

APMAS2023

**13th INTERNATIONAL ADVANCES IN APPLIED PHYSICS &
MATERIALS SCIENCE CONGRESS & EXHIBITION**

ENEFM2023

**9th INTERNATIONAL CONGRESS ON ENERGY EFFICIENCY
AND ENERGY RELATED MATERIALS**

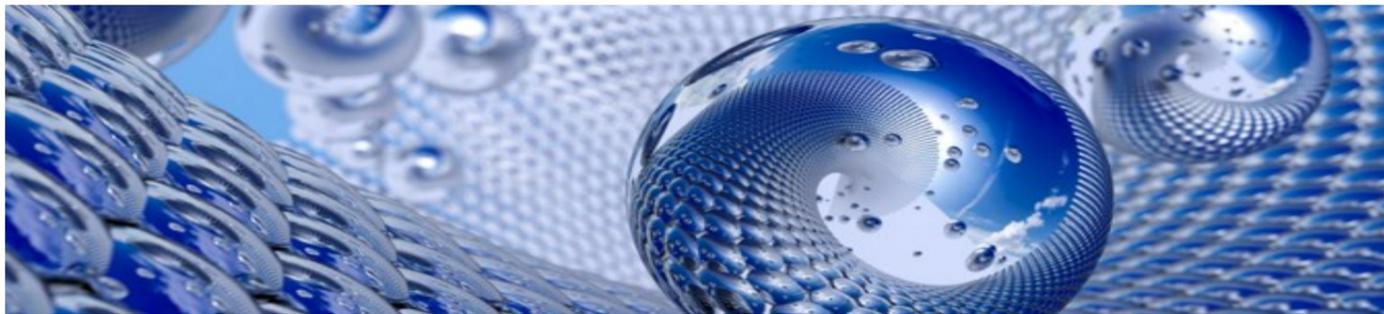
MEDOPTICS2023

2nd INTERNATIONAL CONFERENCE ON MEDICAL OPTICS

OCTOBER 11-17, 2023

**Liberty Hotels Lykia, Oludeniz
MUGLA / TURKEY**

Program Timetable



APMAS2023
**13th INTERNATIONAL ADVANCES IN APPLIED PHYSICS &
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PROGRAM MONDAY, OCTOBER 9, 2023	
<i>14:00-16:30</i>	REGISTRATION FOR EARLY ARRIVALS (14:00 Check-in)

PROGRAM TUESDAY, OCTOBER 10, 2023	
<i>9:00-16:30</i>	REGISTRATION (14:00 Check-in)
<i>Everyday Tours</i>	SOCIAL PROGRAM <ul style="list-style-type: none">• <i>Saklikent Jeep Safari</i>• <i>Paragliding in Oludeniz</i>

PROGRAM WEDNESDAY, OCTOBER 11, 2023	
APMAS-ENEFM-MEDOPTICS	
YUNUS EMRE 1	

PLENARY SESSION 09:30-10:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Mehmet Alper Sahiner Seton Hall University, USA</p> <p style="text-align: center;">“Recent Advances in Hf Based Ferroelectric Films: Al Doped HfO₂-Structural Analysis by DFT-Assisted EXAFS Analysis”</p>
10:15-10:30	COFFEE BREAK
PLENARY SESSION 10:30-11:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Mohini M Sain University of Toronto, Canada</p> <p style="text-align: center;">“Transformative Carbon Engineering Driving Our NextGen Energy and Smart Device Industry”</p>
11:15-11:30	COFFEE BREAK
PLENARY SESSION 11:30-12:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Martin Weitz University of Bonn, Germany</p> <p style="text-align: center;">“Bose-Einstein Condensation of Photons and a Non-Hermitian Phase Transition”</p>
12:30-14:00	LUNCH
PLENARY SESSION 14:00-14:45	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Jiyun Zhao City University of Hong Kong, Hong Kong</p> <p style="text-align: center;">“Boiling and condensation heat transfer enhancement in nuclear reactors”</p>
14:45-15:00	COFFEE BREAK

PARALLEL SESSIONS 15:00-16:20	YUNUS EMRE 1	ARISTO
	<p>Chairperson: Rodion Reznik</p> <p>15:00-15:30 Rodion Reznik Saint-Petersburg State University, Russian Federation <i>(Invited speaker)</i> ID2321- Single photon sources based on quantum dots in nanowires and other III-V nanostructures on silicon.</p> <p>15:30-15:50 Michał Zieliński Nicolaus Copernicus University, Poland ID2323- Antibonding ground states in crystal phase quantum dots</p> <p>15:50-16:10 Maria Kopsakangas-Savolainen Finnish Environment Institute and University of Oulu, Finland ID527- Socio-demographic features and electricity consumption time series in main heating mode classification</p>	<p>Chairperson: Ersin Kayahan</p> <p>15:00-15:30 Lech Tomasz Baczewski Institute of Physics PAS, Poland <i>(Invited speaker)</i> ID2486- New method of enantioseparation of chiral molecules and its importance in pharmacology and medicine</p> <p>15:30-16:00 Constantin Daniel Comeaga University Politehnica of Bucharest, Romania <i>(Invited speaker)</i> ID16- Mechatronic Systems for Vibration Control in Laser Medical Instruments</p> <p>16:00-16:20 Muthumuni Managa University Of South Africa, South Africa ID2445- Photodynamic activity of novel porphyrin conjugated to nanomaterials against of Escherichia coli and Staphylococcus.</p>

