

**INTERM 2023**  
**10<sup>th</sup> INTERNATIONAL CONGRESS ON MICROSCOPY &  
SPECTROSCOPY**

**BIOMATSEN 2023**  
**8<sup>th</sup> INTERNATIONAL CONGRESS ON BIOMATERIALS &  
BIOSENSORS**

**NANOMACH 2023**  
**4<sup>th</sup> INTERNATIONAL CONFERENCE ON NANOMATERIALS,  
NANOFABRICATION AND NANOCHARACTERIZATION**

**INTERPHOTONICS 2023**  
**5<sup>th</sup> INTERNATIONAL CONFERENCE ON PHOTONICS  
RESEARCH**

**APRIL 13-19, 2023**

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

<b>TENTATIVE PROGRAM</b> <b>TUESDAY, APRIL 11, 2023</b>	
<i>14:00-16:30</i>	<b>REGISTRATION FOR EARLY ARRIVALS</b> <b>(14:00 Check-in)</b>

<b>TENTATIVE PROGRAM</b> <b>WEDNESDAY, APRIL 12, 2023</b>	
<i>9:00-16:30</i>	<b>REGISTRATION</b> <b>(14:00 Check-in)</b>
<i>Everyday Tours</i>	<b>SOCIAL PROGRAM</b> <ul style="list-style-type: none"><li>• <i>Saklıkent Jeep Safari</i></li><li>• <i>Paragliding in Oludeniz</i></li></ul>

**TENTATIVE PROGRAM**  
**THURSDAY, APRIL 13, 2023**

**INTERM & BIOMATSEN & NANOMACH & INTERPHOTONICS**

**HALL 1**

<b>PLENARY SESSION</b> 10:30-11:15	<p>Chairperson: <b>A.Yavuz Oral</b></p> <p style="text-align: center;"><b>Josep Nogués</b> Catalan Institute of Nanoscience and Nanotechnology, Spain</p> <p style="text-align: center;">“Magnetoplasmonic nanodomains as a novel structure for biomedical applications”</p>
11:15-11:30	<b>COFFEE BREAK</b>
<b>PLENARY SESSION</b> 11:30-12:15	<p>Chairperson: <b>A.Yavuz Oral</b></p> <p style="text-align: center;"><b>Hendrick C. Swart</b> University of the Free State, South Africa</p> <p style="text-align: center;">“Applications of AES, XPS and TOF SIMS to phosphor nanomaterials”</p>

12:30-14:00	<b>LUNCH</b>	
<b>PARALLEL SESSIONS 14:00-16:30</b>	<p><b>INTERM &amp; INTERPHOTONICS</b></p> <p><b>HALL 1</b></p> <p>Chairperson: <b>Josh Davies-Jones</b></p> <p>14:00-14:30 <b>Josh Davies-Jones</b> Cardiff Catalysis Institute, UK <i>Invited speaker</i> <b>ID684-</b> Imaging the Nanoscale World of Life: A Biophysical Approach to Studying Microbes, Stem Cells, and Antibiotic Resistance</p> <p>14:30-15:00 <b>Victor Pavlov</b> Ioffe Institute, the Russian Academy of Sciences, Russian Federation <i>Invited speaker</i> <b>ID700-</b> Unusual magneto-optics of europium chalcogenide magnetic semiconductors</p> <p>15:00-15:30 <b>Christian Andreasen</b> University of Copenhagen, Denmark <i>Invited speaker</i> <b>ID638-</b> Weed control with a 2 μm fiber laser: How does the laser beam affect non-target organisms?</p> <p>15:30-16:00 <b>Ewa Mijowska</b> West Pomeranian University of Technology, Poland <i>Invited speaker</i> <b>ID668-</b> Solid wastes recycling into hierarchical porous carbon materials for supercapacitors – microscopic and spectroscopic study</p> <p>16:00-16:30 <b>Irena Kostova</b> Medical University-Sofia, Bulgaria <i>Invited speaker</i> <b>ID696-</b> Theoretical DFT and vibrational (IR and Raman) characterization of biologically active lanthanide(III) complexes</p>	<p><b>BIOMATSEN &amp; NANOMACH</b></p> <p><b>HALL 2</b></p> <p>Chairperson: <b>Izabela Kuryliszyn-Kudelska</b></p> <p>14:00-14:30 <b>Izabela Kuryliszyn-Kudelska</b> Institute of Physics Polish Academy of Sciences, Poland <i>Invited speaker</i> <b>ID822-</b> Magnetic semiconductor nanocrystals based on oxide compounds</p> <p>14:30-14:50 <b>Klaudia Maslana</b> West Pomeranian University of Technology in Szczecin, Poland <b>ID819-</b> Cellulose-based electrocatalysts for water splitting</p> <p>14:50-15:10 <b>Olga Hendrikson</b> Russian Academy of Sciences, Russian Federation <b>ID406-</b> Immunochromatographic test systems for rapid and sensitive detection of phycotoxins</p>

