

<b>THURSDAY, 20 AUGUST</b>		
<b>10:00-10:15</b>	<b>Opening Session</b> <b>Welcome message:</b> <b>Cornel Panait, President of the Constanta Maritime University Senate</b> <b>Violeta Vali Ciucur, Rector of Constanta Maritime University</b>	Virtual Room A
<b>10:30-13:10</b>	<u><a href="#">Plenary Session</a></u> <b>Chairs:</b> Paul SCHIOPU, George CARUNTU <b>Technical Chair:</b> Mirel PAUN	Virtual Room A
<b>15:30-18:00</b>	<u><a href="#">Oral Session 1</a></u> Advanced materials and new technologies / Organic optoelectronic materials and devices <b>Scientific Chair:</b> Marian VLADESCU <b>Technical Chair:</b> Sorin TASU	Virtual Room A
<b>15:30-18:00</b>	<u><a href="#">Oral Session 2</a></u> Sensors, microsystems, and instruments / Optics-inspired approaches for non-optical applications: systems, devices, and signal processing <b>Scientific Chair:</b> Razvan TAMAS <b>Technical Chair:</b> Andreea CONSTANTIN	Virtual Room B
<b>FRIDAY, 21 AUGUST</b>		
<b>09:00-13:55</b>	<u><a href="#">Oral Session 3</a></u> Propagation, reliability and security issues in wireless and optical communications / Micro/ nanophotonics and micro/ nanotechnologies / Plasma methods and diagnostic <b>Scientific Chair:</b> Alin DANISOR <b>Technical Chair:</b> Sorin TASU	Virtual Room A
<b>09:00-13:55</b>	<u><a href="#">Oral Session 4</a></u> Modeling, design, and simulation / Biomedical optoelectronics <b>Scientific Chair:</b> Adrian TULBURE <b>Technical Chair:</b> Mirel PAUN	Virtual Room B
<b>15:30-17:20</b>	<u><a href="#">Posters Session 1</a></u> <b>Scientific Chair:</b> Valentin FEIES <b>Technical Chair:</b> Sorin TASU  <b>Scientific Chair:</b> Andrei DRAGULINESCU <b>Technical Chair:</b> Mirel PAUN	Virtual Room A  Virtual Room B
<b>SATURDAY, 22 AUGUST</b>		
<b>09:00-10:45</b>	<u><a href="#">Posters Session 2</a></u> <b>Scientific Chair:</b> Octavian DANILA <b>Technical Chair:</b> Sorin TASU  <b>Scientific Chair:</b> Ana BARAR <b>Technical Chair:</b> Mirel PAUN	Virtual Room A  Virtual Room B
<b>11:00-13:00</b>	<u><a href="#">Posters Session 3</a></u> <b>Scientific Chair:</b> Cosmin DANISOR <b>Technical Chair:</b> Sorin TASU  <b>Scientific Chair:</b> Mirel PAUN <b>Technical Chair:</b> Stefania BUCUCI	Virtual Room A  Virtual Room B
<b>17:00-17:30</b>	<b>Paper Awards &amp; Closing Session</b>	Virtual Room A

## Thursday, August 20

### 10:30-13:10 - Plenary Session

**Chairs:** Paul SCHIOPU, George CARUNTU

**Technical Chair:** Mirel PAUN

**OMN100-8**, Evanescent waves. Extraordinary manifestation in biomedical application (**Invited**),

O.V. Angelsky , Taizhou Research Institute of Zhejiang University, **Taizhou, China** ,

C.Yu. Zenkova, **D.I. Ivanskyi**, Chernivtsi National University, **Ukraine**

**OMN100-85**, Enhancement of the optical polarization effect on the SPR response in gold micro/nanoparticles imaging (**Invited**),

**Nicoleta Tosa**, Florin Toadere, National Institute for Research & Development for Isotopic and Molecular Technologies, ClujNapoca, Romania

**OMN100-121**, Polymer Dispersed Liquid Crystals doped with nanoparticles: electric and electro-optical properties (**Invited**),

**Doina Mănăilă-Maximean**, Octavian Dănilă, University "Politehnica" of Bucharest, Romania

Viorel Cîrcu, Department of Inorganic Chemistry, University of Bucharest, Romania

Paul C. Ganea, National Institute of Materials Physics, Magurele, Romania

Valery A. Loiko, Alexander Konkolovich, Alexander Miskevich, B. I. Stepanov Institute of Physics of the National Academy of Sciences of **Belarus**, Minsk,

Ana Bărar, University "Politehnica" of Bucharest

**OMN100-138**, Biological contamination of naval steel surface after non-thermal plasma treatment, (**Invited**)

**Bogdan Hnatiuc**, Simona Ghita, Mihaela Hnatiuc, Adrian Sabau,

Constanta Maritime University

### 15:30-18:00 Oral Presentation

Session	<u>Oral Session 1</u> Virtual Room A	<u>Oral Session 2</u> Virtual Room B
CHAIRS	<b>Scientific Chair:</b> Marian VLADESCU <b>Technical Chair:</b> Sorin TASU	<b>Scientific Chair:</b> Razvan TAMAS <b>Technical Chair:</b> Andreea CONSTANTIN
<b>15:30-15:55</b>	<b>OMN100-36</b> , Alternative photopyroelectric methods for accurate investigations of thermal effusivity of porous solids Dorin Dadarlat, Carmen Tripon National R&D Institute for Isotopic and Molecular Technologies, Cluj-Napoca, Romania	<b>OMN100-9</b> , 3D LED cube Loredana-Maria BURCIU, Radu-Petru FOTESCU, PhD Lecturer Rodica CONSTANTINESCU, PhD Lecturer Bogdan ALEXANDRESCU, University Politehnica of Bucharest,
<b>15:55-16:20</b>	<b>OMN100-128</b> , Adsorption, wicking behavior and photodegradation tests of Rhodamine B solution upon wool substrates Ligia Frunza, V. Florin Cotorobaia, Monica Enculescu, Irina Zgura, C. Paul Ganea, National Institute of Materials Physics, Magurele, Romania Maria Birzu, National Institute of Statistics, Bucharest, Romania,	<b>OMN100-10</b> , System for monitoring the parameters of vehicle Radu-Petru FOTESCU, Loredana-Maria BURCIU, PhD Lecturer Rodica CONSTANTINESCU, PhD Lecturer Bogdan ALEXANDRESCU, University Politehnica of Bucharest,

