>	NO <sub>x</sub> Formation in Atmospheric Microwave Plasma <b>M. Wnukowski</b> , N. Modiński and U. L. Amasi	<b>Dr. Mateusz Wnukowski</b> , University of Science and Technology, <b>Poland</b>
<b>11:15 - 11:30</b>	Comparative study of atrazine degradation in water using advanced plasma bubble reactors K. Papalexopoulou, A. Bastani and <b>C.A. Aggelopoulos</b>	<b>Dr. Christos Aggelopoulos</b> , Foundation for Research and Technology Hellas, <b>Greece</b>

## SICT 2025 / PlasmaTech 2025 / Tribology 2025 Joint Conferences Posters

### 23 and 24 April 2025 Sessions

N.	Poster Title	Author, Affiliation, Country
1.	Surface Engineering of Metallic Thin Films for SAW Sensor IDTs L.A. Almeida Santos, R.L. Gonçalves, M. Amorim Fraga and <b>M. Massi</b>	<b>Prof. Marcos Massi</b> , Mackenzie Presbyterian University, <b>Brazil</b>
2.	Influence of Plasma Cleaning on the Magnetron Sputtering Deposition of TiCN Thin Films on Ti6Al4V B.M. M. Silva, R.L.P. Gonçalves, <b>A.A. Couto</b> and M. Massi.	<b>Prof. Antonio A. Couto</b> , Mackenzie Presbyterian University, <b>Brazil</b>
3.	Modification of AAO coatings with copper using PVD and electrochemical methods <b>M. Bara</b> , J. Korzekwa, M. Niedźwiedz and S. Kaptacz	<b>Dr. Marek Bara</b> , University of Silesia in Katowice, <b>Poland</b>
4.	Hot dip metallic coatings on steel produced in a HDP Simulator <b>A. Montes</b> , J.M. Artímez, J.A. García, M. Panera and L. Suarez	<b>Ms. Alicia Montes</b> , IDONIAL Technology Center, <b>Spain</b>
5.	PTFE thin films deposited by Pulsed Electron Beam Deposition A. Niemczyk, S. Fryska, R. Jędrzejewski, D. Moszyński, P. Kochmański, D. Deacu and <b>J. Baranowska</b>	<b>Prof. Jolanta Baranowska</b> , West Pomeranian University of Technology in Szczecin, <b>Poland</b>
6.	Enhancement of Sol-Gel coatings for the preservation of quality in high-end products. <b>J. Moriones</b> , J. Osés, N. Jiménez-Moreno, I. Esparza, P. Amézqueta, J.F. Palacio, J. Fernández De Ara and E. Almandoz	<b>Ms. Jennifer Moriones</b> , AIN - Industry Association of Navarra, <b>Spain</b>
7.	Surface Characterization of SiO <sub>2</sub> Thin Film on NiTi Alloy Obtained via Atomic Layer Deposition <b>A. Taratuta</b> , J. Lisoń-Kubica, J. Kolasa, K. Goldsztajn, B. Rynkus, M. Antonowicz, A. Orłowska and M. Basiaga	<b>Dr. Anna Taratuta</b> , Silesian University of Technology, <b>Poland</b>
8.	Characterization of macro and microstructure, along with corrosion resistance, of super austenitic stainless steel cladding deposited on car-bon steel using GTAW <b>E.J. da.Cruz Junior</b> , F.M.F.A. Varasquim, F.O. Carvalho, L.F.F. Santiago, V.A. Ventrella, I. Calliari and A. Zambon	<b>Dr. Eli J.D.Cruz Junior</b> , São Paulo Federal Institute of Education, Science and Technology, <b>Brazil</b>
9.	The influence of unit pressure on the tribological properties of graphite-modified oxide coatings <b>M. Niedzwiedz</b> , M. Bara, J. Korzekwa and S. Kaptacz	<b>Dr. Mateusz Niedzwiedz</b> , University of Silesia in Katowice, <b>Poland</b>
10.	Stress and local structure evolution in the sol-gel thin-films during high temperature annealing <b>JB. Bringuier</b> , E. Burov, E.Barthel, A.Benedetto and J.Teisseire	<b>Mr. Jean-Baptiste Bringuier</b> , Saint-Gobain Recherche, <b>France</b>
11.	The interface of mating surfaces under extreme tribological conditions <b>J.L. Endrino</b> and S. Goel	<b>Mr. Jose L. Endrino</b> , Univ. Loyola Andalucía, <b>Spain</b>
12.	Analysis of Vibration Characteristics by Lifetime of Roller Type Linear Motion Guide System <b>B.R. Cho</b> , D.W. Kim, H. J. Jung, J.Y. Park, Y.G. Kim, S.G. Choi and J-H. Kim	<b>Mr. Bo Ram Cho</b> , Korea Institute of Industrial Technology, Rep. of Korea
13.	Twin-Disc Testing for Wheel-Rail Interaction: A Versatile Approach to Wear and Friction Analysis <b>M. Panera</b> , J.M. Artímez, J.A. García and A. Montes	<b>Ms. María Panera</b> , IDONIAL Technology Center, <b>Spain</b>
14.	From current collection to plasma parameters: models <b>E. Seran</b> and M. Godefroy	<b>Dr. Elena Seran</b> , Sorbonne University, <b>France</b>
15.	pH-Responsive Switchable Antifouling and Antibacterial Coatings for Prevention of Catheter Associated Urinary Tract Infections <b>X. Liu</b> and M. Kamperman	<b>Ms. Xiaojin Liu</b> , University of Groningen, <b>The Netherlands</b>
16.	Biofouling Mitigation Through Biocidal Coatings: A Nanoscale Perspective Using AFM <b>A.P. Carapeto</b> , G.M. Afonso, M.S. Rodrigues and E.R. Silva	<b>Dr. Ana Carapeto</b> , University of Lisbon, <b>Portugal</b>
17.	The Antifungal Activity of Ag-DHLA Nanoclusters against Fungi Isolated from Indoor Environments <b>R. Mikkola</b> , S. Chandra, M. Makki and H. Salonen	<b>Dr. Raimo Mikkola</b> , Aalto University, <b>Finland</b>
18.	A Micropatterning Strategy for Assessing Endothelial Cell Morphology and Topography <b>D. Pedroni</b> , C. Gaucher and H. Alem-Marchand	<b>Mr. Daniele Pedroni</b> , Univ. Lorraine, <b>France</b>



