SurfCoat / Graphene Korea 2021 Joint Virtual Conferences Preliminary Program

26 - 28 May 2021 (GMT + 2 Time Zone)

26 May, 2021		
SurfCoat Korea 2021 Session I.A **Surface treatments and coatings deposition, functionalization, modelling and characterization**		
Session's Chairs: **Prof. Hee-Jung Im, Jeju National University, Rep. of Korea** **Prof. Christopher Berndt, Swinburne University of Technology, Australia**		
09:00 - 09:30	Highly durable, transparent and superwetting multifunctional nanocoating **J. Yang**	**Prof. Jinglei Yang**, The Hong Kong University of Science and Technology, **Hong Kong**
09:30 - 10:00	Icephobic materials: Current research advances and application challenges **J. Tao**, Y. Shen and Z. Chen	**Prof. Jie Tao**, Nanjing University of Aeronautics and Astronautics, **China**
10:00 - 10:30	Trends and spray pattern flattening by optimizing nozzle shape in cold spray **K. Sakaki**	**Prof. Kazuhiko Sakaki**, Shinshu University, **Japan**
10:30 - 11:00	**Morning Break**	
11:00 - 11:30	High power impulse magnetron sputtering: a flexible tool for synthesis of high performance materials **T. Kubart**	**Prof. Tomas Kubart**, Uppsala University, **Sweden**
11:30 - 11:45	Plasma Treatment of Polytetrafluoroethylene in Nitrogen with Water/Ethanol Vapor Dielectric Barrier Discharge Plasma **S.W. Fitriani**, H. Yajima, F. Hisroshi and A. Hatta	**Ms. Sukma Wahyu Fitriani**, Kochi University of Technology, **Japan**
11:45 - 12:00	Cefazolin- chitosan composite coatings on titanium implant with antibacterial ability **H-M. Huang**	**Ms Hui-Min Huang**, National Kaohsiung University of Science and Technology, **Taiwan**
12:00 - 13:30	**Lunch Break**	
Graphene Korea 2021 Session I: **Graphene and 2D Materials, Growth, synthesis, modification and functionalization and Characterization**		
Session's Chairs: **Dr. Artem Mishchenko, Manchester University, UK** **Dr. Elena Polyakova, Graphene Laboratories Inc, NY, USA**		
13:30 - 14:00	Is the Tipping Point for Graphene Commercialisation Approaching? **R. Collins**	**Dr. Richard Collins**, IDTechEx, **UK**
14:00 - 14:30	Graphene Oxide and Graphene-like Materials: Finding Their Place in the World of Commercial Carbon Materials **E. Polyakova**	**Dr. Elena Polyakova**, Graphene Laboratories Inc, NY, **USA**
14:30 - 15:00	Twistronics and stacking control in van der Waals materials **A. Mishchenko**	**Dr. Artem Mishchenko**, Manchester University, **UK**
15:00 - 15:15	Nacre Shell Inspired Self Assembly of Graphene Oxide-Lipid Nanocomposites **C R Greeshma**, D; Baskaran and A. Mishra	**Ms. Greeshma C. Raghuvaran**, ITT Gandhinagar, **India**
15:15 - 15:30	Disclinations in Graphene and Pseudo-Graphenes **A.E. Romanov**, A.L. Kolesnikova and M.A. Rozhkov	**Prof. Aleksei Romanov**, ITMO University, **Russia**
15:30 - 15:45	A Scalable Method for the Layer-by-layer Thinning of 2D Materials **J. Sun**, G. Giorgi, M. Palummo, P. Sutter, M. Passacantando and L. Camilli	**Dr. Jianbo Sun**, Technical University of Denmark, **Denmark**
15:45 - 16:00	2D-germanium: a structural investigation of germanene on Ag(111) by means of photoelectron spectroscopy and diffraction **L. Kesper**, M. Schmitz, J. A. Hochhaus, M. G. H. Schulte, U. Berges and C. Westphal	**Mr. Lukas Kesper**, TU Dortmund University, **Germany**
16:00 - 16:15	Monolayers in ultrafast intense optical pulses: topological phenomena **S. A. Oliaei Motlagh**, V. Apalkov and M. I. Stockman	**Dr. Seyyedeh A. Oliaei Motlagh**, Georgia State University, **USA**