	Doina Mănăilă-Maximean, Physics Department, University "Politehnica" of Bucharest, Bucharest, Romania	
16:20-16:45	<b>OMN100-124</b> , Ionic liquid crystals based on bis-imidazolium salts: dielectric behaviour and X-ray diffraction studies Paul C. Ganea, National Institute of Materials Physics, Magurele, Romania Viorel Cîrcu , Amalia Pană, Monica Iliș, Marin Micutz, Department of Inorganic Chemistry, University of Bucharest, Romania Doina Manaila-Maximean, University Politehnica of Bucharest, Viktor Bodnarchuk, Joint Institute for Nuclear Research, <b>Dubna, Russia</b> Maria Balasoiu, Horia Hulubei Institute of Physics and Nuclear Engineering, Bucharest	<b>OMN100-72</b> , Command and control of platforms for scanning soil properties Sebastian-Lucian Muraru, CAE Department, INMA Bucharest, Bucharest, Paul Schiopu, University Politehnica of Bucharest
16:45-17:10	<b>OMN100-106</b> , Ruthenium-based DSSC efficiency optimization by graphene quantum dot doping Ana Bărar , Octavian Dănilă , Doina Mănăilă-Maximean University "Politehnica" of Bucharest, Valery A. Loiko , B. I. Stepanov Institute of Physics of the National Academy of Sciences of Belarus, Minsk,	<b>OMN100-139</b> , <i>Performance-oriented PIC10F N-core simulator</i> , Bogdan PETRIC, Călin BÎRĂ, University "Politehnica" of Bucharest, Romania
17:10-17:35	<b>OMN100-112</b> , Photophysics of poly(3,4-ethylenedioxythiophene) covered by permofmodified $\gamma$ -cyclodextrin A.-M. Resmerita <sup>1</sup> , A. Rotaru, A. Farcaș, Petru Poni <sup>1</sup> Institute of Macromolecular Chemistry, Iasi, Romania F. Farcaș, "Gh. Asachi" Technical University, Iasi, Romania A. Costea, Politehnica University of Bucharest	<b>OMN100-148</b> , Impact Reduction of Common Mode Currents for Field Measurements on Directional Symmetrical Antennas, Andreea Constantin, Razvan Tamas, Maritime University of Constanta
17:35-18:00		<b>OMN100-142</b> , Reconfigurable FPGA Application for RT Control of Industrial Robots Gheorghe Marc , Adrian Tulbure , University "1 Dec.1918" of Alba Iulia Alexandru Brustan , ADAS Department, Continental Automotive Romania <b>SRL</b> , Timisoara

### Friday, August 21

#### 09:00-13:55 Oral Presentation

Session	<a href="#">Oral Session 3</a> Virtual Room <b>A</b>	<a href="#">Oral Session 4</a> Virtual Room <b>B</b>
CHAIRS	<b>Scientific Chair:</b> Alin DANISOR <b>Technical Chair:</b> Sorin TASU	<b>Scientific Chair:</b> Adrian TULBURE <b>Technical Chair:</b> Mirel PAUN
<b>09:00-09:25</b>	<b>OMN100-87</b> , Vulnerabilities in Authentication Process GSM standard – RF measurements Cristian Capotă, Simona Halunga, Stancu Eugen, Octavian Fratu, Mihai Găină,	<b>OMN100-56</b> , Numerical simulation of air lift pump system using Volume of Fluid Method Andrei Alexandru SCUPI, Dumitru DINU

