

SICT / Plasma Tech 2021 Joint Conferences Program

07 - 09 April 2021 | Paris, France

07 April, 2021		
SICT Session I Surfaces and Coatings processing / Properties		
Session's Chairs: Prof. Alessandro Lavacchi, ICCOM, CNR - Firenze, Italy Prof. Ludmila B. Boinovich, The Russian Academy of Sciences, Russia Prof. Herman Terryn, Vrije Universiteit Brussel, Belgium		
09:00 - 09:30	Tribology of Polymer Composite Coatings for Bearings and Other Applications K. Friedrich	Prof. Klaus Friedrich , Technical University of Kaiserslautern, Germany
09:30 - 10:00	Moving titania nanotube to 3D embedded macrostructure A. Lavacchi	Prof. Alessandro Lavacchi , ICCOM, CNR- Firenze, Italy
10:00 - 10:30	Nano-clustering structures creating a robust superlubricity state under high contact pressure in amorphous carbon films X. Chen	Dr. Xinchun Chen , Tsinghua University, China
10:30 - 11:00 Break		
Plasma Tech Session I Plasma fundamentals / Atomic and Molecular Processes		
Session's Chairs : Prof. Tiberiu Minea, Paris-Sud University, France Prof. Gérard Henrion, CNRS University Lorraine, France Dr. Johannes Grünwald, Gruenwald Laboratories, Austria		
11:00 - 10:30	Corona discharges: Physics and Applications O. Eichwald , O. Ducasse, N. Merbahi, J.P. Sarrette and M. Youfifi	Prof. Olivier Eichwald , Paul Sabatier Univ. Toulouse, France
11:30 - 12:00	The strange world of cathodic arc spots: Is plasma formation fractal or periodic or bimodal? A. Anders , K. Oh, M. Golizadeh and R. Franz	Prof. André Anders , Leibniz Institute of Surface Engineering (IOM), Germany
12:00 - 12:30	Non-equilibrium Characteristics of Laser-Induced Plasmas A. Bultel , V. Morel and A. Favre	Prof. Arnaud Bultel , University of Rouen, France
12:30 - 13:00	The role of excited states in the time evolution of gas discharges G. Colonna	Dr. Gianpiero Colonna , CNR-ISTP-Bari, Italy
13:00 - 14:00 Break		
SICT / Plasma Tech Joint Session I Surfaces and Coatings processing / Characterization / Properties		
Session's Chairs: Prof. Klaus Friedrich, Technical University of Kaiserslautern, Germany Dr. Monica Bollani, Photonic and Nanotechnology Institute, Italy Prof. Alessandro Lavacchi, ICCOM, CNR- Firenze, Italy		
14:00 - 14:30	Hybrid ALD/CVD towards nanoengineered functional CNT coatings N. Bahlawane	Dr. Naoufal Bahlawane , Luxembourg Inst of Science and Tech., Luxembourg
14:30 - 15:00	Functional polymers and micro/nanoengineering towards advanced manufacturing and sustainability B. Zhao	Prof. Boxin Zhao , University of Waterloo, Canada
15:00 - 15:15	Development of innovative duplex coatings combining cold-spray and plasma electrolytic oxidation processes J. Martin , K. Akoda, G. Ezo'o, G. Marcos, T. Czerwiec and G. Henrion	Mr. Julien Martin , University of Lorraine, France
15:15 - 15:30	Spatio-temporal study of poly (maleic anhydride) plasma deposition using a macroscopic description S. Jebali , A. Airoudj, I. Ferreira, D. Hegemann, V. Roucoules and F. Bally-Le Gall	Ms. Syrine Jebali , Haute-Alsace University, France