19:30-21:30	<p><b>DINNER WITH ALL PLENARY SPEAKERS</b></p> <p>(INTERM &amp; BIOMATSEN &amp; NANOMACH &amp; INTERPHOTONICS)</p>
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<p><b>TENTATIVE PROGRAM</b></p> <p><b>FRIDAY, APRIL 14, 2023</b></p>	
<p>INTERM &amp; BIOMATSEN &amp; NANOMACH &amp; INTERPHOTONICS</p>	
<p>HALL 1</p>	
<p>PLENARY SESSION</p> <p>10:30-11:15</p>	<p>Chairperson: <b>A.Yavuz Oral</b></p>
<p>11:15-11:30</p>	<p><b>COFFEE BREAK</b></p>
<p>PLENARY SESSION</p> <p>11:30-12:15</p>	<p>Chairperson: <b>A.Yavuz Oral</b></p> <p style="text-align: center;"> <b>Sanjairaj Vijayavenkataraman</b>  New York University Abu Dhabi, United Arab Emirates  “Eco-friendly Bioinks for 3D Bioprinting of Soft Tissues” </p>
<p>12:30-13:15</p>	<p><b>LUNCH</b></p>
<p>13:15-18:00</p>	<p><b>SOCIAL PROGRAM</b></p> <p><b>13:15-18:00 FETHIYE CITY TOUR &amp; THE ROCK TOMBS</b></p> <p><i>(Gathering at Congress registration desk)</i></p>
<p>19:30-21:30</p>	<p><b>DINNER WITH BIOMATSEN INVITED SPEAKERS</b></p>

<p><b>TENTATIVE PROGRAM</b></p> <p><b>SATURDAY, APRIL 15, 2023</b></p>	
<p>INTERM &amp; BIOMATSEN &amp; NANOMACH &amp; INTERPHOTONICS</p>	
<p>HALL 1</p>	
<p>PLENARY SESSION</p> <p>10:30-11:15</p>	<p>Chairperson: <b>A.Yavuz Oral</b></p>