16:20-16:45	COFFEE BREAK	
PARALLEL SESSIONS 16:45-17:45	YUNUS EMRE 1	ARISTO
	<p>Chairperson: Vijaya Srinivasu Vallabhapurapu</p> <p>16:45-17:15 Vijaya Srinivasu Vallabhapurapu University of South Africa, South Africa <i>(Invited speaker)</i> ID2434- Resistive Switching Memory (ReRAM) through bio-degradable composites</p> <p>17:15-17:45 Konstantin Vorotilov RTU MIREA, Russian Federation <i>(Invited speaker)</i> ID2428- Sol-gel films for advanced electronics applications</p>	<p>Chairperson: Ersin Kayahan</p> <p>16:45-17:15</p> <p>17:15-17:45 Mermut Ozzy York University, Canada <i>(Invited speaker)</i> ID10- Recent Advances in Silicon Photomultipliers: Enabling New Biophotonics Discoveries and Technologies</p> <p>17:45-18:15 Cancelled Andrei Ushkov Tel Aviv University, Israel <i>(Invited speaker)</i> ID31- Mechanical and kinetical studies of vaterite-based microcapsules with optical tweezers</p>

PROGRAM	
THURSDAY, OCTOBER 12, 2023	
APMAS-ENEFM-MEDOPTICS	
YUNUS EMRE 1	
PLENARY SESSION 09:00-09:45	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Thomas Ernst Müller Ruhr-Universität Bochum, Germany</p> <p style="text-align: center;">“Renewable Hydrogen: A Catalyst for Sustainable Energy and Power-to-X Technologies”</p>

09:45-10:00	COFFEE BREAK	
PLENARY SESSION 10:00-10:45	Chairperson: A.Yavuz Oral <p style="text-align: center;">Xavier Moya University of Cambridge, UK</p> <p style="text-align: center;">“Barocaloric materials for sustainable heating and cooling”</p>	
10:45-11:00	COFFEE BREAK	
PARALLEL SESSIONS 11:00-12:30	<p style="text-align: center;">YUNUS EMRE 1</p> <p>Chairperson: Abdollah Bahador</p> <p>11:00-11:30 Abdollah Bahador Univeristi Teknologi Malaysia, Malaysia (Invited speaker) ID2365- Microstructure Control in Fabrication of Novel Ti-Alloys via Powder Metallurgy and Hot Extrusion</p> <p>11:30-12:00 Shoaib Anwer Khalifa University, Abu Dhabi, UAE (Invited speaker) ID2504- Engineering of electrodes with 2D MXene nanosheets for flexible high electrical power triboelectric nanogenerator</p> <p>12:00-12:30 Farzaneh Moghtader SET Medikal San. Tic. A.S., Turkey (Invited speaker) ID2498- Urinary catheters: Strategies to prevent/reduce the catheter-associated urinary tract infections.</p>	<p style="text-align: center;">ARISTO</p> <p>Chairperson: Ersin Kayahan</p> <p>11:00-11:30 Milen Shishkov Massachusetts General Hospital, USA (Invited speaker) ID24- Advancing Optical Coherence Tomography Probes for Multidimensional Intracorporeal Imaging</p> <p>11:30-12:00 Kisalaya Chakrabarti Haldia Institute of Technology, India (Invited speaker) ID5- New advancements in the field of optical sensors (WGM and SPR)</p> <p>Mahmoud Huleihel Ben-Gurion University of the Negev, Israel (Invited speaker) ID26- Identification and Antibiotics Susceptibility determination of different bacteria Directly from Patients' Urine Samples by Infrared Spectroscopy</p> <p style="text-align: center; border: 1px solid black; padding: 2px;">Cancelled</p> <p>12:00-12:20 Anca Aldea National Institute of Materials Physics, Romania ID2358- Flexible sensors based on metallized electrospun polymeric fibers for ion detection in biological fluids.</p>
12:30-13:15	LUNCH	
13:15-18:00	<p style="color: red;">SOCIAL PROGRAM</p> <p>13:15-18:00 FETHIYE CITY TOUR & THE ROCK TOMBS (Gathering at Congress registration desk)</p>	
19:30-21:30	DINNER WITH APMAS INVITED SPEAKERS	