	Dragos Vizireanu, University Politehnica of Bucharest, Romania	Constanta Maritime University, Faculty of Naval Electro-Mechanics,
<b>09:25-09:50</b>	<b>OMN100-88</b> , Processing gain considerations on compromising emissions Răzvan Bărtușică, Boitan Alexandru, Mădălin Mihai, The Special Telecommunications Service Bucharest, Romania Simona Halunga, University Politehnica of Bucharest	<b>OMN100-78</b> , Employment of rb YC C color space and OLED display for enhancement of hyperspectral images colors rendering Toadere Florin INCDTIM Cluj Napoca
<b>09:50-10:15</b>	<b>OMN100-90</b> , Analysis of PS/2 Compromising Emanations Bogdan Trip, Vlad Butnariu , Valentin Velicu, Alexandru Boitan,The Special Telecommunications Service Bucharest, Simona Halunga, University Politehnica of Bucharest	<b>OMN100-84</b> , Algorithm for frequency dependent properties of dielectric materials in high speed interconnections Diana Brînaru, University "Politehnica" of Bucharest, Romania
<b>10:15-10:40</b>	<b>OMN100-91</b> , OFDM in downlink MASSIVE-MIMO system Carmen Florea, Mădălina BERCEANU1,Simona HALUNGA, University Politehnica of Bucharest	<b>OMN100-115</b> , Parallel machine simulator using racket / scheme functional programming language, Călin BÎRĂ, Liviu GUGU, University "Politehnica" of Bucharest, Romania
<b>10:40-11:00</b>	<b>Break</b>	<b>Break</b>
<b>11:00-11:25</b>	<b>OMN100-92</b> , Measurements of the emission parameters of a WiMax BTS under interference conditions Eugen Stancu , Cristian Capotă, Alexandru Badea, Simona Halunga , Octavian Fratu, Nicolae Vizireanu,University Politehnica of Bucharest	<b>OMN100-116</b> , Functional Simulator for Sensor-based Embedded Systems Călin BÎRĂ, University "Politehnica" of Bucharest, Romania
<b>11:25-11:50</b>	<b>OMN100-100</b> , Security and propagation issues and challenges in VLC and OCC systems Simona Riurean, University of Petroșani, Petroșani, Romania Robert Alexandru Dobre , Alina-Elena Marcu, University Politehnica of Bucharest	<b>OMN100-117</b> , Price-Performance Ratio Analysis for Advanced LED Lighting Applications Adrian Tulbure , Gheorghe Marc , Radu Voina, Department of Informatics, Mathematics and Electronics, University "1 Dec.1918" of Alba Iulia Marian Vladescu, University "Politehnica" of Bucharest.
<b>11:50-12:15</b>	<b>OMN100-137</b> , Description of Underwater Noise in Siutghiol lake - Constanta Alin Danisor, Razvan D. Tamas,Constanta Maritime University, Feng Qi, Shenyang Institute of Automation, Chinese Academy of Sciences, Shenyang, China	<b>OMN100-108</b> , The performance of Manchester source coding in an uplink LDPC channel coding OFDM-based Massive MIMO system Alexandru Badea, Madalina-Georgiana Berceanu , Carmen Florea, Simona Halunga, University Politehnica of Bucharest
<b>12:15-12:40</b>	<b>OMN100-111</b> , Key extraction in a chaos-based image cipher with wavelet packets Corina Macovei, Adina-Elena Lupu, Mircea Răducanu, Octaviana Datcu University Politehnica of Bucharest	<b>OMN100-141</b> , Computer Based Analytical Model of a Crankshaft Throw Strength Problema, b, c Birol Menabil, Autoklass Constanta, Constanta, Romania Emil M. Oanta , Alexandra Raicu, Constanta Maritime University, Romania
<b>12:40-13:05</b>	<b>OMN100-146</b> , Proposed pattern for data confidentiality in wireless communications Eugen NEACȘU, Advanced Technologies Institute, Romania Paul ȘCHIOPU, University Politehnica of Bucharest	<b>OMN100-71</b> , Optical investigations of the 3D printing regime influence on surface parameters,Suciu Cornel, Manolache-Rusu Ioan-Cozmin, Besliu-Bancescu Irina, Stefan cel Mare University of Suceava
<b>13:05-13:30</b>	<b>OMN100-107</b> , Hybrid Plasmonic Metasurfaces: Optical Performance Investigations O. Dănilă , D. Mănăilă-Maximean, A. Bărar, University Politehnica of Bucharest, V. A. Loiko3, B. I. Stepanov Institute of Physics of the National Academy of Sciences of Belarus, Minsk,	<b>OMN100-130</b> , <i>TL-Tensor Flow CNN model and dataset for electronic equipment</i> , Călin BÎRĂ, University "Politehnica" of Bucharest, Romania
<b>13:30-13:55</b>	<b>OMN100-140</b> , Power supplies for DBD used for surface treatments Lungu Cristian Victor, University "Dunărea de jos" Galati Hnatiuc Bogdan, Constanta Maritime University	<b>PS2-16, OMN100-20</b> , <i>Efficiency of using a hybrid marine propulsion system vs. conventional system</i> , Mariana PANAITESCU, Mihail-Vlad VASILESCU, Fanel-Viorel PANAITESCU, Cornel PANAT , Maritime University of Constanta

13:55-14:20		<b>PS2-17, OMN100-22</b> , Choose the best electricity sources for a container ship, by using a hybrid optimization model for electric renewable Mariana PANAITESCU, Constanta Maritime Univ.
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### 15:30-17:20 Posters Session 1

	Virtual Room A	Virtual Room B
CHAIRS	<b>Scientific Chair:</b> Valentin FEIES <b>Technical Chair:</b> Sorin TASU	<b>Scientific Chair:</b> Andrei DRAGULINESCU <b>Technical Chair:</b> Mirel PAUN
15:30-15:35	<b>PS1-1, OMN100-59</b> , <i>Differential Mueller-Matrix Tomography of the Polycrystalline Structure of Histological Sections in the Histological Determination of the Limitation of the Damage Formation of Human Internal Organs</i> , A. Litvinenko, I. Savka, O. Vanchulyak, Bukovinian State Medical University, Chernivtsi, <b>Ukraine</b> , Yu. Ushenko, A. Dubolazov, V. Gantyuk, M. Talakh, Chernivtsi National University, <b>Ukraine</b>	<b>PS1-18, OMN100-65</b> , <i>Spectropolarimetry differential diagnosis of adenocarcinoma and squamous cell cervix carcinoma</i> , Olexander Peresunko, Katerina Chala, Bukovinian State Medical University, <b>Ukraine</b> , Maria Ju. Gruia, Oncologic Institute "Al. Trestioreanu", Bucharest, Romania, Nina Horodynska, Sergey Yermolenko, Chernivtsi National University, Chernivtsi, <b>Ukraine</b>
15:35-15:40	<b>PS1-2, OMN100-64</b> , <i>Control surface roughness of mirror</i> , O.V. Angelsky, A.P. Maksimyak and P.P. Maksimyak, Chernivtsi National University, <b>Ukraine</b>	<b>PS1-19, OMN100-66</b> , <i>Diagnosis of cervical cytological smears for availability of papillomavirus by spectropolarimetry</i> , Olexander Peresunko, Bukovinian State Medical University, <b>Ukraine</b> Ion Gruia, Faculty of Physics, University of Bucharest, <b>Romania</b> Sergey Yermolenko, Dmitry Burkovets, Chernivtsi National University, <b>Ukraine</b>
15:40-15:45	<b>PS1-3, OMN100-4</b> , <i>Carbon nanoparticles. Preparation and specially formed optical properties</i> , V.M. Tkachuk Department of Optics, Publishing & Printing, Chernivtsi National University, <b>Ukraine</b>	<b>PS1-20, OMN100-67</b> , <i>Azimuthally Invariant Mueller-Matrix Tomography of Linear Dichroism of Polycrystalline Networks of Biological Tissues</i> , A. Pavlyukovich, N. Pavlyukovich, Y. Sarkisova, M. Solovey, S. Railianu, V. Polovyi, Bukovinian State Medical University, <b>Ukraine</b> , A. Dubolazov, V. Ushenko, M. Kovalchuk, Chernivtsi National University, <b>Ukraine</b>
15:45-15:50	<b>PS1-4, OMN100-5</b> , <i>Carbon nanoparticles for diagnostic of random speckle-fields. Hilbert transformation application</i> , C.Yu. Zenkova, D.I. Ivanskyi, V.M. Tkachuk, Chernivtsi National University, <b>Ukraine</b>	<b>PS1-21, OMN100-68</b> , <i>Molecular spectrometry of the blood of breast cancer patients as a preliminary stage of further molecular genetic screening</i> , Olexander Peresunko, Tatiana Kruk, Bukovinian State Medical University, <b>Ukraine</b> , Ion Gruia, Faculty of Physics, University of Bucharest, <b>Romania</b> , Sergey Yermolenko, Chernivtsi National University, <b>Ukraine</b> , M. Ju. Gruia, Institute of Oncology Bucharest,
15:50-15:55	<b>PS1-5, OMN100-27</b> , <i>Optical selection rules for the quantum transitions from the ground state of the crystal to the superposition states of the two-dimensional magnetoexcitons</i> S.A. Moskalenko, I.V. Podlesny, I.A. Zubac, Institute of Applied Physics of the Academy of Sciences of <b>Moldova</b> , B.V. Novikov, Department of Solid State Physics, Institute of Physics, St. Petersburg State University, <b>Russia</b>	<b>PS1-22, OMN100-70</b> , <i>Processing of spectral imaging of deep layers in the macula of the retina in diabetic macular edema</i> , Yaroslav Penishkevich, Bukovinian <b>State Medical University, Ukraine</b> , Ion Gruia, Faculty of Physics, University of Bucharest, Romania, Sergey Yermolenko, Dmitry Burkovets, Chernivtsi National University, <b>Ukraine</b>
15:55-16:00	<b>PS1-6, OMN100-41</b> , <i>New trends in optical metrology</i> , Oleg V. Angelsky, Chernivtsi National University, Chernivtsi, <b>Ukraine</b> , Zheng Jun Research Institute of Zhejiang University-Taizhou, <b>China</b>	<b>PS1-23, OMN100-54</b> , <i>Managing the luminescence efficiency of the organic compounds of Europium(III) through the obtaining technology</i> , Bordian Olga, Verlan Victor, Culeac Ion, Institute of Applied Physics,