16:15 - 16:45	Afternoon Break	
SurfCoat Korea 2021 Session I.B: **Surface treatments and coatings deposition, functionalization, modelling and characterization**		
Session's Chairs: **Prof. Tomas Kubart, Uppsala University, Sweden** **Dr. Mark D. Soucek, University of Akron, USA**		
16:45 - 17:15	Investigation of the Non-Isocyanate Urethane Functional Monomer in Latexes: Hydronomers **M.D. Soucek**	**Dr. Mark D. Soucek**, University of Akron, **USA**
17:15 - 17:30	Structure and phase formation of ion-plasma vacuum-arc Zr-B-Si-C-Ti-(N) coatings during deposition **D.S Belov**, I.V. Blinkov, V.S. Sergevnin, A.V. Chernogor, B.Yu. Kuznetsov	**Mr. Dmitry Belov**, National University of Science and Technology MISiS, **Russia**
17:30 - 17:45	Synthesis of Superhydrophobic Fluoropolymer Coatings by Hot Wire Chemical Vapor Deposition **A.I. Safonov**, V.S. Sulyaeva, S.V. Starinskiy and N.I. Timoshenko	**Dr. Alexey Safonov,** Kutateladze Institute of Thermophysics, **Russia**
17:45 - 18:00	Fluorine-free omniphobic slippery surfaces made of PDMS-like molecules: surface structure and wetting properties **M. Callau**, C. Fajolles and P. Guenoun	**Ms. Marion Callau**, Paris-Saclay University/ CEA, **France**

27 May, 2021		
Graphene Korea 2021 Session II: **Graphene for electronic, photovoltaic and magnetic applications**		
Session's Chairs: **Prof. Kuan Eng Johnson Goh, Institute of Materials Research and Engineering (IMRE), Singapore** **Dr. Debananda Mohapatra, Yeungnam University, Rep. of Korea** **Dr. Mindaugas Lukosius, Inst. for High Performance Microelectronics, Germany**		
08:30 - 09:00	Rediscovery of existing materials through 3D structuring of graphene and carbon nanotubes: case for elastic polyurethane foam J. Lee, J. Kim, Y. Shin and **I. Jung**	**Prof. Inhwa Jung**, Kyung Hee University, **Rep. of Korea**
09:00 - 9:30	Advances in CVD, technologies and their coating applications **K-L. Choy**	**Prof. Kwang-Leong Choy**, Univ. College London**, UK**
09:30 - 10:00	Natural Graphite and Solvent Processed Bulk Graphene Nanoplatelets For Clean Energy Harvesting **D. Mohapatra,** J.-J. Shim and S. S. Nemala	**Dr.Debananda Mohapatra**, Yeungnam University, **Rep. of Korea**
10:00 - 10:30	Engineering Qubits in 2D Semiconductors **K.E. Johnson**	**Prof. Kuan Eng Johnson Goh**, Institute of Materials Research and Engineering (IMRE), **Singapore**
10:30 - 11:00	**Morning Break**	
11:00 - 11:15	Mass production of soluble graphite that shows ultra-high exfoliation efficiency in liquid **Y. Arao** and M. Kubouchi	**Dr. Yoshihiko Arao**, Tokyo Institute of Technology, **Japan**
11:15 - 11:30	Roll-to-roll process based fabrication of large-area wrinkled graphene on flexible substrates **P. Narute**, C. Jun Lee, R. S. Sharbidre and S-G. Hong	**Mr. Prashant Narute**, University of Science and Technology-Daejeon, **Rep. of Korea**
11:30 - 11:45	XUV-laser induced detachment of multi-layer graphene from silicon carbide substrate **V. Vozda**, T Burian, J. Chalupský, J. Čechald, V. Hájková, L. Juha, M. Krůs, J. Kunc and N. Medvedev	**Mr. Vojtech Vozda**, Institute of Physics- Czech Academy of Sciences, **Czech Republic**
11:45 - 12:00	Chloride Migration in Graphene Oxide Concrete **B. Kim** and M. Ambrose	**Dr. Boksun Kim**, University of Plymouth, **UK**
12:00 - 12:15	Graphene as a standard material for accurate dimensional measurement of the focal volumes of Raman microscopes **A. Sacco**, C. Portesi, A. M. Giovannozzi and A. M. Rossi	**Dr. Alessio Sacco,** INRiM-Turin, **Italy**
12:15 – 12:30	Development of Bioglass Incorporated Plasma Electrolytic Oxidation (PEO) Coating on Titanium Surfaces for Biomedical Application A. Sukrey and **B.A. Razak**	**Dr. Bushroa Abd Razak**, University of Malaya, **Malaysia**
12:30 - 14:00	**Lunch Break**	
SurfCoat Korea 2021 Session II: **Surface treatments and coatings deposition, functionalization, modelling and characterization**		
Session's Chairs: **Prof. Uroš Cvelbar, Jozef Stefan Institute, Slovenia** **Prof. Xin Tu, University of Liverpool, UK** **Dr. Ana Ferraria, University of Lisbon, Portugal** **Prof. Irena Kratochvilova, Czech Academy of Sciences, Czech Republic**		
14:00 - 14:30	Plasma engineering of graphene nanowalls and other 2D structures beyond graphene **U. Cvelbar**	**Prof. Uroš Cvelbar**, Jozef Stefan Institute, **Slovenia**
14:30 - 15:00	Insights into oxidation processes of protective coatings from AIMD modelling F. Guo, T. Glechner, N. Koutná, Y. Du, H. Riedl, P.H. Mayrhofer and **D. Holec**	**Prof. David Holec**, Montanuniversitat Leoben, **Austria**
15:00 - 15:30	A route to complexity: sputter deposition using target powders **D. Depla**	**Prof. Diederik Depla**, Ghent University, **Belgium**