15:30 - 15:45	Different plasma nitride layer designs of an AISI D2 tool steel with a new Cr-Al-Ti-B-N PVD hard coating for optimized duplex layer systems T. Weinhold , A. Dalke, C. Wüstefeld, U. Ratayski, D. Rafaja and H. Biermann	Mr. Tom Weinhold , TU Bergakademie Freiberg, Germany
15:45 - 16:00	Plasma nitriding respond of thermal laser or electron beam treated surfaces of austenitic stainless steel A. Dalke and H. Biermann	Dr. Anke Dalke , TU Bergakademie Freiberg, Germany
16:00 - 16:30	Break	
Session's Chairs: Dr. Naoufal Bahlawane, Luxembourg Inst of Science and Tech., Luxembourg, Prof. Boxin Zhao, University of Waterloo, Canada Dr. Zaoli Zhang, Erich Schmid institute, Austria		
16:30 - 16:45	Low-temperature synthesis of gradient composite nanocoating on TiNi substrate K. Dubovikov , G. Baigonakova and E. Marchenko	Mr. Kirill Dubovikov , Tomsk State University, Russia
16:45 - 17:00	Elaboration and characterization of TixHf1-xN thin films G. Desbordes , C. Jaoul, C. Dublanche-Tixier, F. Husson and P. Tristant	Mr. Guillaume Desbordes , Limoges University, France
17:00 - 17:15	Fabrication of Tungsten high aspect ratio micro-tools by electro-chemical etching, by controlling the immersed length and the etching charge. A. Taфраouti , P. Kleimann and Y. Layouni	Ms. Asmae Taфраouti , Nanotechnologies Institute Lyon, France
17:15 - 17:30	Elaboration of high-entropy alloy coating by cold spray with following laser remelting: feasibility study A. Sova , M. Doubenskaia, E. Trofimov, M. Samodurova and V. Ulianitsky	Dr. Alexey Sova , National Engineering School of Saint-Etienne (ENISE), France
17:30 - 17:45	Deposition of Aluminum Nanostructured Films by DC Magnetron Sputtering for Hydrogen Production S. Ibrahim , P. Brault, A. Caillard, T. Sauvage, C. Chauveau, F. Halter and A-L. Thomann	Dr. Sara Ibrahim , University of Orléans, France
17:45 - 18:00	Adjustment of the micromorphology of component surfaces via cold spraying with fine particles M. Bozoglu , P. Breuninger and S. Antonyuk	Mr. Mustafa Bozoglu , TU Kaiserslautern, Germany
18:00 - 18:15	Combined GD-OES and HAXPES for quantified depth profiling through coatings B. F. Spencer, M. Bouttemy , Pia Dally, S. Béchu, P. Chapon and A. Etcheberry	Dr. Muriel Bouttemy , Versailles Saint-Quentin-en-Yvelines University, France
18:15 - 18:30	Multifunctional anti-fouling coatings for building materials: studying the combination of active nano-biocides with passive strategies via hydrophobicity and induced super hydrophilicity. J.J. Cervera , R. Zarzuela, M.L.A. Gil, I. Moreno-Garrido, Giada M.C. Gemelli, M. Luna and M.J. Mosquera	Mr. Jaime Cervera , University of Cadiz, Spain
18:30 - 18:45	Bio-carbon anti-UV properties for wooden façade coatings L. Marrot and D. B. DeVallance	Dr. Laetitia Marrot , InnoRenew Center of Excellence, Slovenia
18:45 - 19:00	Sculptured thin film based all-silica mirrors for high power lasers L. Ramalis , R. Buzelis, L. Grinevičiutė and T. Tolenis	Mr. Lukas Ramalis , Center for Physical Sciences and Technology, Lithuania
19:00 - 19:15	Impact of Humidity and Deposition Errors on Spectral Parameters of Broadband Chirped Mirror with Sculptured Top Layer S. Melnikas , L. Ramalis, S. Kičas and T. Tolenis	Mr. Simas Melnikas , Center for Physical Sciences and Technology, Lithuania