11:15-11:30	<b>COFFEE BREAK</b>		
PLENARY SESSION 11:30-12:15	Chairperson: <b>A.Yavuz Oral</b>		
	<b>Naceur Belgacem</b> University Grenoble Alpes, CNRS, Grenoble INP, LGP2, Grenoble, France "Cellulose as substrate for active surfaces: Theory and applications"		
12:30-14:00	<b>LUNCH</b>		
PARALLEL SESSIONS 14:00-16:30	<b>INTERM HALL 1</b>	<b>BIOMATSEN &amp; NANOMACH HALL 2</b>	<b>INTERM &amp; INTERPHOTONICS HALL 3</b>
	Chairperson: <b>Günther Rupprechter</b>  14:00-14:30 <b>Günther Rupprechter</b> TU Wien, Austria <i>Invited speaker</i> <b>ID653-</b> Correlative in situ surface microscopy of rhodium catalyzed hydrogen oxidation  14:30-15:00 <b>Sergey Katsyuba</b> Arbusov Institute of Organic and Physical Chemistry, Russian Federation <i>Invited speaker</i> <b>ID665-</b> Computational modeling of condensed-state infrared and Raman vibrational spectra as a tool for analysis of molecular and supramolecular structure of liquids, amorphous solids and their solutions  15:00-15:30 <b>Takuya Matsumoto</b> Osaka University, Japan <i>Invited speaker</i> <b>ID678-</b> Time-Resolved Charge Observation by Tip-Synchronized Electrostatic Force Microscopy  15:30-15:50 <b>Tomoki Misaka</b> Osaka University, Japan <b>ID702-</b> EFM/KPFM measurement of plasmon-induced charge separation on Au nano-particle/ TiO <sub>2</sub> interface  15:50-16:10 <b>Elena Kozlova</b> Federal Research and Clinical Center of Intensive Care Medicine and Rehabilitology, Russian Federation <b>ID649-</b> Comprehensive study of red blood cell pathologies using atomic force microscopy  16:10-16:30 <b>Klaudia Zielinkiewicz</b> West Pomeranian University of Technology, Poland <b>ID669-</b> Ball milling as facile route for borophene nanoflakes fabrication	Chairperson: <b>Zhandos Tauanov</b>  14:00-14:30 <b>Zhandos Tauanov</b> LLP "Scientific Production Technical Center "Zhaly", Kazakhstan <i>Invited speaker</i> <b>ID791-</b> Rice husk derived synthetic zeolites and nanocomposites: synthesis and characterization  14:30-14:50 <b>Zhandos Tauanov</b> LLP "Marmar Kazakhstan", Kazakhstan <b>ID442-</b> Antimicrobial Properties of the Triclosan-Loaded Polymeric Composite Based on Unsaturated Polyester Resin: Synthesis, Characterization and Activity  14:50-15:20 <b>Benjamin Burton</b> Xxx, USA <i>Invited speaker</i> <b>ID825-</b> First Principles Studies 2D Mo(S,Te) <sub>2</sub> alloys adsorbed on Sapphire and Graphite, and sandwiched between Graphene layers, and 2D (Al,Sc)N alloys on Sapphire	Chairperson: <b>Marek Godlewski</b>  14:00-14:30 <b>Marek Godlewski</b> Polish Academy of Sciences, Poland <i>Invited speaker</i> <b>ID636-</b> Fluorescent Markers For Early Detection Of Cancer  14:30-15:00 <b>Ludmil T. Benov</b> Kuwait University, Kuwait <i>Invited speaker</i> <b>ID646-</b> Site-specific delivery of photo-generated cytotoxic species  15:00-15:30 <b>Mahmoud Huleihel</b> Ben-Gurion University (BGU), Israel <i>Invited speaker</i> <b>ID675-</b> Rapid Identification and Antibiotics Susceptibility determination of Bacteria Isolated Directly from Patients' Urine Samples by Infrared Spectroscopy in Tandem with Machine Learning  15:30-16:00 <b>Ahmad Salman</b> SCE-Sami Shamon College of Engineering, Israel <i>Invited speaker</i> <b>ID674-</b> Monitoring the Response of the Immune System by Infrared Spectroscopy-Based Machine-Learning algorithms for Rapid Diagnosis of the Etiology of Patients' Infections as Bacterial or Viral  16:00-16:30 <b>Czesława Paluszkiewicz</b> Institute of Nuclear Physics Polish Academy of Sciences, Poland <i>Invited speaker</i> <b>ID688-</b> Spectroscopic methods in the study of the influence of amino acids on the corrosion process of materials used for implants