15:30 - 15:45	Formation of multiphase synthesized coatings on TiNi substrate **G. Baigonakova**, S. Gunther and A.Shishelova	**Dr. Gulsharat Baigonakova**, Tomsk State University, **Russia**
15:45-16:00	Ultra-Thin Topological Insulator Films for Thermoelectrical Applications: Deposition and Properties. **J. Andzane**, K. Niherysh, E. Kauranens, U. Malinovskis, A. Felsharuk and D. Erts	**Dr. Jana Andzane**, University of Latvia, **Latvia**
16:00 - 16:30	**Afternoon Break**	
16:30 - 16:45	Sol-Gel Surface Coating of 3D Printed Parts **H.G Manning**, J. Mohan, M.Culleton, B. Duffy and J. Kennedy	**Dr. Hugh Manning**, Trinity College Dublin, **Ireland**
16:45 - 17:00	Investigation of Electroless Copper Plating on Textiles using Different Catalysts **G. Taghavi Pourian Azar**, D. Fox, L. Krishnan and A.J. Cobley	**Dr. Golnaz T. Pourian Azar**, Coventry University, **UK**
17:00 - 17:15	Characterization of solid devices using quadrupole SIMS **N. Wehbe**	**Dr. Nimer Wehbe**, King Abdullah Univ. of Sci. & Tech. (KAUST), **Saudi Arabia**
17:15 - 17:30	Finite element simulation of residual stresses and failure mechanism of plasma sprayed thermal barrier coating considering real interface. A. Abdelgawad and **K. Al-Athel**	**Dr. Khaled Al-Athel**, King Fahd University of Petroleum and Minerals, **Saudi Arabia**
17:30 - 17:45	One Structure – Three functionalizations: Laser based microstructures on aluminium with superhydrophobic, ice-repellent and self-cleaning properties **S. Milles**, M. Soldera and A.F. Lasagni	**Mr. Stephan Milles**, Technische Universität Dresden, **Germany**
17:45 - 18:00	Durable polymeric nanocomposite coatings with remarkable icephobic performance **H. Memon**, J. Liu, D. Focatiis, K. Choi and X. Hou	**Mr. Halar Memon**, University Of Nottingham, **UK**
18:00 - 18:15	Friction level control of pneumatic rod seals by surface texturing **M. Brase** and M. Wangenheim	**Mr. Markus Brase**, Leibniz Univ. Hannover, **Germany**
18:15 - 18:30	Mechanical and tribological characteristics of carbon- and nitrogen-based thin films prepared by bottom-up approach **L. Kolodziejczyk**, W. Szymanski, D. Martínez-Martínez, R. Parkhomenko, O. De Luca, M. Knez, P. Rudolf and L. Cunha	**Dr. Lukasz Kolodziejczyk**, Lodz University of Technology, **Poland**