		Chisinau, Republic of <b>Moldova</b> , Zubarev Vera, Institute of Chemistry, Chisinau, Republic of <b>Moldova</b> ,
16:00-16:05	<b>PS1-7, OMN100-55</b> , <i>Photosensitivity of heterostructures produced by aerosol deposition of ZnMgO thin films on Si substrates</i> , Vadim Morari , Emil Rusu , D.Ghitu Institute of Electronic Engineering and Nanotechnologies, Chisinau <b>Republic of Moldova</b> , Vitalie Postolache ,V. V. Ursaki ,I. M. Tiginyanu , Technical University of Moldova, Karin Leistner , Kornelius Nielsch , Leibniz Institute for Solid State and Materials Research of Dresden (IFW Dresden), Institute for Metallic Materials (IMW), Dresden, <b>Germany</b>	<b>PS1-24, OMN100-38</b> , <i>Photoelectrical effect in chalcogenide multilayer structures</i> , Oxana Iaseniuc, Mihail Iovu ,Institute of Applied Physics, <b>R. Moldova</b>
16:05-16:10	<b>PS1-8, OMN100-77</b> , <i>Tunnel Junctions in Bi and Bi0.97Sb0.03 Nanoconstrictions</i> , L. Konopko , A. Nikolaeva , C. Slobodeniuc, Gitsu Institute of Electronic Engineering and Nanotechnologies, Chisinau, <b>Moldova</b> , T. Huber Howard University, 500 College St. N.W., Washington, DC 20059, <b>USA</b>	<b>PS1-25, OMN100-19</b> , <i>Investigations of non-grain oriented Si steel sheets</i> , Ionica Ioniță, Broscăreanu Ionuț, Aurora Anca Poinescu, Daniela Avram, Elena Valentina Stoian, Ana-Maria Hossu, <b>Valahia University of Târgoviște</b> ,
16:10-16:15	<b>PS1-9, OMN100-25</b> , <i>Polarization-Phase Mapping of the Optically Anisotropic Component of Biological Tissues in the Differential Diagnosis of Sepsis</i> , I.Oliinyk, Yu. Solovey, V.Polovy, Bukovinian State <b>Medical University</b> , Chernivtsi, <b>Ukraine</b> , A. Dubolazov, Yu.Ushenko, I. Soltys, A. Motrich, Chernivtsi National University, 2 Kotsiubynskiy Str., Chernivtsi, <b>Ukraine</b>	<b>PS1-26, OMN100-33</b> , <i>Yttrium based nanostructured oxides for applications in biotechnology</i> Vasilica Țucureanu, Cosmin Romanițan, Oana Tutunaru, Iuliana Mihalache, Alina Matei, National Institute for Research and Development in Microtechnologies, <b>IMT-Bucharest</b>
16:15-16:20	<b>PS1-10, OMN100-26</b> , <i>Statistical Analysis of Vector-Parametric Polarization Images of the Polycrystalline Component of Biological Tissues with Varying Degrees of Necrotic Changes</i> , S.Railianu, M. Solovei, V.Polovy, Bukovinian State Medical University, Chernivtsi, <b>Ukraine</b> , A. Dubolazov, Yu.Ushenko, I. Soltys, A. Motrich, V. Gantiuk, Chernivtsi National University, <b>Ukraine</b> ,	<b>PS1-27, OMN100-43</b> , <i>1-pyrenebutyric acid functionalized graphene CVD for use as biocompatible coating film</i> , Dr. Petruta Preda , Bianca Tincu, Marioara Avram, Cristina Pachiu, Iuliana Mihalache, IMT Bucharest, Anton Ficai, <b>Politehnica University of Bucharest</b> , Ana-Maria Enciu, Victor Babes National Institute of Pathology, Bucharest, <b>Romania</b>
16:20-16:25	<b>PS1-11, OMN100-69</b> , <i>Study performed on two lavender oils from different Romanian areas</i> , Ana-Maria Hossu, Ionica Ionita, Department of Sciences and Advanced Technologies, Valahia University of Târgoviște, Faculty of Science and Arts, Târgoviște, Georgia E. Boros Iacob, Dorina N. Mocuta, Department of Management and Marketing, University of Agricultural Sciences and Veterinary Medicine Bucharest, Faculty of Management, Economic Engineering in Agriculture and Rural Development, Bucharest	<b>PS1-28, OMN100-79</b> , <i>Doping of zinc oxide nanoparticles for biomedical applications</i> , Alina Matei, Cosmin Romanitan, Oana Tutunaru, Vasilica Tucureanu, National Institute for Research and Development in Microtechnologies, <b>IMT-Bucharest</b>
16:25-16:30	<b>PS1-12, OMN100-60</b> , <i>Polarization Reconstruction of Fluctuations in the Parameters of the Phase Anisotropy of Biological Crystals Networks in Differentiation of Cerebral Infarction</i> M. Garazdyuk, V. Bachinsky, O. Vanchulyak, Bukovinian State <b>Medical University</b> , Chernivtsi, <b>Ukraine</b> , Yu.Ushenko, A.Dubolazov, P.Gorodensky, O.Yatsko, Chernivtsi National University, <b>Ukraine</b>	<b>PS21-29, OMN100-30</b> , <i>Optical and electrical properties of Al-doped ZnO thin films deposited by sol-gel method</i> Dr. Madalina Nicolescu ,M. Nicolescu, M. Anastasescu, I. Atkinson, S. Mihaiu, M. Zaharescu, M. Gartner, Institute of Physical Chemistry ,M. Covei, Transilvania University of Brasov ( <b>Romania</b> );
16:30-16:35	<b>PS1-13, OMN100-61</b> , <i>Phase Reconstruction of the Polycrystalline Structure of Internal Organs Tissues in the Differentiation of Alcohol and Carbon Monoxide Poisoning</i> , Ya. Ivashkevich, O. Vanchulyak, V. Bachinsky, Bukovinian State <b>Medical University</b> , Chernivtsi, <b>Ukraine</b> , Yu. Tomka, I. Soltys, O. Dubolazov, V. Dvorjak, Chernivtsi National University, 2 Kotsiubynskiy Str., Chernivtsi,	<b>PS1-30, OMN100-40</b> , <i>Conservation of wooden artifacts: evaluation of modern and classical materials</i> , Dr. Irina Fierascu, R. Fierascu, A. Baroi, R. Brazdis, T. Fistos, V. Raditoiu, R. Gabor, C. Nicolae, I. Fierascu, National Institute for Research & Development in Chemistry and Petrochemistry – ICECHIM Bucharest ( <b>Romania</b> );