16:30-16:40	<b>COFFEE BREAK</b>
16:40-17:40	<b>FOYER (Poster Session Area)</b> Chairperson: A. Yavuz Oral  <b>POSTER SESSION</b>  <b>INTERM &amp; BIOMATSEN &amp; NANOMACH &amp; INTERPHOTONICS</b>
19:30-21:30	<b>DINNER WITH INTERPHOTONICS INVITED SPEAKERS</b>

**TENTATIVE PROGRAM**  
**SUNDAY, APRIL 16, 2023**

	<b>HALL 1</b>
PLENARY SESSION 10:30-11:15	Chairperson: <b>A.Yavuz Oral</b>  <p style="text-align: center;"><b>Wuge H Briscoe</b> University of Bristol, UK</p> <p style="text-align: center;">“Self-assembly and interactions of bacterial lipids”</p>
11:15-11:30	<b>COFFEE BREAK</b>
PLENARY SESSION 11:30-12:15	Chairperson: <b>A.Yavuz Oral</b>  <p style="text-align: center;"><b>Holger Klein</b> Institut Néel, Université Grenoble Alpes &amp; CNRS, France</p> <p style="text-align: center;">“Beam-sensitive nano-crystals: a double challenge for crystallographic structure solution”</p>
12:30-13:15	<b>LUNCH</b>
13:15-18:00	<b>SOCIAL PROGRAM</b>  <b>13:15-18:00 THE BOAT CRUISE AROUND EXCELLENT BAYS OF BLUE LAGOON &amp; VISIT TO St. NICHOLAS ISLAND</b>  <i>(Gathering at Congress registration desk)</i>
19:30-21:30	<b>DINNER WITH NANOMACH INVITED SPEAKERS</b>

**TENTATIVE PROGRAM**

**MONDAY, APRIL 17, 2023**

**INTERM & BIOMATSEN & NANOMACH & INTERPHOTONICS**

**HALL 1**

<b>PLENARY SESSION</b> 10:30-11:15	Chairperson: <b>A.Yavuz Oral</b>	
11:15-11:30	<b>COFFEE BREAK</b>	
<b>PLENARY SESSION</b> 11:30-12:15	Chairperson: <b>A.Yavuz Oral</b>  <b>Biqiong Chen</b>  Queen's University Belfast, UK  "Biomimetic elastomers and elastomer nanocomposites for biomedical applications"	
12:30-14:00	<b>LUNCH</b>	
<b>PARALLEL SESSIONS 14:00-16:20</b>	<p style="text-align: center;"><b>INTERM &amp; INTERPHOTONICS</b></p> <p style="text-align: center;"><b>HALL 1</b></p> <p>Chairperson: <b>Denis Koume</b></p> <p>14:00-14:30 <b>Denis Koume</b> University of Toulouse, France <b>Invited speaker</b> <b>ID660</b>- Computational biomedical imaging: inverse problems</p> <p>14:30-15:00 <b>Søren Bredmose Simonsen</b> Technical University of Denmark, Denmark <b>Invited speaker</b> <b>ID693</b>-Combining Impedance Spectroscopy with Environmental TEM for solid state electrochemical experiments</p> <p>15:00-15:20 <b>Radov Radeslav</b> Lawrence Livermore National Laboratory, USA <b>ID659</b>- International standards for radiation protection instrumentation</p> <p>15:20-15:40 <b>Ekaterina Sherstyukova</b> Federal Research and Clinical Center of Intensive Care Medicine and Rehabilitology, Russian Federation <b>ID647</b>- Changes in RBCs under hypoxia: Spectrophotometry and AFM study</p> <p>15:40-16:00 <b>Oleg Boyarkine</b> EPFL, Switzerland <b>ID662</b>- Identification of isomeric molecules by spectroscopy of non-covalent complexes</p> <p>16:00-16:20 <b>Viktoria Sergunova</b> Federal Research and Clinical Center of Intensive Care Medicine and Rehabilitology, Russian Federation <b>ID648</b>- Using confocal laser scanning and atomic force microscopy to assess the effect of activators on neutrophils</p>	<p style="text-align: center;"><b>BIOMATSEN &amp; NANOMACH</b></p> <p style="text-align: center;"><b>HALL 2</b></p> <p>Chairperson: <b>Darya Alontseva</b></p> <p>14:00-14:30 <b>Darya Alontseva</b> D. Serikbayev East Kazakhstan Technical University, Kazakhstan <b>Invited speaker</b> <b>ID456</b>- Additive manufacturing of orthopedic implants with microplasma sprayed hydroxyapatite coatings</p> <p>14:30-15:00 <b>Elif Begum Elcioglu</b> Eskisehir Technical University, Turkey <b>Invited speaker</b> <b>ID832</b>- Nanofluids: The State of the Art and Future Outlook</p> <p>15:00-15:20 <b>Vanja Kokol</b> University of Maribor, Slovenia <b>ID800</b>- Antimicrobial nanocellulose-based porous microparticles as an alternative to toxic nano-biocides</p>