19:15 - 19:30	Optical properties of highly porous thin films: an overview of optical simulation methods J. Müller , P. Moskovkin and S. Lucas	Dr. Jerome Muller , University of Namur, Belgium

08 April, 2021		
SICT Session II Interface and Interaction Science, Adhesion and Adhesives		
Session's Chairs: Prof. Fabienne Poncin-Epaillard, French National Research institute, France Prof. Auezhan Amanov, Sun Moon University, Rep. of Korea Prof. Ludmila B. Boinovich, The Russian Academy of Sciences, Russia		
09:00 - 09:30	Improvement in Tribological Properties and Interface Adhesion of Thermal Spray Coatings by Surface Severe Plastic Deformation (S2PD) Technique A. Amanov	Prof. Auezhan Amanov, Sun Moon University, Rep. of Korea
09:30 - 10:00	How to study interfacial reactions at the buried interface between organic coatings and metals H. Terryn, S. Pletincx, K. Marcoen, F. Cavezza, L. Fockaert, N. Madelat, J.M.C. Mol and T. Hauffman	Prof. Herman Terryn, Vrije Universiteit Brussel, Belgium
10:00 - 10:30	A study on the quality of adhesively bonded composite aircraft structures based on crack growth monitoring and Acoustic Emission S. Teixeira de Freitas, D. Zarouchas and H. Poulis	Dr. Hans Poulis, TU Delft, The Netherlands
10:30 - 11:00 Break		
Session's Chairs: Dr. Hans Poulis, TU Delft, Netherlands Prof. Herman Terryn, Vrije Universiteit Brussel, Belgium Prof. Auezhan Amanov, Sun Moon University, Rep. of Korea		
11:00 - 11:30	Plasma technologies for enhancing the metallic adhesion or the vulcanization-bonding F. Poncin-Epaillard, M. Ji, L. Benyahia and JF. Coulon	Prof. Fabienne Poncin-Epaillard, French National Research institute, France
11:30 - 12:00	In pursuit of toughness and damage tolerance by controlling material architecture M. Alfano	Prof. Marco Alfano, University of Waterloo, Canada
12:00 - 12:15	Studying the impacts of bonding agents in epoxy adhesives using self-assembled monolayers (SAMs) L. Tomasovic, F. Gilbert, D. Jacquet, F. Bally-Le Gall and A. Ponche	Mr. Lucas David Tomasovic, Institut de Science des Matériaux de Mulhouse, UMR-CNRS/UHA, France
12:15 - 12:30	Polymer thin films nano-engineered by means of femtosecond laser on single spot and scanning. O. Shavdina, H. Rabat, F. Mahut, M. Vayer, C. Sinturel and N. Semmar	Ms. Olga Shavdina, University of Orléans, France
12:30 - 12:45	Laser-based processing of polymeric tribological coatings for engine pistons M. Dahmen, C. Vedder, H. Sändker and J. Stollenwerk	Mr. Marius Dahmen, Fraunhofer Institute for Laser Technology (ILT), Germany
12:45 - 13:00	Hydrophobic Coatings with Low Ice Adhesion as a Passive Anti-icing System J. Marczak, M. Piłkowski and G. Morgiante	Dr. Jacek Marczak, PORT Polish Center for Technology Development, Poland
13:00 - 14:00 Break		
Plasma Tech Session II Plasma-surface interactions / Plasma diagnostics / Modelling and numerical simulations		
Session's Chairs: Prof. Olivier Eichwald, Paul Sabatier Univ. Toulouse, France Prof. André Anders, Leibniz Institute of Surface Engineering, Germany		
