



THE PROGRAM

INTERM 2026

BIOMATSEN 2026

NANOMACH 2026

SEMIMATER 2026



INTERM 2026
**13th INTERNATIONAL CONGRESS ON MICROSCOPY &
SPECTROSCOPY**
APRIL 2-8, 2026

BIOMATSEN 2026
**11th INTERNATIONAL CONGRESS ON BIOMATERIALS &
BIOSENSORS**
APRIL 2-6, 2026

NANOMACH 2026
**7th INTERNATIONAL CONFERENCE ON NANOMATERIALS,
NANOFABRICATION AND NANOCHARACTERIZATION**
APRIL 2-8, 2026

SEMIMATER 2026
3rd SEMICONDUCTOR MATERIALS & DEVICE PHYSICS CONFERENCE
April 5-8, 2026

Liberty Hotels Lykia, Oludeniz
MUGLA / TURKEY

PROGRAM WEDNESDAY, APRIL 1, 2026	
9:00-16:30	REGISTRATION (14:00 Check-in)
Everyday Tours	SOCIAL PROGRAM <ul style="list-style-type: none">• <i>Saklıkent Jeep Safari</i>• <i>Paragliding in Oludeniz</i>

PROGRAM THURSDAY, APRIL 2, 2026	
INTERM & BIOMATSEN & NANOMACH	
ARISTO	
PLENARY SESSION 09:30-10:15	Chairperson: A.Yavuz Oral <div style="text-align: center;"> Murat Pak Ivec, Belgium “ID...- Lithography in Today’s Microchip Manufacturing: From i-line to HNA EUV” </div>
PLENARY SESSION 10:15-11:00	Chairperson: A.Yavuz Oral <div style="text-align: center;"> Gang Sun University of California, Davis, USA “ID574- Ultrasensitive Biosensors (f-ELISA) for Rapid Onsite Detection of Biological and Chemical Agents in Fluids” </div>
11:00-11:30	COFFEE BREAK
PLENARY SESSION 11:30-12:15	Chairperson: A.Yavuz Oral <div style="border: 1px solid red; padding: 5px; display: inline-block;">CANCELLED</div> Thomas Webster Hebei University of Technology, China & Brown University, USA “ID560- Implantable Nano Sensors: Building of off Human Success”

12:30-14:00	LUNCH	
PARALLEL SESSIONS 14:00-15:20	INTERM & BIOMATSEN ARISTO Chairperson: Kay Römer 14:00-14:30 Kay Römer TU Graz, Austria (invited speaker) ID583- Position Sensing in the Presence of (Bio)obstacles 14:30-15:00 Qiaoyi Wu The First Affiliated Hospital of Fujian Medical University, China (invited speaker) ID591- Novel Approach for Diabetic Wound Healing: Adipose-Derived Mesenchymal Stromal Cells Exo@Sphydrogel Combined With Laser Therapy 15:00-15:20 Alba Thio-Pera Procope Medicals SAS, France ID565- Development of Hemocompatible membranes for total artificial hearts: from manufacturing to in vitro evaluation	NANOMACH IBN-I SINA Chairperson: Onur Alp Aksan 14:00-14:20 Onur Alp Aksan Gebze Technical University, Turkiye ID1043- Fabrication of Ca-Doped LaCoO3 Nanofibers via Electrospinning Method 14:20-14:50 Pablo Botella INSTITUTO DE TECNOLOGIA QUÍMICA (ITQ), Spain (invited speaker) ID1017- Covalent organic frameworks for cancer theranostics 14:50-15:20 Maria C. Iliuta Université Laval, Canada (invited speaker) ID1010- High-purity biohydrogen production by intensified steam reforming of biomass derivatives over nanocomposite-based hybrid materials