	<b>Ukraine</b>	
<b>16:35-16:40</b>	<b>PS1-14, OMN100-62, Mueller-Matrix Differentiation of Necrotic Changes in Polycrystalline Structure of Partially Depolarizing Layers of Biological Tissues</b> I. Savka, Bukovinian State <b>Medical University</b> , Chernivtsi, <b>Ukraine</b> , Yu. Tomka, I. Soltys, O. Dubolazov, O. Olar, M. Kovalchuk, O. Yatsko, Chernivtsi National University, <b>Ukraine</b>	<b>PS1-31, OMN100-39, Graphene Monolayer modified Electrochemical Sensor</b> , Bianca Tincu ,Andrei Avram ,Corneliu Voitincu ,Vasilica Tucureanu ,Cristina Pachiu, Marioara Avram, National Institute for Research and Development in Microtechnologies, Bucharest; Petruta Preda ,University Politehnica of Bucharest, Rodica Iosu , Diana Stan, DDS Diagnostic SRL, Bucharest, <b>Romania</b>
<b>16:40-16:45</b>	<b>PS1-15, OMN100-63, Differential Mapping of Depolarization Component of Mueller Matrix of Optically Thick Biological Layers</b> , O.Ushenko, V.Zhytaryuk, O. Dubolazov, V. Ushenko, M. Kovalchuk, O. Yatsko, Chernivtsi National University, <b>Ukraine</b>	<b>PS1-32, OMN100-154, Porous bilayers for hydrogen detection based on surface acoustic wave sensors</b> Cristian Viespe, Dana Miu, Izabela Constantinoiu Laser Department, National Institute for Laser, Plasma and Radiation Physics, Magurele, <b>Romania</b>
<b>16:45-16:50</b>		<b>PS2-33, OMN100-123, Intelligent lighting System using Single Shot Multibox detector</b> , OROIAN-BOCA Maria Loredana , BOCA Liana Luminița, "1 Decembrie 1918" University of Alba Iulia,
<b>16:55-17:20</b>	<b>Discussion</b>	<b>Discussion</b>