28 May, 2021		
SurfCoat Korea 2021 Session III.A: Surface engineering / coatings for environment, energy, electric, photovoltaic and magnetic applications		
Session's Chairs: Prof. Diederik Depla, Ghent University, Belgium Prof. Kazuhiko Sakaki, Shinshu University, Japan Dr. Alfred Tok Ling Yoong, Nanyang Technological University, Singapore		
08:00 - 08:30	Development of ceramic coatings with hydrogen, corrosion, irradiation, and electrical resistance **T. Chikada**	**Prof. Takumi Chikada**, Shizuoka University, **Japan**
08:30 - 09:00	Tribological performance of novel water-based nano-lubricants used for hot steel rolling **Z. Jiang**	**Prof. Zhengyi Jiang**, University of Wollongong, **Australia**
09:00 - 09:30	Thermal Spraying of Biomaterials: Matching Process Conditions to Phase Structure and Biocompatibility **C. Berndt**	**Prof. Christopher Berndt**, Swinburne University of Technology, **Australia**
09:30 - 09:45	Adsorption Study on The Porphyrin Aggregates Formed at the Toluene/Water Interface **T.A. Gusman** and S. Tsukahara	**Mrs. Tania Gusman**, Osaka University, **Japan**
09:45 - 10:00	Fundamental Analysis of Lignin Molecular Binding Mechanism using Surface Forces Apparatus (SFA) **D. Lee**, Y. Song, S. Lee, J. Park, H. Kwon, J. Lee and C. Lim	**Mr. Dong Woog Lee**, Ulsan National Inst. of Science and Technology, **Rep. of Korea**
10:00 - 10:15	General Trends in Core-shell Preferences of Bimetallic Nanoparticles **N. Eom**, M. E. Messing, J. Johansson and K. Deppert	**Dr. Namsoon Eom**, Lund University, **Sweden**
10:15 - 10:30	Zr alloy protection against high-temperature oxidation: coating by a double-layered structure with active and passive functional properties **I.Kratochvílová**, J. Škarohlíd,, R. Škoda and P. Ashcheulov	**Prof. Irena Kratochvilova**, Institute of Physics of the Czech Academy of Sciences, **Czech Republic**
10:30 - 11:00	**Morning Break**	
Session's Chairs: Prof. David Holec, Montanuniversitat Leoben, Austria Prof. Zhengyi Jiang, University of Wollongong, Australia Prof. Tomas Kubart, Uppsala University, Sweden		
11:00 -11:15	Penetration behaviour of different blasting particles at composite peening **M. Seitz** and K. A. Weidenmann	**Mr. Michael Seitz**, Karlruhe Institute of Technology (KIT), **Germany**
11:15 - 11:30	A new method for testing the abrasive wear of cementitious materials loaded with a spinning wheel S. Czarnecki, **K. Krzywiński**, M. Moj, A. Chowaniec and Ł. Sadowski	**Mr. Kamil Krzywiński**, Wroclaw University of Science and Technology, **Poland**
11:30 - 11:45	The effect of the addition of granite powder to the primer on the pull-off strength of epoxy resin coatings **Ł. Kampa** and Ł. Sadowski	**Mr. Łukasz Kampa**, Wroclaw Univ. of Science and Technology, **Poland**
11:45 - 12:00	Self-protective Paste Nitriding Process of AISI 304 SS for Sea Water Applications **G. Vargas** and L. López	**Dr. Gregorio Vargas**, Center for Research and Advanced Studies (CINVESTAV), **Mexico**
12:00 - 12:15	Amorphous carbon nitrogen-modified layers for light emitting diodes **K. Dyndał**, G. Lewińska, J. Sanetra, S. Kluska and K.W. Marszalek	**Dr. Katarzyna Dyndał**, AGH University of Science and Technology, **Poland**
12:15 - 12:30	Electrostatic discharge behaviors of Diamond-like Carbon on Alumite **S.Yamamoto** and H.Ezaki	**Dr. Shuji Yamamoto**, Japan Coating Center Co., LTD, **Japan**
12:30 - 12:45	Abnormal Aging and Recovery Processes in Perovskite Solar Cells with Metal Electrodes **D.G. Lee**, M-C. Kim, S. Wang, B. Jo Kim, Y.S. Meng and H.S. Jung	**Mr. Dong Geon Lee**, Sungkyunkwan University, **Rep. of Korea**