PROGRAM FRIDAY, APRIL 3, 2026			
INTERM & BIOMATSEN & NANOMACH			
ARISTO			
PLENARY SESSION 09:30-10:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Cagatay Aydin VIB, Belgium</p> <p style="text-align: center;">“ID...-Decoding the Brain: How AI and Big Data are Revolutionizing Neurological Diagnostics”</p>		
PLENARY SESSION 10:15-11:00	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Ladislav Kavan J. Heyrovsky Institute of Physical Chemistry, Czech Republic</p> <p style="text-align: center;">“ID1002- Work function and spectro-photo-electrochemistry of ZnO single crystals and thin films”</p>		
11:00-11:30	COFFEE BREAK		
PLENARY SESSION 11:30-12:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Vitaly Gruzdev The ITMO University, Russian Federation</p> <p style="text-align: center;">“ID1048- Few-cycle laser-nanostructure interactions: From ultrafast nanophotonics to petahertz nanoelectronics”</p>		
12:30-14:00	LUNCH		
PARALLEL SESSIONS 14:00-15:30	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p style="text-align: center;">INTERM & BIOMATSEN ARISTO</p> <p>Chairperson: Olga Sokolova</p> <p>14:00-14:30 Olga Sokolova Lomonosov Moscow State University, Russian Federation (invited speaker) ID843- The body in the phage capsid - a detective story</p> <p>14:30-15:00 Marian Catalin Grosu The National Research & Development Institute for Textiles and Leather, Romania (invited speaker) ID584- TECHNOLOGICAL SOLUTION FOR THE REALIZATION OF AN AUTOMATIC TRIGGERING SYSTEM FOR GUNSHOT WOUND DETECTION</p> <p>15:00-15:30 Fatemeh Hassaninejad Farahani Tehran University of Medical Science, Iran (invited speaker) ID594- Next-Generation Wound Dressings: Lyophilized Synbiotic Microparticles for the Management of Infected Burn Wounds</p> </td> <td style="width: 50%; vertical-align: top;"> <p style="text-align: center;">NANOMACH IBN-I SINA</p> <p>Chairperson: Ewa Mijowska</p> <p>14:00-14:30 Ewa Mijowska West Pomeranian University of Technology in Szczecin, Poland (invited speaker) ID1013- Molybdenum disulfide based for electrocatalysts- new insights into hydrogen evolution</p> <p>14:30-15:00 Huseyin Sar IMEC, Belgium (invited speaker) ID1051- Silicon Photonics Testing: Challenges, Bottlenecks, and Emerging Innovations</p> <p>15:00-15:20 Mehmet Emre Aköz Gebze Technical University, Turkiye ID1044- Design and Optimization of Synthetic Antiferromagnetic Structures for p-MTJ Devices</p> </td> </tr> </table>	<p style="text-align: center;">INTERM & BIOMATSEN ARISTO</p> <p>Chairperson: Olga Sokolova</p> <p>14:00-14:30 Olga Sokolova Lomonosov Moscow State University, Russian Federation (invited speaker) ID843- The body in the phage capsid - a detective story</p> <p>14:30-15:00 Marian Catalin Grosu The National Research & Development Institute for Textiles and Leather, Romania (invited speaker) ID584- TECHNOLOGICAL SOLUTION FOR THE REALIZATION OF AN AUTOMATIC TRIGGERING SYSTEM FOR GUNSHOT WOUND DETECTION</p> <p>15:00-15:30 Fatemeh Hassaninejad Farahani Tehran University of Medical Science, Iran (invited speaker) ID594- Next-Generation Wound Dressings: Lyophilized Synbiotic Microparticles for the Management of Infected Burn Wounds</p>	<p style="text-align: center;">NANOMACH IBN-I SINA</p> <p>Chairperson: Ewa Mijowska</p> <p>14:00-14:30 Ewa Mijowska West Pomeranian University of Technology in Szczecin, Poland (invited speaker) ID1013- Molybdenum disulfide based for electrocatalysts- new insights into hydrogen evolution</p> <p>14:30-15:00 Huseyin Sar IMEC, Belgium (invited speaker) ID1051- Silicon Photonics Testing: Challenges, Bottlenecks, and Emerging Innovations</p> <p>15:00-15:20 Mehmet Emre Aköz Gebze Technical University, Turkiye ID1044- Design and Optimization of Synthetic Antiferromagnetic Structures for p-MTJ Devices</p>
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PROGRAM	
SATURDAY, APRIL 4, 2026	
INTERM & BIOMATSEN & NANOMACH	
ARISTO	
PLENARY SESSION 09:30-10:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Susan Gibbs</p> <p style="text-align: center;">Amsterdam University Medical Center, Netherlands</p> <p style="text-align: center;">"ID568- Towards a multi-Organ-on-Chip model combining skin, lymph node and vasculature for mimicking innate and adaptive immune responses"</p>
PLENARY SESSION 10:15-11:00	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Hendrik Swart</p> <p style="text-align: center;">University of the Free State, South Africa</p> <p style="text-align: center;">"ID846- Multifunctional Lanthanide-doped Oxyfluoride Nanophosphors for Luminescence Thermometry and Latent Fingerprint Detection"</p>
11:00- 11:30	COFFEE BREAK
PLENARY SESSION 11:30-12:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Fang Xie</p> <p style="text-align: center;">Imperial College London, UK</p> <p style="text-align: center;">"ID598- Harnessing Plasmonic Nanomaterials for Enhanced Optical Sensing and NIR-II Imaging"</p>
12:30- 13:15	LUNCH