PROGRAM					
FRIDAY, OCTOBER 13, 2023					
APMAS-ENEFM-MEDOPTICS					
YUNUS EMRE 1					
PLENARY SESSION 09:30-10:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Liqiu Wang The Hong Kong Polytechnic University, Hong Kong</p> <p style="text-align: center;">“Nano-/subnano-liter Droplets”</p>				
10:15-10:30	COFFEE BREAK				
PLENARY SESSION 10:30-11:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Wojciech Mrozik Newcastle University, UK</p> <p style="text-align: center;">“The Future of Safe Batteries”</p>				
11:15 - 11:30	COFFEE BREAK				
PARALLEL SESSIONS 11:30-13:10	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">YUNUS EMRE 1</th> <th style="width: 50%; text-align: center;">ARISTO</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <p>Chairperson: Felix Chukhovskii</p> <p>11:30-12:00 Felix Chukhovskii Russian Academy of Sciences, Russian Federation <i>(Invited speaker)</i> ID2318- Innovation and Tendencies of The State-of-Art Computer X-Ray Diffraction Tomography. Towards To Solution of The Inverse Radon Problem for Crystal Structure Characterization</p> <p>12:00-12:30 Rustem R. Zairov Kazan Federal University, Russian Federation <i>(Invited speaker)</i> ID2544- Ln(III) chelates nanoparticles as alternatives to organic fluorescent dyes in thermo- and chemosensing</p> <p>12:30-13:00 Gene Tessema Mola University of KwaZulu-Natal, South Africa <i>(Invited speaker)</i> ID2331- Suppressing energy loss in disordered polymers blend solar absorber of thin film organic solar cell.</p> </td> <td style="vertical-align: top;"> <p>Chairperson: Aron Kneer</p> <p>11:30-12:00 Aron Kneer TinniT Technologies GmbH, Germany <i>(Invited speaker)</i> ID521- Numerical Prediction of Heat and Mass Transfer Processes in a Bioreactor with Coated Membrane-Based Adsorption Bodies</p> <p>12:00-12:20 Atila Incecik University of Strathclyde, UK ID504- Harnessing Energy from Oceans</p> <p>12:20-12:50 Beycan Ibrahimoglu & Iskender Engin Ture Ankara Science University, Turkey <i>(Invited speaker)</i> ID498- The Investigation of the Boundries of Liquid Phase</p> <p>12:50-13:10 Levent Colak Baskent University, Turkey ID497-The Impact of Heat Transfer Fluid Type on Thermal Efficiency of PTC When Direct Radiation is Interrupted</p> </td> </tr> </tbody> </table>	YUNUS EMRE 1	ARISTO	<p>Chairperson: Felix Chukhovskii</p> <p>11:30-12:00 Felix Chukhovskii Russian Academy of Sciences, Russian Federation <i>(Invited speaker)</i> ID2318- Innovation and Tendencies of The State-of-Art Computer X-Ray Diffraction Tomography. Towards To Solution of The Inverse Radon Problem for Crystal Structure Characterization</p> <p>12:00-12:30 Rustem R. Zairov Kazan Federal University, Russian Federation <i>(Invited speaker)</i> ID2544- Ln(III) chelates nanoparticles as alternatives to organic fluorescent dyes in thermo- and chemosensing</p> <p>12:30-13:00 Gene Tessema Mola University of KwaZulu-Natal, South Africa <i>(Invited speaker)</i> ID2331- Suppressing energy loss in disordered polymers blend solar absorber of thin film organic solar cell.</p>	<p>Chairperson: Aron Kneer</p> <p>11:30-12:00 Aron Kneer TinniT Technologies GmbH, Germany <i>(Invited speaker)</i> ID521- Numerical Prediction of Heat and Mass Transfer Processes in a Bioreactor with Coated Membrane-Based Adsorption Bodies</p> <p>12:00-12:20 Atila Incecik University of Strathclyde, UK ID504- Harnessing Energy from Oceans</p> <p>12:20-12:50 Beycan Ibrahimoglu & Iskender Engin Ture Ankara Science University, Turkey <i>(Invited speaker)</i> ID498- The Investigation of the Boundries of Liquid Phase</p> <p>12:50-13:10 Levent Colak Baskent University, Turkey ID497-The Impact of Heat Transfer Fluid Type on Thermal Efficiency of PTC When Direct Radiation is Interrupted</p>
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12:30-14:00	LUNCH				
YUNUS EMRE 1					