19.	Enhancing Zein Biopolymer Performances: Insights from Low-Pressure Cold Plasma Treatment for Sustainable Food Packaging Solutions <b>M. Saleh</b> , M. Pedroni, E. Vassallo, R.Campardelli, G. Firpo and E.Drago	<b>Dr. Miriam Saleh</b> , ISTP-CNR- Milan, <b>Italy</b>
20.	Monosaccharide layers deposited by PLD and PED technique <b>A. Niemczyk</b> , A. Goszczyńska, D. Moszyński, P. Figiel, S. Fryska, D. Deacu and J. Baranowska	<b>Dr. Agata Niemczyk</b> , West Pomeranian University of Technology, <b>Poland</b>
21.	Pulsed Electron Beam Deposition of Glucose – the influence of process parameters <b>D. Deacu</b> , A. Niemczyk, A. Goszczyńska, T. Idzik, J.G. Sośnicki, S. Fryska and J. Baranowska	<b>Mr. Daniel Deacu</b> , West Pomeranian University of Technology, <b>Poland</b>
22.	SUPREME – Sustainable nanoparticles enabled antimicrobial surface coatings <b>E. Merli</b> , D. Spinelli, I. Canesi and N. Cei	<b>Mrs. Elena Merli</b> , Next Technology Tecnotessile, <b>Italy</b>
23.	Elucidation of H <sub>2</sub> O <sub>2</sub> reaction pathways in plasma-driven biocatalysis <b>S. Klopsch</b> , T. Dirks, M. Krewing, F. Hollmann and J. E. Bindow	<b>Mrs. Sabrina Klopsch</b> , Ruhr University Bochum, <b>Germany</b>
24.	Catalytic Bio-hybrid Coating-based Degradation of Haloalkanes in the Gas-Phase A; Skopp, <b>M. Marosevic</b> , B. Rühmann and V. Sieber	<b>Mr. Matea Marosevic</b> , Technical University of Munich, <b>Germany</b>
25.	Smart materials with depolluting and self-cleaning activity by combining g-C <sub>3</sub> N <sub>4</sub> -with TiO <sub>2</sub> photocatalysts decorated with Au NPs <b>H. Nezzal</b> , M.Luna and M.J. Mosquera	<b>Ms. Hala.Nezzal</b> , University of Biskra, <b>Algeria</b>
26.	Development of g-C <sub>3</sub> N <sub>4</sub> -TiO <sub>2</sub> visible light active photocatalysts for NO <sub>x</sub> depollution applications. M. Luna, <b>D.A.Peñaloza</b> , C.G. Silva, J.L. Faria and M.J.Mosquera	<b>Mrs. Damaris A. Peñaloza</b> , University of Cadiz, <b>Spain</b>
27.	Bluefire- CO <sub>2</sub> -Loop Based on Carbon Capture and Novel Plasma Technology for Sustainable Synthetic Fuels or CO <sub>2</sub> Neutral Cement Production <b>V. Seithümmer</b> , S. Kaufmann, H. Chinnaraj,P. Rößner and K. Peter Birke	<b>Mr. Valentin Seithümmer</b> , University of Stuttgart, <b>Germany</b>
28.	Low-pressure reduction of iron oxides in a hydrogen-containing inductively coupled rf plasma M. Mayer, <b>M. Pustylnik</b> , C. Altenbach, U. Manzoor, I.R. Souza Filho, H.M. Thomas, D. Raabe and D. Zander	<b>Dr. Mikhail Pustylnik</b> , DLR Institute of Materials Physics in Space, <b>Germany</b>
29.	High performance IWO thin films with a new hybrid technology for the deposition of thin films for solar cells application <b>Z. En-Naji</b> , A. Bes, P. Carroy and A. Lacoste	<b>Mr. Zakariae En-Naji</b> , Univ. Grenoble Alpes, <b>France</b>