13:15-18:00	<p><i>SOCIAL PROGRAM</i></p> <p><i>13:15-18:00 THE BOAT CRUISE AROUND EXCELLENT BAYS OF BLUE LAGOON & VISIT TO St. NICHOLAS ISLAND</i></p> <p><i>(Gathering at Congress registration desk)</i></p>
19:30-21:30	<p><i>SPECIAL DINNER WITH INTERM & BIOMATSEN & NANOMACH PLENARY - INVITED SPEAKERS</i></p> <p><i>(Authentic Turkish Cuisine)</i></p>

<p>PROGRAM</p> <p>SUNDAY, APRIL 5, 2026</p>	
<p>INTERM & BIOMATSEN & NANOMACH & SEMIMATER</p>	
	<p>ARISTO</p>
<p>PLENARY SESSION 09:30-10:15</p>	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Rodica Voicu</p> <p style="text-align: center;">National Institute for Research and Development in Microtechnologies - IMT Bucharest, Romania</p> <p style="text-align: center;">“ID849- MICROGRIPPERS ELECTRO-THERMALLY ACTUATED BASED SEMICONDUCTORS AND POLYMERS MATERIALS”</p>
<p>PLENARY SESSION 10:15-11:00</p>	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Alexander Khmaladze</p> <p style="text-align: center;">SUNY at Albany, USA</p> <p style="text-align: center;">“ID857- Machine Learning Based Raman Spectral Analysis of Complex Biological Systems”</p>
<p>11:00-11:30</p>	<p>COFFEE BREAK</p>
<p>PLENARY SESSION 11:30-12:15</p>	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Todor Zhelyazov</p> <p style="text-align: center;">Bulgarian Academy of Sciences, Bulgaria</p> <p style="text-align: center;">“ID853- Analyzing the response of intelligent material containing a self-healing agent”</p>
<p>12:30-14:00</p>	<p>LUNCH</p>
<p>PARALLEL SESSIONS 14:00-15:50</p>	<p style="text-align: center;">INTERM & BIOMATSEN & NANOMACH & SEMIMATER</p> <p style="text-align: center;">ARISTO</p> <p>Chairperson: Ekaterina Silina</p> <p>14:00-14:30 Ekaterina Silina Sechenov First Moscow State Medical University (Sechenov University), Russian Federation</p>

	<p>(invited speaker) ID1023- Development of redox-active nanomaterials based on cerium phosphate nanoparticles for biomedical applications</p> <p>14:30-14:50 Olga D. Hendrickson Bach Institute of Biochemistry, Research Center of Biotechnology of the Russian Academy of Sciences, Russian Federation ID575- Enantiospecific biosensor for antibiotics detection based on lateral flow testing</p> <p>14:50-15:20 Klaudia Zielinkiewicz West Pomeranian University of Technology in Szczecin, Poland (invited speaker) ID1012- Tuning Hydrogen Adsorption on Pt/C through CaO-Induced electron Spin redistribution: Experimental and DFT Mechanistic Study</p> <p>15:20-15:50 Gunther Van Kerckhove OCSiAl Europe Sarl, Luxembourg (invited speaker) ID1015- Importance of exposure assessment along life cycle of nanocomposites</p>
15:50-16:30	COFFEE BREAK
16:30-17:30	<p>FOYER (Poster Session Area)</p> <p>Chairperson: A. Yavuz Oral</p> <p>POSTER SESSION</p> <p>INTERM & BIOMATSEN & NANOMACH & SEMIMATER</p>