PLENARY SESSION 14:00-14:45	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Wataru Setaka</p> <p style="text-align: center;">Tokyo Metropolitan University, Japan</p> <p style="text-align: center;">“Dielectric Relaxation of Crystalline Molecular Gyrotops with a Dipolar Rotor”</p>	
14:45 - 15:00	COFFEE BREAK	
PARALLEL SESSIONS 15:00-16:30	<p style="text-align: center;">YUNUS EMRE 1</p> <p>Chairperson: Svetoslav Kuzmichev</p> <p>15:00-15:30 Svetoslav Kuzmichev M.V. Lomonosov Moscow State University (MSU), Russian Federation <i>(Invited speaker)</i> ID2526- Direct Tunneling Probe of the Superconducting Order Parameter in EuCsFe₄As₄</p> <p>15:30-15:50 Krzysztof Gołacki University of Life Sciences in Lublin, Poland ID2492- Stress relaxation in sugar beet root tissue</p> <p>15:50-16:10 Violeta Tsakiris National Institute for Research and Development in Electrical Engineering ICPE-CA, Romania ID2465- Soft Magnetic Alloys Designed for Multilayer Electromagnetic Shielding Materials Manufactured by Magnetron Sputtering Deposition Method</p> <p>16:10-16:30 Alina Marinela Ionescu National Institute of Materials Physics, Romania ID2357- The Importance of Long Time Scales Relaxation Measurements for Investigation of Vortex Dynamics in Superconductors</p>	<p style="text-align: center;">ARISTO</p> <p>Chairperson: Ersin Kayahan</p> <p>15:00-15:30 Meltem Izzetoglu Villanova University, USA <i>(Invited speaker)</i> ID18- Role of Non-Invasive Optical Neuromonitoring in Brain Function and Injury Assessment</p> <p>15:30-16:00 George Abu-Aqil Ben-Gurion University of the Negev, Israel <i>(Invited speaker)</i> ID25- Rapid characterization and detection of Extended-Spectrum β-Lactamase-producing bacteria isolated directly from urine by infrared spectroscopy and Random Forest</p> <p>16:00-16:30 Manal Suleiman Ben-Gurion University of the Negev, Israel <i>(Invited speaker)</i> ID34- Application of Infrared Spectroscopy in Conjunction with Random Forest for Rapid Assessment of Bacterial Susceptibility to Antibiotics after first culture.</p>
16:30- 16:45	COFFEE BREAK	
16:45- 17:45	<p>FOYER (Poster Session Area)</p> <p>Chairperson: A. Yavuz Oral</p> <p>POSTER SESSION-I</p> <p>APMAS-ENEFM-MEDOPTICS</p>	
19:30-21:30	<p>DINNER WITH ALL PLENARY SPEAKERS</p> <p>(APMAS & ENEFM & MEDOPTICS)</p>	

PROGRAM SATURDAY, OCTOBER 14, 2023					
APMAS-ENEFM-MEDOPTICS					
YUNUS EMRE 1					
PLENARY SESSION 09:30-10:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Omid Mahian Ningbo University, China</p> <p style="text-align: center;">“Enhancement of energy systems performance using nanoparticles”</p>				
10:15-10:30	COFFEE BREAK				
PLENARY SESSION 10:30-11:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Naceur Belgacem University of Grenoble Alpes, CNRS, France</p> <p style="text-align: center;">“Pristine and Functionalized Cellulose at The Service of Medicine”</p>				
11:15-11:30	COFFEE BREAK				
PARALLEL SESSIONS 11:30-12:30	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">YUNUS EMRE 1</th> <th style="width: 50%; text-align: center;">ARISTO</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <p>Chairperson: Abdellah Ajji</p> <p>11:30-12:00 Abdellah Ajji Polytechnique Montréal, Canada <i>(Invited speaker)</i> ID2536- Development of PVDF Piezoelectric Properties Using Fillers and Mechanical Stretching</p> <p>12:00-12:20 Fatmanur Kocaman Kabil Gebze Technical University, Turkey ID2561- Laser-induced Graphene Coated Conductive Sponges</p> </td> <td style="vertical-align: top;"> <p>Chairperson: Ahmed Abdala</p> <p>11:30-12:00 Ahmed Abdala Texas A&M University at Qatar, Qatar <i>(Invited speaker)</i> ID520- Advanced Air-dehumidification Membranes for Energy Efficient Air-Cooling Applications</p> <p>12:00-12:30 Ahmet Emre University of Michigan, USA <i>(Invited speaker)</i> ID541- Engineering Bioinspired Nanocomposites for Next-Generation Batteries</p> </td> </tr> </tbody> </table>	YUNUS EMRE 1	ARISTO	<p>Chairperson: Abdellah Ajji</p> <p>11:30-12:00 Abdellah Ajji Polytechnique Montréal, Canada <i>(Invited speaker)</i> ID2536- Development of PVDF Piezoelectric Properties Using Fillers and Mechanical Stretching</p> <p>12:00-12:20 Fatmanur Kocaman Kabil Gebze Technical University, Turkey ID2561- Laser-induced Graphene Coated Conductive Sponges</p>	<p>Chairperson: Ahmed Abdala</p> <p>11:30-12:00 Ahmed Abdala Texas A&M University at Qatar, Qatar <i>(Invited speaker)</i> ID520- Advanced Air-dehumidification Membranes for Energy Efficient Air-Cooling Applications</p> <p>12:00-12:30 Ahmet Emre University of Michigan, USA <i>(Invited speaker)</i> ID541- Engineering Bioinspired Nanocomposites for Next-Generation Batteries</p>
YUNUS EMRE 1	ARISTO				
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12:30-13:15	LUNCH				
13:15-18:00	<p><i>SOCIAL PROGRAM</i></p> <p>13:15-18:00 THE BOAT CRUISE AROUND EXCELLENT BAYS OF BLUE LAGOON & VISIT TO St. NICHOLAS ISLAND</p> <p><i>(Gathering at Congress registration desk)</i></p>				
19:30-21:30	DINNER WITH ENEFM & MEDOPTICS INVITED SPEAKERS				

PROGRAM

Please visit the website for the latest updates.