14:00 - 14:30	Diagnosing the plasma electrolytic oxidation process: an exciting but complex challenge G. Henrion, J. Martin, C. Tusch, V. Ntomprougkidis, A. Nominé and T. Belmonte	Prof. Gérard Henrion, Institut Jean Lamour- CNRS University Lorraine, France
14:30 - 15:00	Pulsed NS Discharge Development in a Strong Magnetic Field and its Application for MHD Energy Generation A. Yu Starikovskiy, N L Aleksandrov and M N Shneider	Dr. Andrey Starikovskiy, Princeton University, USA

15:00 - 15:30	Theory and Applications of inverted Fireballs J. Gruenwald and G. Eichenhofer	Dr. Johannes Grünwald , Gruenwald Laboratories, Austria
15:30 - 15:45	Ion-induced secondary electron emission coefficient of metal surfaces analysed in an ion beam experiment R. Buschhaus and A. von Keudell	Mrs. Rahel Buschhaus , Ruhr-University Bochum, Germany
15:45 - 16:00	Characterization and analysis of atmospheric pressure air plasma treatment of hard mineral materials V. Grigaitienė , R. Kėželis, R. Uscila, M. Aikas and V. Valinčius	Dr. Viktorija Grigaitiene , Lithuanian Energy Institute, Kaunas, Lithuania
16:00 - 16:30	Break	
Session's Chairs: Dr. Gianpiero Colonna, CNR-ISTP-Bari, Italy Dr Andrey Starikovskiy, Princeton University, USA		
16:30 - 16:45	Plasma nitrocarburizing with an active carbon screen made of CFC: Influence of the active screen power on the reactive gas composition and its effects on surface layer properties of stainless steel AISI 316L J. Böcker , A. Puth, A. Dalke, J. Röpcke, J.-P. H. van Helden and H. Biermann	Mr. Jan Böcker , Technische Universität Bergakademie Freiberg, Germany
16:45 - 17:00	Multiscale simulation of TiAlN film growth in an industrial magnetron-based reactor S. Lucas , P. Moskovkin, J. Müller, A. Haye, P. Zikán and A. Obrusník	Mr. Stephane Lucas , University of Namur, Belgium
17:00 - 17:15	Collisional electronic excitations in the interaction of slow ions with surfaces P. Riccardi	Dr. Pierfrancesco Riccardi , University of Calabria, Italy
17:15 - 17:30	Influence of the transition probabilities and the Hönl-London factors on radiative spectra simulation A. M. Kassir, A. Hleli , Y. Cressault, M. Masquère and P. Teulet	Dr. Ali Hleli , LAPLACE-Toulouse University, France
17:30 - 17:45	Type-I ELM mitigation through lithium pellet injection in EAST with tungsten divertor W. Xu , J.S. Hu, R. Maingi, Z. Sun, Y.Z. Qian, D.K. Mansfield, G.Z. Zuo, X.C.Meng, C.L. Li, M. Huang, Z.L. Tang, J.S. Yuan and D.H. Zhang	Dr. Wei Xu , Hefei Comprehensive National Science Center, China
17:45 - 18:00	Unravelling the limitations of ammonia synthesis by non-thermal plasmas P. Navascués , J.M. Obrero-Pérez, J. Cotrino, A.R. González-Elipé and A. Gómez-Ramírez	Ms. Paula de Navascués Garvín , CSIC-US-Seville, Spain
18:00 - 18:15	Modeling an Atmospheric Pressure Plasma Jet Impinging on a Silver Nitrate Solution for Nanoparticle Synthesis A. L. Raisanen , S. Exarhos, S. Kerketta, P.J. Bruggeman and M. J. Kushner	Dr. Astrid Raisanen , University of Michigan, USA
18:15 - 18:30	Kinetic investigation of electron energization in magnetron discharges: RFMS, DCMS, and HiPIMS B. Zheng, Y. Fu, K. Wang, T. Schuelke and Q. Hua Fan	Dr. Bocong Zheng , Fraunhofer USA Center Midwest, Michigan State University, USA