12:45 - 13:00	Mechanisms for electron emission in ion surface interactions **P. Riccardi**	**Dr. Pierfrancesco Riccardi**, University of Calabria, **Italy**
13:00 - 14:00	**Lunch Break**	
SurfCoat Korea 2021 Session III.B **Bio-interfaces/ Biomedical/ Bioactive surfaces and coatings**		
Session's Chairs: **Prof. Christopher Berndt, Swinburne University of Technology, Australia** **Dr. Mark D. Soucek, University of Akron, USA**		
13:30 - 14:00	Atomic Layer Deposition of Noble Metals with Low Concentration Ozone **A. Ling Yoong**	**Dr. Alfred Tok Ling Yoong**, Nanyang Technological University, **Singapore**
14:00 - 14:15	Development of Electrically Activable Phosphonium Self-Assembled Monolayers to Efficiently Kill and Tackle Bacterial Infections **S. Auditto**, S. Carrara, F. Rouvier, F. Brunel, C. Janneau, M. Camplo, M. Sergent, I. About, J.-M. Bolla and J.-M. Raimundo	**Ms. Sanjana Auditto**, Aix-Marseille Univ, **France**.
14:15 - 14:30	Synthesis of 5,15-A2BC-Type Porphyrins to modify a Field-Effect Transistor for Detection of Gram-Negative Bacteria **L. Neumann**, L. Könemund, F. Hirschberg, R. Biedendieck, D. Jahn, H.-H. Johannes and W. Kowalsky	**Ms. Laurie Neumann**, TU Braunschweig, **Germany**
14:30 - 14:45	Modification of a Field-Effect Transistor for Gram-negative Bacteria Detection Using Porphyrin SAMs **L. Könemund**, L. Neumann, F. Hirschberg, R. Biedendieck, D. Jahn, H.-H. Johannes and W. Kowalsky	**Ms. Lea Könemund**, TU Braunschweig, **Germany**
Graphene Korea 2021 Session III **Graphene for electronic, photovoltaic and magnetic applications**		
Session's Chairs: **Prof. Cecilia Mattevi, Imperial College London, UK** **Prof. Cristiane Morais Smith, University of Utrecht, The Netherlands**		
14:45 - 15:15	Ink formulations of 2D materials for 3D printed energy devices **C. Mattevi**	**Prof. Cecilia Mattevi**, Imperial College London, **UK**
15:15 - 15:45	Research of graphene in 200 mm pilot line: from theory to devices **M. Lukosius**	**Dr. Mindaugas Lukosius,** Inst. for High Performance Microelectronics, **Germany**
15:45 - 16:15	Atom-by-atom design of graphene-like structures **C. Morais Smith**	**Prof. Cristiane Morais Smith**, University of Utrecht, **The Netherlands**
16:15 - 16:45	**Afternoon Break**	
16:45 - 17:15	Graphene, chemistry and single molecule devices **G. Schneider**	**Prof. Grégory F. Schneider**, Leiden Univ., **The Netherlands**
17:15 - 17:30	Large-dimensional MoS2 Transistors Array Fabricated by RF Sputtering and Its Applications **H. Park**, N. Liu, B.H. Kim, Y.J. Yoon and S. Kim	**Ms. Heekyeong Park**, Sungkyunkwan University, **Rep.of Korea**
17:30 – 17:45	Enhanced sensitivity of humidity and soil moisture sensor using liquid exfoliated MoS2 nanosheets **M.S. Siddiqui**, V.S. Palaparthy, H. Kalita, M.S. Baghini and M. Aslam	**Mr. Mohd Salman Siddiqui**, Indian Institute of Technology-Bombay, **India**
17:45 - 18:00	Conductive cationized cotton yarns coated with graphene sheets: in-situ mechanical and electrical properties **L. Maneval**, A. Serghei, N. Sintes-Zydowicz and E. Beyou	**Mrs. Léa Maneval**, University of Lyon, **France**
18:00 - 18:15	Superconducting Dirac point in proximetized graphene **G.N. Daptary**, E. Walach, E. Shimshoni and A. Frydman	**Dr. Gopi Nath Daptary**, Bar-Ilan University, **Israel**