SUNDAY, OCTOBER 15, 2023	
APMAS-ENEFM-MEDOPTICS	
YUNUS EMRE 1	
PLENARY SESSION 09:30-10:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Ahmed Samy Yousef Saed</p> <p style="text-align: center;">Kaunas University of Technology, Lithuania</p> <p style="text-align: center;">“Sustainability of wind energy materials”</p>
10:15-10:30	COFFEE BREAK
PLENARY SESSION 10:30-11:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Alper Ulku</p> <p style="text-align: center;">Aselsan, Turkey</p> <p style="text-align: center;">“Advancements and Future Prospects in FinFET Technology: Unleashing the Power of Next-Generation Transistors”</p>
11:15-11:30	COFFEE BREAK
PLENARY SESSION 11:30-12:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Manish Kumar Tiwari</p> <p style="text-align: center;">University College London, UK</p> <p style="text-align: center;">“Nanoprecision interfaces in energy and healthcare”</p>
12:30-14:00	LUNCH

PARALLEL SESSIONS 14:00-15:30	YUNUS EMRE 1	ARISTO	
	<p>Chairperson: Katarzyna Roszek</p> <p>14:00-14:30 Katarzyna Roszek Nicolaus Copernicus University in Torun, Poland <i>(Invited speaker)</i> ID2517- Nanobiocatalytic systems for modern enzyme-based therapies</p> <p>14:30-15:00 Dina Deyneko Lomonosov Moscow State University, Russian Federation <i>(Invited speaker)</i> ID2444- Novel bioactive Sr²⁺-based phosphates with whitlockite structure for bone implants</p> <p>15:00-15:30 Tatiana Kuzmicheva Lebedev Physical Institute RAS, Russian Federation <i>(Invited speaker)</i> ID2531- Evolution of Superconducting Gap Structure of Alkali Metal Based Na(Fe,Co)As Pnictides</p>	<p>Chairperson: Ersin Kayahan</p> <p>14:00-14:30 Alexendar Sigov MIREA - Russian Technological University, Russian Federation <i>(Invited speaker)</i> ID2427- Leakage and relaxation phenomena in ferroelectric thin films</p> <p>14:30-14:50 Bahar Şölen Akdemir Yılmaz Gebze Technical University, Turkey ID2560- The Effects of The Preparation Method and Post Treatment on The Electrical Conductivity and Absorption Behavior of The PEDOT:PSS Films</p> <p>14:50-15:20 Horace Crogman California State Dominguez Hills, USA <i>(Invited speaker)</i> ID21- Comparative Analysis of Radiation Response in Chemo-Treated BT20, 4T1 Breast Cancer, and Neuroblastoma Cancer Cell Lines through Single and Multiple Cell Ionization Using Infrared Laser Trapping</p> <p>15:20-15:50 Uraib Sharaha Ben Gurion University of the Negev, Israel <i>(Invited speaker)</i> ID29- Monitoring the efficacy of antibiotic therapy in febrile pediatric oncology patients with bacteremia using infrared spectroscopy of leucocytes-based machine learning</p>	
	15:30-16:00	COFFEE BREAK	
	16:00-17:00	<p>FOYER (Poster Session Area)</p> <p>Chairperson: A. Yavuz Oral</p> <p>POSTER SESSION-II</p> <p>APMAS-ENEFM-MEDOPTICS</p>	
PROGRAM			
MONDAY, OCTOBER 16, 2023			
APMAS-ENEFM-MEDOPTICS			
YUNUS EMRE 1			
PLENARY SESSION 09:00-09:45	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Janusz Lewinski</p> <p style="text-align: center;">Warsaw University of Technology, Poland</p> <p style="text-align: center;">“Engineering of perovskites and ZnO quantum dots for game-changing improvements in light harvesting devices”</p>		
09:45-10:00	COFFEE BREAK		

PLENARY SESSION 10:00-10:45	Chairperson: A.Yavuz Oral <div style="text-align: center;"> Chaohua Cui Soochow University, China “Photovoltaic Material Design and Morphology Optimization for High-Performance Organic Solar Cells” </div>	
10:45-11:00	COFFEE BREAK	
PARALLEL SESSIONS 11:00-12:10	<div style="text-align: center;">YUNUS EMRE 1</div> <p>Chairperson: Marek Wisniewski</p> <p>11:00-11:30 Marek Wisniewski Nicolaus Copernicus University in Toruń, Poland <i>(Invited speaker)</i> ID2516- Unknown properties of Carbon Quantum Dots</p> <p>11:30-11:50 Aristofan Alexandru Teişanu National Institute for Research and Development in Electrical Engineering ICPE-CA, Romania ID2466- Evaluation of Multilayer Material Electromagnetic Shielding Efficiency by Two Different Measurements Methods</p> <p>11:30-11:50 Vala Can Askan Gebze Technical University, Turkey ID2557- Effect of the Laser-Induced Graphene on Microstructural and Chemical Properties of Polyvinylidene Fluoride Thick Films</p>	<div style="text-align: center;">ARISTO</div> <p>Chairperson: Paweł Pasierb</p> <p>11:00-11:20 Paweł Pasierb AGH University of Science and Technology, Poland ID505- Different approaches and strategies towards protonic conductors with improved electrical conductivity and chemical stability</p> <p>11:20-11:40 Łukasz Łańcucki AGH University of Science and Technology, Poland ID506- Influence of synthesis route on physicochemical and electrochemical properties of MnO₂ based electrode materials used in supercapacitors</p> <p>11:40-12:00 Zineb Bouhssine International University of Rabat, Morocco ID471- Thermal Behavior of a Green Building with Recycled PET-Sand Bricks in Casablanca, Morocco</p>
12:30-13:15	LUNCH	
13:15-18:00	<p style="text-align: center;"><i>SOCIAL PROGRAM</i></p> <p style="text-align: center;">13:15-18:00 GHOST TOWN & BLUE LAGOON</p> <p style="text-align: center;"><i>(Gathering at Congress registration desk)</i></p>	