18:30 - 18:45	Formation of Turing patterns in strongly magnetized plasmas M. Menati , U. Konopka and E. Thomas	Dr. Mohamad Menati , Auburn University, USA

09 April, 2021		
SCIT Session III Coatings for Energy and Environmental Applications		
Session's Chairs: Prof. Alessandro Lavacchi, ICCOM, CNR- Firenze, Italy Dr. Monica Bollani, Photonic and Nanotechnology Institute, Italy		
09:00 - 09:30	The Mechanisms of Corrosion Protection of Metals in Corrosive Medium by Superhydrophobic Coatings L.B. Boinovich	Prof. Ludmila B. Boinovich , The Russian Academy of Sciences, Russia
09:30 - 10:00	Study and optimization of the natural instability in Si-based thin solid films for sensing and photonic applications M.Bollani , M.Abbarchi, C.Barri, I.Berberzier, F.Biccari, M.Bouabdellaoui, P.de Anna, L.Fagiani, L. Favrè, A.Federov, D.Grosso, N.Granchi, F.Intonti, E.Mafakheri, G.Nicotra, M.Salvalaglio, G.Sfuncia, S.Sanguinetti and A.Voigt	Dr. Monica Bollani , Photonic and Nanotechnology Institute, Italy
10:00 - 10:15	PECVD passivation of GaN for transistor threshold voltage control O. Richard , A. Gupta, V. Aimez and A. Jaouad	Mr. Olivier Richard , Sherbrooke University, Canada
10:15 - 10:30	Optimized stoichiometry for CuCrO ₂ thin films as Sustainable and semi-transparent Hole Transparent Layer in performant and recyclable organic solar cells L. Bottiglieri , A. Nourdine, J. Resende, C. Jimenez and J.L. Deschanvres	Mr. Lorenzo Bottiglieri , LMGP, Univ. Grenoble Alpes/CNRS, France
10:30 - 11:00 Break		
Plasma Tech Session III Plasma diagnostics / Modelling and numerical simulations of plasmas and surfaces		
Session's Chairs: Prof. Achim von Keudell, Ruhr-University Bochum, Germany Prof. André Anders, Leibniz Institute of Surface Engineering (IOM), Germany Dr. Gianpiero Colonna, CNR-ISTP-Bari, Italy		
11:00 - 11:30	On the relation between deposition rate and ionized flux fraction in high power impulse magnetron sputtering J.T. Gudmundsson , H. Hajihoseini, M. Rudolph, T.M. Minea, M.A. Raadu, N. Brenning and D. Lundin	Prof. Jon Tomas Gudmundsson , University of Iceland, Iceland
11:30 - 12:00	Hyper Power Impulse Magnetron glow discharge T. Minea , E. Morel and Y. Rozier	Prof. Tiberiu Minea , Paris-Sud University, France
12:00 - 12:30	On the energy balance of an atmospheric pressure surface barrier discharge H. Kersten , L. Hansen, L. Rosenfeldt and K. Reck	Prof. Holger Kersten , University Kiel, Germany
12:30 - 13:00	Electrical diagnostics for Dielectric Barrier Discharges: from integrated measurements to spatially resolved measurements. Benefits for plasma processes at atmospheric pressure? C.Tyl, A. Belinger, S. Dap and N. Naudé	Dr. Nicolas Naudé , Paul Sabatier University, France
13:00 - 14:00 Break		
Session's Chairs: Dr. Nicolas Naudé, Paul Sabatier University, France Dr Andrey Starikovskiy, Princeton University, USA		
14:00 - 14:30	Controlling atmospheric pressure non equilibrium plasmas for species conversion A. von Keudell , K. Grosse, M. Falke, C. Stewig, T. Urbanietz, P. Preissing, S. Dzikowski, J. Golda, M. Böke and V. Schulz-von der Gathen	Prof. Achim von Keudell , Ruhr-University Bochum, Germany