## SATURDAY, 22 AUGUST

### 09:00-10:45 Posters Session 2

	Virtual Room A	Virtual Room B
CHAIRS	<b>Scientific Chair:</b> Octavian DANILA <b>Technical Chair:</b> Sorin TASU	<b>Scientific Chair:</b> Ana BARAR <b>Technical Chair:</b> Mirel PAUN
<b>09:00-09:05</b>	<b>PS2-1, OMN100-89, Cyber-Physical Healthcare Security System based on a Raspberry Pi</b> , George Suciuc , Mari-Anais Sachian, Beia Consult International, Bucharest,	<b>PS2-15, OMN100-46, Distribution of droplets in an atomized combustible jet depending on the surface of the atomized jet of fuel</b> , Marius Beniuga, Department of Mechanical Engineering, Stefan cel Mare University of Suceava
<b>09:05-09:10</b>	<b>PS2-2, OMN100-80, Experimental stand of absorption measurements in the 8.6 - 9.5 GHz range for very thin samples with offset of the reflected wave phase</b> Huțanu Constantin , "1 Decembrie 1918" University, Alba Iulia, Romania	<b>PS2-16, OMN100-47, The modification of vaporization times and the evolution analyze of diameters of fuel drops depending about ambient temperature</b> , Marius Beniuga, Mihai Ioan, Department of Mechanical Engineering, Stefan cel Mare University of Suceava
<b>09:10-09:15</b>	<b>PS2-3, OMN100-126, System Design and Analysis of a Web Site for studying the metaphors of business language in English and Romanian</b> , Liana Luminița BOCA, Technical University of Cluj Napoca-Romania, Vasile Teodor DĂDĂRLA, Maria Loredana OROIAN – BOCA, Decembrie 1918" University of Alba Iulia,	<b>PS2-17, OMN100-51, VOF method developed for the evaporation of liquid droplets that come into contact with heated surfaces</b> Picus Claudiu , Ioan Mihai, Department of Mechanical Engineering, Stefan cel Mare University of Suceava
<b>09:15-09:20</b>	<b>PS2-4, OMN100-97, Contributions to the analysis of substances with time-domain terahertz spectroscopy</b> ,	<b>PS2-15, OMN100-52, Simulation of the impact of a liquid jet upon contact with a perpendicular surface versus an inclined one</b>

	Marian Vlădescu ,Alexandru Crăciun ,Ana Bărar, Paul Şchiopu, University "Politehnica" of Bucharest, Adrian Tulbure, "1 Decembrie 1918" University of Alba Iulia,	Picus Claudiu, Ioan Mihai,Department of Mechanical Engineering, Stefan cel Mare University of Suceava
09:20-09:25	<b>PS2-5, OMN100-81, Mechatronic Platform with Sensors for Smart Agriculture,</b> Marian Vladescu,Valentin Feies, Paul Schiopu,Nicolae Vasiliu, Alexandru Craciun,Valentin Voiculescu, University Politehnica of Bucharest,Virgil Muraru, Sebastian Lucian Muraru, The National Institute of Research – Development for Machines and Installations Designed to Agriculture and Food Industry – INMA Bucharest	<b>PS2-16, OMN100-74,</b> Experimental investigations regarding contact mean pressure in four balls test, P.C.Hangan,I.C.Roanu, I.Musca,Stefan cel Mare University of Suceava
09:25-09:30	<b>PS2-6, OMN100-58, The use of homodyne detection for measuring small frequency differences between two RF oscillators,</b> Florentin Vasile , Craciun A., Vladescu M., Schiopu ,Feies ,Codreanu N., University Politehnica of Bucharest, Ionita S,Raducu M.,University of Pitesti, Romania	<b>PS2-17, OMN100-76, Analysis of passive vs. semi-active quarter car suspension models,</b> Manolache-Rusu Ioan-Cozmin, Suciuc Cornel, Ioan Mihai,Stefan cel Mare University of Suceava
09:30-09:35	<b>PS2-7, OMN100-110, Time and power performance study on 8-bit microcontrollers,</b> Alexandru VLĂDESCU, Rodica CONSTANTINESCU, Dan STOICHESCU, University Politehnica of Bucharest	<b>PS2-18, OMN100-24, Direct Hologram Compression vs. Quantitative Phase Image Compression,</b> Ana-Maria Sandu, N. Mihale, Mihaela-Andreea Ungureanu, E.I. Scarlat, University Politehnica Bucharest
09:35-09:40	<b>PS2-8, OMN100-86, Temperature Dependence of I-V Characteristics of Dye Sensitized Solar Cells</b> Ciprian Ionescu, Norocel Codreanu, Alexandru Vasile, Paul Svasta, University "Politehnica" of Bucharest, Gheorghe Marin , NANOM MEMS srl ,	<b>PS2-19, OMN100-94, Effect of reducing the background noise in the detection of blood lead by atomic absorption</b> CARAGEA Genica , Military Medical Research Center (CCSMM), Bucharest, BOJESCU Alexandra Andrada , MACOVEI Radu Alexandru , University of Medicine and Pharmacy "Carol Davila", Bucharest, VLĂDESCU Marian , ŞCHIOPU Paul University "Politehnica" of Bucharest
09:40-09:45	<b>PS2-9, OMN100-23, Bio-algorithms for decision making,</b> Manolache Manuel Adelin, Manolache Sergiu, Automatic Control and Computer Science, Polytechnic University of Bucharest,	<b>PS2-20, OMN100-103, An overview on optoelectronic methods for detection of xenobiotics in human fluid samples</b> Ana Bărar , Paul Şchiopu,University "Politehnica" of Bucharest, Genica Caragea ,Military Medical Research Center (CCSMM), Bucharest, Alexandra Andrada Bojescu, University of Medicine and Pharmacy "Carol Davila", Bucharest,
09:45-09:50	<b>PS2-10, OMN100-32, Performance targets and QoS requirements for the service provided to users / subscribers of public IP networks,</b> Irina Bristena Bacîş , Alina Constantin ,University "Politehnica" of Bucharest, Romania	<b>PS2-21, OMN100-37, Realistic model for simulating membrane electroporation, based on phase imaging of cultured cells,</b> Ana-Maria Sandu ,Mihaela A. Ungureanu,Mihaela Morega , Violeta L. Călin , Mona Mihăilescu , University "Politehnica" of Bucharest, Mihaela G. Moiescu , Biophysics and Cellular Biotechnology Department, University of Medicine and Pharmacy Carol Davila, Bucharest,Irina A. Paun, CETAL, National Institute for Laser, Plasma and Radiation Physics, Magurele, Romania
09:50-09:55	<b>PS2-10 bis, OMN100-155, High reliability hybrid power supply systems for PON passive and AON active optical communications networks,</b> Alexandru Vasile, Irina Bristena B Bacis; Rodica-Cristina Negroiu, University "Politehnica" of Bucharest, Romania	<b>PS2-22, OMN100-95, An optoelectronic biomedical method for amphetamine detection by enzyme multiplied immunoassay technique,</b> CARAGEA Genica , FORJE Mărgărita, AVRAM Ruxandra , VARZARU Andreea Camelia , Military Medical Research Center (CCSMM), Bucharest,TUDOSIE Mihail Silviu , University of Medicine and Pharmacy "Carol Davila", VLĂDESCU Marian , ŞCHIOPU Paul, University