19:30-21:30	<b>DINNER WITH INTERM INVITED SPEAKERS</b>
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<b>TENTATIVE PROGRAM</b> <b>TUESDAY, APRIL 18, 2023</b>
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<b>PLENARY SESSION</b> 10:30-11:15	<p>Chairperson: <b>A.Yavuz Oral</b></p> <p style="text-align: center;"><b>Sarper Ozharar</b> NEC Laboratories America, Inc., USA</p> <p style="text-align: center;">“ ”</p>
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11:15-11:30	<b>COFFEE BREAK</b>
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<b>PLENARY SESSION</b> 11:30-12:15	<p>Chairperson: <b>A.Yavuz Oral</b></p> <p style="text-align: center;"><b>Francesco Branda</b> University of Naples "Federico II, Italy</p> <p style="text-align: center;">“Structure, Formation Mechanism and Impact on Fire Behavior of Nanoparticles Formed in Epoxy Matrix through the Solvent-Free One-Pot Process”</p>
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12:30-13:15	<b>LUNCH</b>
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13:15-18:00	<p style="text-align: center;"><b>SOCIAL PROGRAM</b></p> <p style="text-align: center;">13:15-18:00 <b>GHOST TOWN &amp; BLUE LAGOON</b></p> <p style="text-align: center;"><i>(Gathering at Congress registration desk)</i></p>
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<b>TENTATIVE PROGRAM</b> <b>WEDNESDAY, APRIL 19, 2023</b>
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<b>INTERM &amp; BIOMATSEN &amp; NANOMACH &amp; INTERPHOTONICS</b>
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<b>HALL 1</b>
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<b>PARALLEL SESSIONS 10:00-11:20</b>	<p><i>Chairperson: Lobat Tayebi</i></p> <p>10:00-10:30  <b>Caglar Sivri</b>  Bahçeşehir University, Turkey  <i>Invited speaker</i>  <b>ID695</b>- Novel Perspectives in Microscopy of Nanofibrous Materials</p> <p>10:30-11:00  <b>Lobat Tayebi</b>  Marquette University School of Dentistry, USA  <i>Invited speaker</i>  <b>ID478</b> - VEGF Delivery in Tissue Engineering to be Applied for Angiogenesis of Critical-Sized Craniomaxillofacial Defects</p> <p>11:00-11:20  <b>Jaroslav Serafinczuk</b>  Wrocław University of Science and Technology, Poland  <b>ID640</b>- High-resolution X-ray diffraction edge geometry for epitaxial nanostructures characterization</p>
<b>12:00</b>	<b><i>Hotel Check Out</i></b>

<b>PROGRAM LEGEND DESCRIPTIONS</b>	
<b>ID-</b>	<b>INTERM 2023 oral presentations</b>
<b>ID-</b>	<b>BIOMATSEN 2023 oral presentations</b>
<b>ID-</b>	<b>NANOMACH 2023 oral presentations</b>
<b>ID-</b>	<b>INTERPHOTONICS 2023 oral presentations</b>