14:30 - 14:45	TD-LIF measurements and PIC modelling of Titanium sputtered atoms velocity distribution functions in Argon DC magnetron plasma A. El Farsy , A Revel, L. de Poucques, J.Robert, J. Bougdira and T. Minea	Dr. Abderzak El Farsy , Paris-Saclay University, France

14:45 - 15:00	Calculation of thermophysical properties and computational modeling for higher temperature and pressure air plasma M. Alija , Y. Cressault, P. Teulet and M. Kurrat	Mr. Muhamet Alija , Technische Universität Braunschweig, Germany
15:00 - 15:15	Investigation of multi-periodic self-pulsed plasma in a AC Helium Atmospheric Pressure Plasma Jet H. Yang and A. Rousseau	Mr. Hang Yang , Polytechnic Institute-CNRS / Sorbonne University, France
15:15 - 15:30	Optical emission spectroscopy as a diagnostic tool for electron temperature and density measurements in atmospheric pressure liquid plasma reactor N. Milaniak , L. Samard, J-F. Sauvageau and M-A. Fortin	Dr. Natalia Milaniak , Laval University, Canada
15:30 - 15:45	Optical emission spectroscopy and actinometry in SF6/Ar RF discharges for PCE A.A. Osipov , V.I. Berezenko, A.A. Osipov, A.B. Speshilova, A.E. Gagaeva, E.V. Endiarova and S.E. Alexandrov	Dr. Artem Osipov , Peter the Great St.Petersburg Polytechnic University, Russia
15:45 - 16:15	Break	
Plasma Tech Session IV Plasma application for biology, medicine and agriculture		
Session's Chairs: Prof. Achim von Keudell, Ruhr-University Bochum, Germany Prof. Boxin Zhao, University of Waterloo, Canada		
16:15 - 16:45	Cold atmospheric pressure plasma for wound healing: state-of-the-art and perspectives T. von Woedtke	Prof. Thomas von Woedtke , Leibniz Institute for Plasma Science and Technology, Germany
16:45 - 17:15	Plasma in cancer therapy M. Keidar	Prof. Michael Keidar The George Washington Uni., USA
17:15 - 17:30	Effectiveness of plasma activated water on the inactivation of Listeria monocytogenes biofilms P. Fernández-Gómez , A. Alvarez-Ordóñez, M. González-Raurich, M. López, M. Prieto, J. L. Walsh, M. Sivertsvik and E. Noriega Fernández	Ms. Paula Fernández Gómez , University of León, Spain
17:30 - 17:45	Study of antimicrobial and antiviral properties of silver-doped hydro-genated amorphous carbon coatings produced by hybrid PVD/PECVD process V. Job , M. Cardinal, D. Coupeau, B. Muiykens, V. Maloteau, J. Laloy, J-M. Dogné and S. Lucas	Mr. Valentin Job , University of Namur, Belgium
17:45 - 18:00	Low temperature air plasma effects on germination of two Brassica-ceae seeds, Arabidopsis thaliana and Camelina sativa M. Bafoil , M. Yousfi, C. Dunand and N. Merbahi	Dr. Maxime Bafoil , Paul Sabatier University, France
18:00 - 18:15	Application of Dielectric Barrier Discharge (DBD) atmospheric pres-sure plasma for pretreatment of medical textiles I. Pinheiro , J. Padrão, C. Silva, A. Ribeiro, V. Bouça, L. Coelho, A. Carvalho, B. Moura, A. I. Ribeiro, H. Felgueiras, A. P. Souto and A. Zille	Ms. Inês Pinheiro , Centre of Nanotechnology and Smart Materials (CeNTI), Portugal

Posters Virtual Session

Posters are being displayed through the Virtual event solution (Whova).
Discussions are to be done through the system chat features available to the attendees.