Posters Virtual Session

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

N.	Poster Title	Author, Affiliation, Country
1.	Al2O3 and TiO2 Atomic Layer Deposition on Die Casting Mold Steel for Surface Engineering **R.M. Silva**, F.Oliveira and R.F. Silva	**Prof. Rui Silva**, University of Aveiro, **Portugal**
2.	Fabrication of hierarchical TiO2@NiO nanocomposite electrode with outstanding cycle durability for electrochromic application **J-H. Yu**, R.H. Jeong, D. In Kim, J.W. Lee, J.W. Yang, S. Park, S-H. Nam and J-H. Boo	**Mr. Jung-Hoon Yu**, Sungkyunkwan University, **Rep. of Korea**
3.	Effect of Heat Treatment Temperature on the Microstructure and Properties of Thermally Sprayed Ni-Cr-Mo-Al Alloy Coating **A. Srichen** and C. Banjongprasert	**Ms. Aradchaporn Srichen,** Chiang Mai University, **Thailand**
4.	Evaluation of self-cleaning efficiency of laser-structured aluminum surfaces contaminated with organic and inorganic particles **S. Milles**, M. Soldera and A.F. Lasagni	**Mr. Stephan Milles**, Technische Universität Dresden, **Germany**
5.	GaN epitaxy on graphene/sapphire substrate C-Y. Chiang, Y-C. Chang and **W-C. Ke**	**Mr. Wen-Cheng Ke**, Nat. Taiwan Uni of Science & Technology, **Taiwan**
6.	Hydrogel Based Adsorption Particle Shuttling on Aqueous System while Removing Co Nuclides **H-J. Kim**, S-J. Kim, C.W. Park and H-M. Yang	**Dr. Hyung-Ju Kim**, Korea Atomic Energy Research Institute- Daejeon, **Rep. of Korea**
7.	Surface protection of concrete surfaces with anti-graffiti systems **S. Jäntsch**, C. von Laar and H. Bombeck	**Mrs. Sandra Jäntsch**, University of Rostock, **Germany**
8.	Comparison of wear and cavitation erosion resistance of the cermet coatings sprayed by HVOF **E. Jonda**, L. Łatka, M. Szala and M. Walczak	**Dr. Ewa Jonda**, Silesian University of Technology, **Poland**
9.	Optical sensing properties of citrate-reduced gold nanoparticle thin films **G.J. Lee**, M.A. Yewale, L. N. Nguyen, E.H. Choi, D.G. Kim, T.Y. Kim, and C. K. Hwangbo	**Prof. Geon Joon Lee**, Kwangwoon University, **Rep.of Korea**
10.	Facile fabrication of Cuprous Oxide QDs-Afr 2D array as a sensor media for neurotransmitter **H.K. Lee** and S. J. Park	**Mr. Ho Kyung Lee**, Gachon University, **Rep. of Korea**
11.	Photoluminescence and structural defects of ZnO films deposited by reactive magnetron sputtering with unconventional Ar-O2 gas mixture formation **K. Bockute**, E. Demikyte, S. Tuckute, M. Urbonavicius, S.Varnagiris, G. Laukaitis and M. Lelis	**Dr. Kristina Bockute**, Kaunas University of Technology, **Lithuania**
12.	Study on the Quantum Dot Organic-Inorganic Hybrid Photodetector Using Low Temperature Conbustion Process Based NiOx as an Electron Blocking Layer **K-T. Kim**, W-S. Kim and S-Y Oh	**Dr. Kee Tae Kim**, Sogang University, **Rep. of Korea**
13.	Improved Dark Current of Organic Photodetector By inserting of Hf-SnO2 Layer as an Electron Transport Material **S. Lee**, G-M. Kim and S. Oh	**Ms. Seri Lee**, Sogang University, **Rep. of Korea**
14.	Water-processable LiFePO4/graphene hybrid cathodes for high power Lithium Ion Batteries **J-W. Jeon** and M. Biswas	**Dr. Ju-Won Jeon**, Kookmin University, **Rep. of Korea**
15.	Immobilization of viable proteins onto plasma modified nanofibers investigated by XPS analysis **A. Manakhov** and A. Solovieva	**Dr. Anton Manakhov**, Research Institute of Clinical and Experimental Lymphology– Branch of the ICG SB RAS, **Russia**
16.	Phototransistor with Heterogeneous Double Layer Consisted of Inorganic CsPbIxBr3-x Perovskite and In-Ga-Zn-O Semiconductor for Visible Light Detection **H-J. Na**, S-E. Lee and Y.S. Kim	**Mr. Hyun-Jae Na**, Seoul National University, **Rep. of Korea**
17.	Enhanced wear performance of surface layer of some cold working tool steels after combined finishing processes **D. Toboła** and A. Łętocha	**Dr. Daniel Toboła**, Łukasiewicz Research Network - Krakow Institute of Technology, **Poland**

18.	Phosphate and Flouride Bath Electrolyte for Low-energy PEO Coatings on Mg-based Biodegradable Materials **Y. Husak** and B. Dryhval	**Dr. Yevheniia Husak**, Sumy State University, **Ukraine**
19.	Temperature and Iodine Effects on Hydrogen Oxidation **H-J. Im** and J-W. Yeon	**Prof. Hee-Jung Im**, Jeju National University, **Rep. of Korea**
20	Stability of polyacid-doped polyaniline-based layer-by-layer films **J.W. Jeon**, P.B. Dea Firda and Y. Trianzar Malik	**Dr. Ju-Won Jeon**, Kookmin University, **Rep. of Korea**