PROGRAM	
MONDAY, APRIL 6, 2026	
INTERM & BIOMATSEN & NANOMACH & SEMIMATER	
ARISTO	
PLENARY SESSION 09:30-10:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Roman Gorbachev University of Manchester, UK</p> <p style="text-align: center;">“ID1049- Van der Waals Heterostructures”</p>
PLENARY SESSION 10:15-11:00	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Nilanthy Balakrishnan Keele University, UK</p> <p style="text-align: center;">“ID1006- All solid-state supercapacitor with natural rubber-based solid polymer electrolyte and 2D materials-based electrodes”</p>
11:00-11:30	COFFEE BREAK
PLENARY SESSION 11:30-12:15	<p>Chairperson: A.Yavuz Oral</p> <p style="text-align: center;">Eugeny V Kryukov Cryogenic Ltd., UK</p> <p style="text-align: center;">“ID837- Cryogen-free technology for applications in Magnetic Resonance”</p>
12:30-14:00	LUNCH

PARALLEL SESSIONS 14:00-15:50	INTERM & BIOMATSEN & NANOMACH & SEMIMATER ARISTO Chairperson: Mauro Tortello 14:00-14:30 Mauro Tortello Politecnico di Torino, Italy <i>(invited speaker)</i> ID838- Thermal Properties of CVD Graphene by Scanning Thermal Microscopy and Finite-Elements Analysis 14:30-15:00 Gunther Van Kerckhove OCSiAl Europe Sarl, Luxembourg <i>(invited speaker)</i> ID1015- Importance of exposure assessment along life cycle of nanocomposites 15:00-15:30 Joshua Nehinbe Edo State University, Nigeria <i>(invited speaker)</i> ID1- Formal Gate-Level Transformation Theorems for IP-Aware Functional Equivalence in Digital Logic Design 15:30-16:00 Sarah Haigh University of Manchester, UK <i>(invited speaker)</i> ID1050- Advanced Transmission Electron Microscopy for understanding functional oxides and nanomaterials 16:00-16:30 Barbara Pieczyrak University of Wroclaw, Poland <i>(invited speaker)</i> ID1040- Electronic and magnetic properties of salophene-based molecular systems on noble metal surfaces	
	19:30-21:30	SPECIAL DINNER WITH SEMIMATER & SCITEED & DIGIAI SOCIETY PLENARY - INVITED SPEAKERS <i>(Authentic Turkish Cuisine)</i>

PROGRAM TUESDAY, APRIL 7, 2026	
INTERM & NANOMACH & SEMIMATER ARISTO	
PLENARY SESSION 09:30-10:15	Chairperson: Ersin Kayahan Christa Willnauer Infineon Technologies Dresden AG & Co. KG, Germany "ID11- The incoming clean of raw silicon wafers and its challenges: applying the T6sigma methods to the root cause evaluation"
PLENARY SESSION 10:15-11:00	Chairperson: Ersin Kayahan Kuan-Wei Lee I-Shou University, Taiwan "ID1041- Global Semiconductor Industry Trends and Developments: Insights from Taiwan"

11:00-11:30	COFFEE BREAK
PLENARY SESSION 11:30-12:15	<p>Chairperson: Ersin Kayahan</p> <p style="text-align: center;">Uwe Bandelow</p> <p style="text-align: center;">Weierstrass Institute for Applied Analysis and Stochastics (WIAS), Germany</p> <p style="text-align: center;">“ID8- Modeling and Simulation of the dynamics in semiconductor lasers”</p>
12:30-14:00	LUNCH
PARALLEL SESSIONS 14:00-16:10	<p style="text-align: center;">INTERM & NANOMACH & SEMIMATER</p> <p style="text-align: center;">ARISTO</p> <p>Chairperson: Ersin Kayahan</p> <p>14:00-14:30 Elena Orlenko Peter the Great Saint-Petersburg Polytechnic University, Russian Federation (invited speaker) ID5- COHERENT PHONON STATES IN HEAT TRANSFER IN NANOMATERIALS WITH DIFFERENT SIZE DIMENSION</p> <p>14:30-14:50 Kgomotso Mtshatsheni VAAL UNIVERSITY OF TECHNOLOGY, South Africa ID1009- PINECONE-BASED ADSORPTIVE BIONANOCOMPOSITES AS MODIFIERS FOR MONODOPED AND CO-DOPED AMORPHOUS TiO2 for use in wastewater remediation</p> <p>14:50-15:20 Irena Kostova Medical University-sofia, Bulgaria (invited speaker) ID858- DFT and Spectral Investigations of Bioactive Lanthanide Complexes</p> <p>15:20-15:50 Igor Kuskovsky The City University of New York, USA (invited speaker) ID3- Type-II Submonolayer CdTe/ZnCdSe Quantum Dots as an Active Layer for Intermediate Band Solar Cells</p> <p>15:50-16:10 Vala Can Askan Gebze Technical University, Turkiye ID1045- Urea-Derived Nitrogen Incorporation in Laser-Induced Graphene for Tunable Thermoelectric Response</p>