		"Politehnica" of Bucharest
09:55-10:00	<b>PS2-11, OMN100-44</b> , <i>Experimental evaluation of the air flow rate and boost pressure by aid of the diaphragm method for an electrically driven axial compressor</i> , Grădinariu Andrei Cristian, Mihai Ioan, Department of Mechanical Engineering, Stefan cel Mare University of Suceava	<b>PS2-23, OMN100-125</b> , <i>Polarized emission and dielectric studies of novel lanthanidomesogens based on 4-pyridone ligands</i> Theodora A. Ilincă , Viorel Cîrcu, Department of Inorganic Chemistry, University of Bucharest, Romania, Doina Manaila-Maximean , University Politehnica of Bucharest, Paul C. Ganea, Luliana Pasuk , National Institute of Materials Physics, Magurele,
10:00-10:05	<b>PS2-12, OMN100-34</b> , <i>Heat transfer modeling in the hot source area of flat micro heat pipe</i> , SPRINCEANA Siviu, Department of Mechanical Engineering, Stefan cel Mare University, Suceava, România	<b>PS2-24, OMN100-31</b> , <i>Quantum random number generation with down converted photon pairs</i> , Vasile-Laurențiu DOSAN, Mona MIHĂILESCU, Nicolae TARBĂ, Mihaela-Andreea UNGUREAN, University Politehnica of Bucharest, Romania, Radu IONICIOIU, Department of Theoretical Physics, Horia Hulubei National Institute of Physics and Nuclear Engineering, Măgurele
10:05-10:10	<b>PS2-13, OMN100-35</b> , <i>Experimental research on cooling the condensation area to flat micro heat pipe using the inverted Seebeck effect</i> SPRINCEANA Siviu, Mihai Ioan, Department of Mechanical Engineering, Stefan cel Mare University, Suceava, România	<b>PS2-25, OMN100-104</b> , <i>Visible Light Communications - current challenges and prospects</i> , Alina-Elena Marcu, Robert-Alexandru Dobre, Marian Vlădescu, University Politehnica of Bucharest
10:10-10:15	<b>PS2-14, OMN100-45</b> , <i>Compression ratio influence on the performances of a diesel engine equipped with an electrically driven axial compressor</i> Grădinariu Andrei Cristian, Mihai Ioan, Department of Mechanical Engineering, Stefan cel Mare University of Suceava	<b>PS2-26, OMN100-122</b> , <i>LED lighting system with gradual control of light intensity through capacitive sensing</i> , Dan-Alexandru Vlădescu, Alina-Elena Marcu, University "Politehnica" of Bucharest
10:15-10:45	<b>Discussion</b>	<b>Discussion</b>

### 11:00-13:00 Posters Session 3

	Virtual Room A	Virtual Room B
<b>CHAIRS</b>	<b>Scientific Chair:</b> Cosmin DANISOR <b>Technical Chair:</b> Sorin TASU	<b>Scientific Chair:</b> Mirel PAUN <b>Technical Chair:</b> Stefania BUCUCI
11:00-11:05	<b>PS3-1, OMN100-144</b> , <i>Modelling and simulation of datalogging embedded module with solar panel supply and NiMH battery energy storage</i> , Andrei Drumea , Cristina Marghescu , Mihaela Pantazică, University "Politehnica" of Bucharest, Romania	<b>PS3-19, OMN100-119</b> , <i>Cross-docking locational-allocation analysis using genetic algorithms</i> , Vlad-Augustin Vulcu, Simona Dinu, Constanta Maritime University,
11:05-11:10	<b>PS3-2, OMN100-145</b> , <i>LED display matrix with serial interface</i> , Andrei Drumea , Cristina Ioana Marghescu, University Politehnica of Bucharest,	<b>PS3-20, OMN100-13</b> , <i>Software-defined Ground Penetrating Chirp Radar</i> , Mirel Paun , Electronics and Telecommunications Department, Maritime University of Constanta,
11:10-11:15	<b>PS3-3, OMN100-147</b> , <i>Procedures to keep the voice of "intelligent objects" alive</i> , Cătălina Gherghina, Gemany, Angelica Bacivarov, Ioan C. Bacivarov, Paul Șchiopu, University Politehnica of Bucharest	<b>PS3-21, OMN100-14</b> , <i>Continuous-wave software-defined radar interferometry</i> , Mirel Paun , Electronics and Telecommunications Department, Maritime University of Constanta
11:15-11:20	<b>PS3-4, OMN100-11</b> , <i>Methods of underwater autonomous navigation</i> , Mihaela Hnatiuc, Constanta Maritime University, Alin Ghilezan , Technic Departament, R.A. ROMATSA, Constanta,	<b>PS3-22 OMN100-15</b> , <i>Stepped-frequency software-defined ground-based synthetic aperture radar</i> , Mirel Paun , Maritime University of Constanta
11:20-11:25	<b>PS3-5, OMN100-29</b> , <i>Biofouling monitoring</i> , Simona Ghita, Mihaela Hnatiuc, Constanta Maritime University,	<b>PS3-23, OMN100-16</b> , <i>Stepped-frequency software-defined Ground Penetrating Radar</i> , Mirel Paun, Electronics and Telecommunications