PROGRAM
TUESDAY, OCTOBER 17, 2023
APMAS-ENEFM-MEDOPTICS

Please visit the website for the latest updates.

YUNUS EMRE 1	
PARALLEL SESSIONS 10:30-11:30	<p><i>Chairperson: Vala Can Askan</i></p> <p>10:30-11:00 Sergey Alexandrov University of Galway, Ireland <i>(Invited speaker)</i> ID28- Label Free Detection of The Structure Below the Resolution Limit of The Imaging System</p> <p>11:00-11:30</p>
12:00	<i>Hotel Check Out</i>

PROGRAM LEGEND DESCRIPTIONS	
ID-	APMAS 2023 oral presentations
ID-	ENEFM 2023 oral presentations
ID-	MEDOPTICS 2023 oral presentations

TENTATIVE POSTER PROGRAM

FRIDAY, OCTOBER 13, 2023

16:45-17:45

FOYER (Poster Session Area)

Chairperson: A. Yavuz Oral

POSTER SESSION-I

APMAS-ENEFM-MEDOPTICS

ID	TITLE	CONTACT AUTHOR
2404	Patterned interdigitated electrodes covered with ZnO nanowire arrays: preparation, characterization and optoelectronic applications	Melania Onea
2405	A comparison of electric properties nanowire FET fabricated on 2 electrode system vs 4 electrode system.	Melania Onea
2326	PERI-SUBSTITUTED DICHALCOGENIDES OF NAPHTHALIMIDE AS PROMISING ANTICANCER AGENTS	Konstantin Konstantinov
2364	Wire treatment for reduction of metal contamination in hot wire CVD	Akira IZUMI
2324	SYNTHESIS OF HETEROCYCLIC EXTENDED 1,8-NAPHTHALIMIDES	Monika Mutovska
2401	ANTITUMOR EFFECTS INDUCED BY MAGNETIC HYPERTHERMIA USING FUNCTIONALISED MAGNETIC NANOCCLUSERS LINKED WITH DOXORUBICIN	Ioana Baldea
2351	A new water-soluble poly(propylene imine) dendrimer modified with 4-sulfo-1,8-naphthalimide units	Ivo Grabchev
2349	Enhancing the antibacterial activity of PAMAM dendrimer modified with 1,8-Naphthalimides and its copper complex via light illumination	Desislava Staneva
2397	Substituents' effect on the ultrasound assisted homodimerization of coumarins – methodology and properties	Nevena Petkova-Yankova
2398	Fine tuning of the optical properties of phosphorous containing coumarin systems by altering the substituents	Rositca Nikolova
2339	Self-associated 1,8-naphthalimide as a selective fluorescent chemosensor for detection of high pH in aqueous solutions and their Hg ²⁺ contamination	Stanimir Stoyanov
2352	SUPRAMOLECULAR AND COVALENT ORGANIC FRAMEWORKS BASED ON 9,9'-SPIROBIFLUORENE BUILDING BLOCKS	Ioana-Georgeta Grosu
2334	Forest fire spread with non-universal critical behavior	Baara Yamina
2335	CRITICAL BEHAVIOR OF AN EXTREME FIRE "FIRE JUNCTION"	Khadidja Khelloufi