N.	Poster Title	Author, Affiliation, Country
1.	Hydrogenated amorphous carbon (a-C:H) thin films deposited by low-pressure plasma : linking mechanical and fracture behavior to deposition conditions A. Bagherpour , M-S. Collab, P. Baralb, M. Coulombierb, T. Pardoeb and S. Lucasa	Mr. Alireza Bagherpour , University of Namur, Belgium
2.	Discussion on Dimond-like coatings by HIPIMS W. Gajewski, A.W. Oniszcuk , M. Puźniak, R. Mroczyński and P. Domanowski	Dr. Anna Wiktoria Oniszcuk , TRUMPF Huettinger Sp. z o.o, Poland
3.	Structuration of titanium surfaces using He ions. F. Sanchez , L. Marot, R. Antunes, R. Steiner, M. Kisiel, E. Meyer, M. Astasov-Frauehoffer, I. Hauser-Gerspach, S. Kühn, J. Köser, R. Wagner, J. Hofstetter and K. Mukaddam	Mr Fabien Sanchez , University of Basel, Switzerland
4.	Anodizing of AlSi alloys in sulfuric medium A.Ben Romdhane , D.Veys-Renaux, E. Rocca and K. Elleuch	Mr. Anas Ben Romdhane , University of Lorraine, France/ ENIS, Tunisia
5.	Control of Spokes in Magnetron Discharges. M. George , W. Breilmann ¹ , J. Held and A. von Keudell	Mr. Mathews George , Ruhr-University Bochum, Germany
6.	Model Predictive Control and Parameter Identification Analysis of Cascaded H-bridge Multilevel EAST Fast Control Power Supply Based on CPS-PWM Modulation Strategy H. Haihong and Y. Bichen	Mr. Bichen Yan , Hefei University of Technology, China
7.	Single-Shot Spatially Resolved Optical Emission Spectroscopy of Plasma Species within the Spoke M. Šlapanská , M. Kroker, J. Hnilica, P. Klein and P. Vašina	Ms Marta Šlapanská , Masaryk University, Czech Republic
8.	Optical emission spectroscopy mapping for plasma diagnostics during plasma-enhanced chemical vapor deposition R.R. Ismagilov , S.A. Malykhin, A.B. Loginov, V.I. Kleshch and A.N. Obraztsov	Dr. Rinat Ismagilov , Lomonosov Moscow State University, Russia
9.	In Situ Electroanalytical Modelling of the Influence of Bath Hydrodynamics on Nucleation Kinetics for Electrodeposition of Nickel-Cobalt alloy system I. Khazi , U. Mescheder and J. Wilde	Mr. Isman Khazi , Hochschule Furtwangen University, Germany
10.	Influence of chain length of organic modifiers in hydrophobization process on epoxy resin properties G. Morgiante , M. Piłkowski and J. Marczak	Dr. Gianluca Morgiante , PORT Polish Center for Technology Development, Poland
11.	Bulk-modified epoxy resins as a coatings with low ice adhesion M. Piłkowski , G. Morgiante and J. Marczak	Mr. Michał Piłkowski , PORT Polish Center for Technology Development, Wrocław, Poland
12.	Plasma enhanced chemical vapour deposition of ZrO ₂ based layers P. A. Maaß , V. Bedarev, S. M. J. Beer, M. Prenzel, M. Böke, A. Devi and A. von Keudell	Mr. Philipp Maaß , Ruhr-University Bochum, Germany
13.	Influence of plasma torch power on the properties of alumina coatings A. Šuopys , V. Grigaitienė, L. Marcinauskas, R. Kėželis, R. Uscila and M. Aikas	Mr. Airingas Šuopys , Lithuanian Energy Institute, Lithuania
14.	Durability Study of the Anti-biofilm Capacity of Plasma-Polymerized Coatings on Stainless Steel for Food Contact Applications R. Múgica-Vidal, P. Fernández-Gómez, I. Muro-Fraguas, A. Sainz-García, M. González-Raurich, A. Álvarez-Ordóñez, M. Prieto, M. López, P. Toledano, M. López, Y. Sáenz, A. González-Marcos, F. Alba-Elías and E. Sainz-García	Dr Fernando Alba-Elías , University of La Rioja, Spain