		Department, Maritime University of Constanta
11:25-11:30	<b>PS3-6, OMN100-113</b> , <i>Operation and diagnosis of electrically operated valves</i> , Nedelcu, Elena ,Ciucur, Violeta-Vali , Nichifor Marius, Constanta Maritime University	<b>PS3-24, OMN100-98</b> , <i>Radar cross section analysis for meander line frequency selective surfaces</i> , Stefania Bucuci , Razvan D. Tamas, Maritime University of Constanta
11:30-11:35	<b>PS3-7, OMN100-114</b> , <i>Operation and diagnosis of pneumatically operated valves</i> , Nedelcu, Elena , Ciucur, Violeta-Vali, Constanta Maritime University Romania,	<b>PS3-25, OMN100-101</b> , <i>Low Cost Seismometer for Building Integrity Measurement</i> , Ana DUMITRASCU, Ana BORDEA, Maritime University of Constanta
11:35-11:40	<b>PS3-8, OMN100-2</b> , <i>On the dynamics of shaping. The generalization of the morphogenesis</i> , Catalin Silviu Nutu ,Department for General Engineering Sciences, Constanta Maritime University,	<b>PS3-26, OMN100-102</b> , <i>On the improvement of performance in motorsport by means of acceleration measurements</i> , Ana DUMITRASCU, George MOTRU,Ana BORDEA, Maritime University of Constanta
11:40-11:45	<b>PS3-9, OMN100-3</b> , <i>Fractals, the missing link between certainty and uncertainty</i> , Catalin Silviu Nutu, Department for General Engineering Sciences, Constanta Maritime University,	<b>S3-27, OMN100-105</b> , <i>Characterization of antenna side and back radiation in a multipath site</i> , Mariana Vasilica Galbaza, Liliana Anchidin, Razvan D. Tamas, Maritime University of Constanta
11:45-11:50	<b>PS3-10, OMN100-17</b> , <i>Numerical Modeling of Mixed-Mode Delamination Fracture in Unidirectional AS4/PEEK Composites</i> , Ionescu Viorel, Ovidius University of Constanta,	<b>PS3-28, OMN100-118</b> , <i>MPPT solar charge controller for automotive industry</i> Ionuț Constantin Guran, Lucian Andrei Perișoară, University "Politehnica" of Bucharest
11:50-11:55	<b>PS3-11, OMN100-18</b> , <i>Numerical Analysis of Fluid Flow and Mixing Performance for a SAR-Based Passive Micromixer</i> Ionescu Viorel, Ovidius University of Constanta	<b>PS3-29, OMN100-127</b> , <i>Properties of naval steel surface after non-thermal plasma treatment</i> , <b>Simona Ghița, Bogdan E Hnatiuc; Mihaela Hnatiuc; Adrian Sabău, Maritime University of Constanta</b>
11:55-12:00	<b>PS3-12, OMN100-53</b> , <i>Numerical Modeling of Centrifugal Microfluidic Flow in Rectangular Channels for Lab-on-a-CD Platform Applications</i> , Ionescu Viorel, Ovidius University of Constanta,	<b>PS3-30, OMN100-6</b> , <i>The benefit of nanoparticles add to R600a in a vapor compression system</i> , <b>Dr. Feiza Memet , Maritime University of Constanta</b>
12:00-12:05	<b>PS3-13, OMN100-21</b> , <i>Big data integration – an evolutionary perspective</i> , Simona Dinu, Constanta Maritime University, Faculty of Navigation and Naval Transport,	<b>PS3-31, OMN100-7</b> , <i>Improvement of gas turbines performance through erosion resistant nanocoatings and exergy analysis</i> , Dr. Feiza Memet , Maritime University of Constanta
12:05-12:10	<b>PS3-14, OMN100-143</b> , <i>Software implementation strategies for telecommunications problems</i> , Simona Dinu, Constanta Maritime University	<b>PS3-32, OMN100-12</b> , <i>Electromagnetic radiation monitoring universal device</i> , Mariana I. Panaitescu, Dumitrescu Marius-Valentin, Panaitescu Fanel-Viorel, Maritime University of Constanta
12:10-12:15	<b>PS3-15, OMN100-82</b> , <i>Seismic qualification by analysis of an overhead crane for nuclear industry</i> , Liviu – Constantin STAN, Constanta Maritime University,	<b>PS3-34, OMN100-42</b> , <i>Stakeholder influence on the closing phase of projects</i> , Nilgun Milis Caibula, Maritime University of Constanta, Ionescu Sorin Cristian, University Politehnica of Bucharest,
12:15-12:20	<b>PS3-16, OMN100-83</b> , <i>Optimization study of a centrifugal pump in cavitation</i> , Liviu – Constantin STAN, Constanta Maritime University,	<b>PS3-35, OMN100-57</b> , <i>Particularities of the closing processes of project in the context of sustainability requirements</i> , Caibula Milis Nilgün,Ionescu Sorin Cristian, Tamaș Răzvan, Dumitrache Ramona, Dumitrache Cosmin Laurențiu, Maritime University of Constanta
12:20-12:25	<b>PS3-17, OMN100-96</b> , <i>Modeling of nuclear radiation detection with MEMS</i> , Valerica Baban , Dănuț Argintaru , Eliodor Constantinescu, Constanta Maritime University,	<b>OMN100-112</b> , <i>Photophysics of poly(3,4-ethylenedioxythiophene) covered by permofified <math>\gamma</math>-cyclodextrin</i> A.-M. Resmerita <sup>1</sup> , A. Rotaru, A. Farcaș,Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania F. Farcaș, "Gh. Asachi" Technical University, Iasi, Romania

		A. Costea, Politehnica University of Bucharest
<b>12:25-12:30</b>	<b>PS3-18, OMN100-129</b> , <i>Benefit of SqueeSAR filtering in Topography Reconstructions: an example over the Bucharest area with TerraSAR-X</i> , Cosmin Dănișor, University "Politehnica" of Bucharest, Romania Antonio Pauciullo, Gianfranco Fornaro, Institute for Electromagnetic Sensing of the Environment, CNR, Naples, <b>Italy</b>	
<b>12:30-13:00</b>	<b>Discussion</b>	<b>Discussion</b>

**17:00 – 17:30 Paper Awards and Closing Session**