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2447	Effects of doping on structural and electrical properties of Bi(Pb)-2212 superconducting ceramics	Faiza Bouaïcha
2394	Organosilicon self-assembled surface nanolayers on zinc. Formation and effect on the electrochemical and corrosion behavior of the metal	Maxim Petrunin
2442	Quarter Turn Compression Lock Design with Opening Indicator for Railway Applications	Mustafa Can
2559	Enhancing Organic Thermoelectric Materials: The Role of Sorbitol and Graphene in PEDOT:PSS Thick Films	Fatmanur Kocaman Kabil
2400	INFLUENCE OF 3D PRINTING PARAMETERS ON COC BIOCOMPATIBLE MATERIAL THZ OPTICAL PROPERTIES	Mateusz Kałuża
2525	Tin-doped Titanium dioxide film for hydrogen production from wastewater	Ahmad Ahmad
2522	Measurement of radon concentrations inside drinking water purification stations, Irbid city, Jordan	Hasan Al-khateeb
2528	CONCENTRATION OF RADON AND PHYSICOCHEMICAL PARAMETERS IN HOT SPRINGS WATER, JORDAN	Mohammed Alqadi
2527	The Antibacterial Activity of Fe ₃ O ₄ Nanoparticles and Magnetite /Silver Core-Shell Nanoparticles Against Drug Resistant Bacteria	Fedda Alzoubi
2519	Ultraviolet Transmittance of Daily and Monthly Disposable Contact Lenses with UV Filters and Compliances with American National Standard Institute (ANSI) Classification	mohammad Anwar Alebrahim
2344	Processing and selected properties of polymer - sands composites	Tomasz Garbacz
2473	Europium doped carbon dots for selective and sensitive detection of tetracycline	Timur Sh. Atabaev
2461	Effect of microplasma spraying parameters on surface roughness, adhesive strength and biocompatibility of titanium coatings on titanium implants	Darya Alontseva
2533	The Use of Electron Microscopy for the Characterization of Biocompatible Materials and Robotic Microplasma-Sprayed Coatings	Alexander Krasavin
2462	In-vitro testing of microplasma sprayed Ti, Zr, Ta coatings on Ti alloy substrates: effect of coating material on implant biocompatibility	Yuliya Safarova (Yantsen)
2476	Iodine-doped carbon dots for potential use as contrast agent in computed tomography	Timur Sh. Atabaev
2475	Fabrication of two-layered porous TiO ₂ thin films with improved photoelectrochemical activity	Timur Sh. Atabaev
2474	Mesoporous silica particles for removal of toxic and heavy metal cations from water samples	Timur Sh. Atabaev
2367	Formation and relaxation of the second optical harmonic in glasses under the electron beam irradiation	Valentina Zhurikhina
2564	Development of Additive Technology for Robotic Microplasma Spraying of Biocompatible Coatings	Albina Kadyroldina
2386	Micro-Bulges Formation on Laser Modified Copper Surface	Viacheslav Zheleznov
447	PERI-SUBSTITUTED DICHALCOGENIDES OF NAPHTHALENE AND PERYLENE MONOIMIDES	Yulian Zagranyski

513	Thermoelectric Properties of Bi ₂ Sr ₂ Co ₂ O _y Ceramics Doped with Na ₂ B ₄ O ₇ and Pb(BO ₂) ₂	Giorgi Mumladze
528	Thermoelectric Performance Enhancement of Sol-Gel Processed Bi ₂ Sr ₂ Co ₂ O _y Cobaltite by BiBO ₃ Doping	Iamze Kvartskhava
490	Simulation Analysis on Power Consumption Reduction of Cooling System Using Waste Cooling Heat source from Liquefied air	Chang-Hyo Son
489	Performance Analysis of Ultra-Low Temperature Refrigeration System for BOG Re-liquefaction	Chan-Ho Choi
491	CFD Analysis on Heat Exchanger with Inner Fins for Thermal Management of Electricity Bus	Sung-Hoon Seol
535	The Non-Isothermal Nanofluid Flow in A Lid-Driven Square Cavity with An Obstacle: An Irreversibility Analysis	Eugenia Rossi di Schio
35	Early-stage detection of herpetic infections using FTIR spectroscopy.	Eiman Abu Galiyun

TENTATIVE POSTER PROGRAM

SUNDAY, OCTOBER 15, 2023

16:00-17:00

FOYER (Poster Session Area)

Chairperson: A. Yavuz Oral

POSTER SESSION-II

APMAS-ENEFM-MEDOPTICS

ID	TITLE	CONTACT AUTHOR
2350	HYBRID METAL@PAF MATERIALS AS SMART CATALYSTS FOR CROSS-COUPLING AND "CLICK" REACTIONS	Ion Grosu
2320	Changing of semiconductor and metallic thin film layer's features via nanostructuring	Aliaksandr Smirnov
2383	Evolution of the dendritic envelope and primary stem structure in free dendritic growth	Liubov Toropova
2470	Modified Colloid Lithography for Amphiphilic Surface Creation	Elena Miliutina
2471	Covalent Grafting of MXene Flakes for Humidity Sensing	Vasilii Burtsev
2314	Application of track-etched membranes in membrane distillation of low-level liquid radioactive wastes and salt solutions	Ilya Korolkov
2385	Swelling kinetics of Sodium alginate-g-acrylic acid hydrogels obtained by electron beam irradiation	Elena Manaila
2384	Impact of initiator concentration and irradiation dose on structure, network parameters and swelling properties of Sodium alginate-g-acrylic acid hydrogels obtained by electron beam irradiation	Gabriela CRACIUN
2495	Impact of Low-Vacuum Level on Starch Modification via Cold Plasma	Mirela Braşoveanu
2410	Antimicrobial and antioxidant effects of liposome-encapsulated functional compounds from some forest berry leaf extracts on mayonnaise	Corina Predescu
2409	Biodegradability and ecotoxicity assessment of new agricultural hydrogels based on acrylic acid, carboxymethyl cellulose and sodium alginate	Amalia Carmen MITELUȚ
2369	SOLID-STATE INTERACTIONS BETWEEN KETOCONAZOLE-ADIPIC ACID CO-CRYSTAL AND EXCIPIENTS IN FORMULATION DEVELOPMENT	Flavia Adina Martin
2520	Computational Simulation of Bearing Ring Forming Process with Numerical Analysis and Findings	Pavel Doležal
2425	Study of concentration series of Li ⁺ codoped Yb:ZnWO ₄ laser crystals	Denis Lis
2393	SOME ENVIRONMENTAL ASPECTS OF LASER TECHNOLOGY	Vladimir Yamshchikov