PROGRAM	
WEDNESDAY, APRIL 8, 2026	
INTERM & NANOMACH & SEMIMATER	
ARISTO	
PLENARY SESSION 09:30-10:15	<p>Chairperson: Vala Can Askan</p> <p style="text-align: center;">Thomas Webster</p> <p style="text-align: center;">Hebei University of Technology, China & Brown University, USA</p> <p style="text-align: center;">“Record-Microscopy and Nanomedicine: Understanding Nanomaterial Control Over Cells”</p>

PLENARY SESSION 10:15-11:00	<p>Chairperson: Vala Can Askan</p> <p style="text-align: center;">Sebastian Schlücker University of Duisburg-Essen, Germany</p> <p style="text-align: center;">“ID851- SERS-Based Biophotonics: From Nanotags to Microscopy and POCT”</p>
11:00-11:30	COFFEE BREAK
PLENARY SESSION 11:30-12:15	<p>Chairperson: Vala Can Askan</p> <p style="text-align: center;">Horace Crogman California State University, USA</p> <p style="text-align: center;">“ID1046- Topologically Protected Quantum Teleportation via Majorana Zero Modes: A Measurement-Only Approach for Scalability and Decoherence Immunity”</p>
13:15-18:00	<p style="text-align: center;">SOCIAL PROGRAM</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 THURSDAY, APRIL 9, 2026	
	<p>Leisure Time</p> <p>Liberty Hotels Lykia offers a premium leisure experience with extensive amenities and a stunning natural setting. The resort features a private beach, multiple swimming pools, an aquapark, diverse dining options, sports facilities, and a fully equipped spa and wellness centre. Combining comfort, entertainment, and relaxation, it provides an ideal atmosphere for guests seeking both tranquillity and active recreation throughout their stay.</p>
12:00	HOTEL CHECK OUT

PROGRAM LEGEND DESCRIPTIONS	
ID-	INTERM 2026 oral presentations
ID-	BIOMATSEN 2026 oral presentations
ID-	NANOMACH 2026 oral presentations
ID-	SEMIMATER 2026 oral presentations

POSTER PROGRAM

SUNDAY, APRIL 5, 2026

16:30-17:30

FOYER (Poster Session Area)

Chairperson: A. Yavuz Oral

POSTER SESSION

INTERM & BIOMATSEN & NANOMACH & SEMIMATER

ID	TITLE	CONTACT AUTHOR
585	ADVANCED BIOACTIVE TEXTILE SYSTEMS WITH ENHANCED ANTIBACTERIAL PERFORMANCE FOR THE MANAGEMENT OF POST-TRAUMATIC SKIN INFECTIONS	Maria Felicia Dondea
576	LATERAL FLOW IMMUNOASSAY OF BETA-AGONIST MABUTEROL USING AU@CE NANOPARTICLES AS A SIGNAL-ENHANCING LABEL	Elena A. Zvereva
1008	Structure–Function Relationships of Engineered Oxide Nanoparticles for Wettability Alteration in Porous Media	Nyeso Azubuike
1016	GREEN NONOTECHNOLOGY: THE PROMISE OF BIOPOLYMERS EMULSIONS IN CRAFTING THE NEXT GENERATION OF ECO-FRIENDLY PESTICIDES	Christian Andreasen
1037	IMPACT OF PORE STRUCTURE AND SURFACE MODIFICATION ON LOADING CAPACITY AND DRUG RELEASE PROFILES OF TWO TYPES OF CUBIC MESOPOROUS SILICAS LOADED WITH THE FLUOROQUINOLONE ANTIBIOTIC LOMEFLOXACIN	Borislav Tzankov
1038	DESIGN OF MCM-41 MESOPOROUS SILICA NANOPARTICLES FOR DELIVERY OF PYRROLE HYDRAZONES AND IMPROVEMENT OF THEIR BIOPHARMACEUTICAL PROPERTIES	Diana Tzankova
1025	Liquid-phase aerobic oxidation of pentadecane in the presence ultrasonic pretreatment of fullerene soot	Aliyeva Aygun
1005	Grafting Bulrush with Acrylic Acid using Fenton’s Redox Initiator for the Removal of Methylene Blue Dye from an Aqueous Solution	Nozipho Mabaso