15.	Methodology for designing the parameters of technological nitriding regime with respect to the relative wear resistance of tool steels for hot working N. Tontchev, E. Yankov and A. Zumbilev	Dr. Emil Yankov , University of Ruse, Bulgaria
16.	The application of organofunctional silanes to protect the wood surface K. Szubert , D. Łoś and H. Maciejewski	Dr. Karol Szubert , Adam Mickiewicz University Poznan, Poland

17.	Development of superhydrophobic CoAl-LDH conversion coating as a novel photocatalytic protective film on AA6082 M. Ahsan Iqbal , H. Asghar and M. Fedel	Mr. Muhammad Ahsan Iqbal , University of Trento, Italy
18.	Enhanced Performance of Solution Processed 2D-MoS ₂ Photodetectors upon Ultraviolet-Ozone Treatment. H. Badahdah , R. Altuwirqi and H. Al-Jawhari	Mrs. Hend Badahdah , King Abdulaziz University, Saudi Arabia
19.	Polypropylene vs. Polyester Plasma Ion-Exchange Activated Needle-Punched Non-Woven Geotextiles D. Gospodinova , M. Neznakomova and P. Dineff	Dr Dilyana Nikolova , Technical University Sofia, Bulgaria
20.	Significantly reduced secondary electron yield of electrodeposited silver coatings for multipactor applications J. Belfio , F. Lazar, O. Jbara and M. Belhaj	Mrs. Julie Belfio , Reims Champagne-Ardennes University/ Toulouse University, France
21.	Simulation of multi-layer TiN/TiAlN thin film growth and calculation of its thermal conductivity P. Moskovkin , J. Müller and S. Lucas	Dr. Pavel Moskovkin , University of Namur, Belgium
22.	Mean Absorption Coefficients of air-copper thermal plasmas E. Raveloharinjaka , Y. Cressault, M. Rakotomalala and H.Z. Randrianandraina	Mr. Elisé M. Raveloharinjaka , University of Paul Sabatier Toulouse, France
23.	Catalytic performances of Ce _{0.01} Mn in Post-Plasma Catalysis for dilute Trichloroethylene abatement G. Abdallah , J.-M. Giraudon, N. De Geyter, R. Morent and J.-F. Lamonier	Ms. Grèce Abdallah , University of Lille, France / University of Ghent, Belgium
24.	Sequential adsorption followed by plasma assisted catalytic conversion of toluene on Hopcalite in air stream S. Sonar , J.-M. Giraudon, S.K.P. Veerapandian, J.-F. Lamonier, R. Morent, N. De Geyter and A. Löfberg	Ms. Shilpa Sonar , University of Lille, France / University of Ghent, Belgium
25.	Oxygen Plasma Treatment on Silicone Catheter Surface for Enhancement of Antifouling Properties P. Dave , A. Kumar, M. Abdulkhalik, C. Balasubramanian, S. Hans and S. K. Nema	Dr. Purvi Dave , Institute for Plasma Research-Gandhinagar, India
26.	Use of a microwave plasma process at atmospheric pressure for bacterial disinfection L. Renoux , C. Dublanche-Tixier, C. Chazelas, P. Tristant, C. Maftah, P. Leprat, L. Sandoval and N. Picard	Mrs. Laura Renoux , Limoges University, France
27.	Laser-induced breakdown spectroscopy interface tracking (LIBS-IT): application to a W-PVD thin layer on a CuCrZr substrate A. Favre, V. Morel, A. Bultel , G. Godard, S. Idlahcen, B. M. Diez, C. Grisolia and F. Perry	Prof. Arnaud Bultel , University of Rouen, France
28.	Structure and microstructure of high entropy alloy thin films from the AlCrFeMnMo family deposited by magnetron sputtering M. Aly Sow , F. Beclin, C. Cordier, M. Touzin, Laurent Boilet, J.-F. Treclat, A. Tromont and C. Nouvellon	Mr. Mourtada Sow , University of Lille, France