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2538	Development of a composite photocatalyst SrTiO ₃ @Al/Graphene oxide for efficient hydrogen production by water decomposition	Chingis Daulbayev
2433	Resistive Switching Property of Aloe Vera: A Possible bio-ReRAM for Green Computing	Sreedevi Vallabhapurapu
2378	CRYSTALLINE SALT OF AMOURPHOUS DRUG	Maria Olimpia Miclaus
2437	ESR and Low Field Microwave Absorption in Metal shell and Magnetic core Nano Particles	Tebogo Mahule
2464	Ultrasonic photoacoustic emitter of graphene-nanocomposites film on a flexible substrate	Aleš Mrzel
2372	NEW FLUORESCENT POLYMERIC MATERIALS FROM BENZANTHRONE ALLYL DERIVATIVE	Jelena Kirilova
2356	PDA@SiO ₂ nanocomposite as a platform for studying Polydopamine adhesion	Claudiu Filip
2395	Morphological characterization of Quercetine@Polydopamine coated surfaces	Diana Bogdan
2399	The effect of preliminary laser treatment of metal surfaces on joint strength and temperature during diffusion welding.	Yury Khomich
2487	Pair Breaking Effects as probed by Non-Resonant Microwave Absorption in a Ba _{0.34} K _{0.64} Fe ₂ As ₂ Single Crystal	Tshiwela Caroline Ramashitja
2563	Effect of Titanium Doping on the Porosity and Optical Properties of ZnO Thin Films Prepared by Sol-Gel Method	Onur Alp Aksan
2515	Radon contribution on the response of the sensitive passive dosimeters used in the personal dose monitoring	Felicia Mihai
2562	Fabrication of antibacterial thin Cu-Ti coatings by magnetron sputtering	Bagdat Azamatov
2503	IDENTIFICATION AND THERMAL STABILITY OF DEFECTS IN ZrO ₂ IRRADIATED WITH Xe IONS	Alma Dauletbekova
2502	Optical Characteristics of MgAl ₂ O ₄ Single Crystals Irradiated by 220 MeV Xe Ions	Abdirash Akilbekov
2411	HYDROGEL FORMULATION CONTAINING ACTIVE NATURAL COMPONENTS WITH ANTIOXIDANT PROPERTIES AND COLLOIDAL SILVER SOLUTION	ELENA CORINA BUBUEANU
2412	FORMULATION OF NATURAL AND SYNTHETIC POLYMERS HYDROGELS WITH COLLOIDAL SILVER SOLUTIONS	Angela CASARICA
2488	YBa ₂ Cu ₃ O _{7-d} NANOPARTICLES DOPED BY FERROMAGNETIC NANOPARTICLES OF Y ₃ Fe ₅ O ₁₂	Samir KHENE
2368	Modification of glasses in plasma using resistive barrier discharge	Andrey Lipovskii
2515	Radon contribution on the response of the sensitive passive dosimeters used in the personal dose monitoring	Felicia Mihai
2376	Lidar Systems for Measuring the Vertical Ozone Distribution in Tomsk, Russia	Alexey Nevzorov
2379	Methods And Tools for Remote Monitoring of Methane Concentration in The Atmosphere Using Infrared Sensing Technologies	Olga Kharchenko

2417	REMOTE SENSING OF GREENHOUSE GASES IN THE ATMOSPHERE USING METHODS AND MEANS OF LASER ABSORPTION SPECTROSCOPY	Oleg Romanovskii
461	Plasma gasification of alternative fuels using superheated water steam	Tomas Najser
530	Measurement of instantaneous wall stress distributions in turbulent wall flows using nm flexible mirror embedded in micro-wells	Maryam Jalali-Mousavi
459	A Technique for Analyzing and Measuring the Amount of Tar Generated Through the Thermal Decomposition of Solid Waste	Aleksandrs Pučkins
458	INVESTIGATION OF CONTAMINANTS PRESENT IN INDUSTRIAL WATER UTILIZED FOR THE COOLING OF CO-PRODUCED GASES	Sergejs Osipovs
543	Abundant Temperature- and Pressure-Induced Polymorphism in 1D Lead Iodide δ -Perovskites	Iwona Justyniak
483	CONTRIBUTION TO THE DEVELOPMENT OF NANOSATELLITE PACK BATTERY FOR PEDAGO-SAT MISSION	Nassim AGUECHARI
2	VISION IMPROVEMENT BY DYNAMIC OPTICS	Karol Kakarenko
3	ANALYSIS OF PERFORMANCE OF LIGHT SWORD LENS ON RETINA OF A HUMAN EYE	Jan Bolek