

THE *TENTATIVE* PROGRAM

APMAS 2025

ENEFM 2025

GENERA 2025

MEDOPTICS 2025



APMAS 2025

15th International Advances in Applied Physics & Materials Science Congress & Exhibition

OCTOBER 21-27, 2025

ENEFM 2025

11th International Congress on Energy Efficiency and Energy Related Materials

OCTOBER 21-27, 2025

GENERA 2025

Global Exchange on Next-Gen Engineering and Life Sciences Research and Applications OCTOBER 21-23, 2025

MEDOPTICS 2025

4th International Conference on Medical Optics

OCTOBER 21-27, 2025

Liberty Hotels Lykia, Oludeniz MUGLA / TURKEY

TENTATIVE P R O G R A M	
SUNDAY, OCTOBER 19, 2025	
REGISTRATION FOR EARLY ARRIVALS	
(14:00 Check-in)	

TENTATIVE P R O G R A M MONDAY, OCTOBER 20, 2025		
9:00-16:30	REGISTRATION (14:00 Check-in)	
Everyday Tours	SOCIAL PROGRAM	

Saklıkent Jeep Safari
Paragliding in Oludeniz

	TENTATIVE PROGRAM		
	TUESDAY, OCTOBER 21, 2025		
	APMAS & ENEFM & GENERA & MEDOPTICS		
	HALL 1		
	Chairperson: A.Yavuz Oral		
N 0			
ESSI 1:15	Thomas Webster		
PLENARY SESSION 10:30-11:15	Brown University, USA		
10:3	"ID3- Next Generation Implants: Say "No" to Drugs and "Yes" to Nanomedicine: 30,000 Human Successes"		
PLE			
11:15-			
11:45	COFFEE BREAK		
	Chairperson: A.Yavuz Oral		
z			
30 30	Tahir Tahirov		
PLENARY SESSION 11:45-12:30	University of Nebraska Medical Center, Eppley Institute for Cancer Research, USA		
ARY :45			
_EN,	"ID6- Mechanism of human primosome function"		
4			

2:30- 4:00	LUNCH	
	APMAS ENEFM	APMAS GENERA MEDOPTICS
	HALL 1	
		HALL 2
	Chairperson: Aliaksandr Smirnov	
		Chairperson: Dina Deyneko
	14:00-14:30	
	Aliaksandr Smirnov	14:00-14:30
	BSUIR, Belarus	Dina Deyneko
0	(invited speaker)	Lomonosov Moscow State University, Russian Federation
5:3	ID2815- Memristive memory array based on chalcogenide	(invited speaker)
00-1	phase change materials: physics, technology and applications	ID2856- LUMINESCENT MATERIALS IN BONE SUBSITUTES
5 14:	14:30-15:00	14:30-15:00
PARALLEL SESSIONS 14:00-15:30	Tatiana Kuzmicheva	Lucian Baia
Sic	Lebedev Physical Institute RAS, Russian Federation	"Babes-Bolyai" University, Romania
SES	(invited speaker)	(invited speaker)
蒀	ID2862- Possible Spectroscopic Evidence of Electron	ID2841- Alginate-based biocomposites for tissue engineering
ALL	Nematicity in Na-deficient and Underdoped Na(Fe,Co)As	applications
AR.	Pnictides	
<u>a</u>		15:00-15:30
	15:00-15:30	Monica Baia
	Elena Alekseeva	Babes-Bolyai University, Romania
	Saint-Petersburg University, Russian Federation	(invited speaker)
	(invited speaker)	ID2842- From Noble Metal Nanoparticles to Multifunctional SERS
	ID643- Nitrogen Ion Modification of Carbon Nanotubes as a	Substrates
	Versatile Platform for 2e ⁻ and 4e ⁻ Oxygen Reduction Pathways	
	,	

15:30-	
16:00	COFFEE BREAK
	APMAS ENEFM GENERA MEDOPTICS
	HALL 1
	Chairperson: Hendrik C Swart
	16:00-16:30
	Hendrik C Swart
	University of the Free State, South Africa
_	(invited speaker)
SNS	ID650- Down and Upconversion layers for enhancing the performance of c-Si solar cell efficiency
PARALLEL SESSIONS 16:00-17:40	16:30-17:00
. SE	Yuri Kalvachev
 E 	Bulgarian Academy of Sciences, Bulgaria
RAI	(invited speaker)
PA	ID2907- Synthesis and application of nanosized mordenite
	17:00-17:20
	Man Xu
	China Nuclear Power Engineering Co., Ltd, China
	ID641- Current Status of Modular Construction Technology for Nuclear Power Plants
	17:20-17:40
	Yang Lu
	China Nuclear Power Engineering Co., Ltd., China
	ID614- Design Study on the Backup Cooling System for Pressurized Water Reactor Nuclear Power Plants

	TENTATIVE PROGRAM		
	WEDNESDAY, OCTOBER 22, 2025		
		APMAS & ENEFM & GENEF	RA & MEDOPTICS
		HALL 1	
7		Chairperson: A.Yavuz Oral	
PLENARY SESSION	09:45-10:30	Jian-Jia	ing Zhong
IARY	9:45-	Shanghai Jiao To	ng University, China
PLEN.	0	"ID4- Synthetic Biology-Based Biomanufacturing"	
):30- 1:00	COFFEE BREAK	
		Chairperson: Ersin Kayahan	
PLENARY SESSION 11:00-11:45		University o	V. Larin f Houston, USA
PLE		"IDRecent Advances in Optical Coherence Elastography"	
S	;	APMAS ENEFM	APMAS GENERA MEDOPTICS
SSIOF	:30	HALL 1	HALL 2
PARALLEL SESSIONS 11:00-12:30		Chairperson: Arcady Zhukov	Chairperson: József Bódis
	11:(11:00-11:30 Arcady Zhukov Univ. Basque Country, UPV/EHU, Spain	11:00-11:30 József Bódis University of Pécs, Hungary

	(invited speaker)	(invited speaker)
	ID2821- MAGNETIC PROPERTIES AND APPLICATIONS OF GLASS-COATED	ID1-Is ultra-weak photon emission a fast communication tool for
	11.30-12:00 Carmen Tuca Horia Hulubei National Institute for R D in Physics and Nuclear Engineering, Romania (invited speaker) ID2814- Developing and implementing of a digitalization system to streamline radiological characterization of the facilities under decommissioning	11.30-12:00 Oksana Lastochkina Russian Academy of Sciences (invited speaker) ID20- Endophytic PGP Bacteria Bacillus subtilis: Physiological and Molecular Regulation of Wheat Tolerance to Multiple Abiotic Stresses
12:30- 13:15	LUNCH	
	SOCIAL PROGRAM	
13:15-18:00	13:15-18:00 GHOST TOWN & BLUE LAGOON	
13:	(Gathering at Congress registration desk)	

	TENTATIVE P R O G R A M		
	THURSDAY, OCTOBER 23, 2025		
	APMAS & ENEFM & GENERA & MEDOPTICS		
	HALL 1		
	Chairperson: A.Yavuz Oral		
PLENARY SESSION 10:00-10:45	Alper Sahiner		
4RY :00-	Seton Hall University, USA		
10 10	"ID2919- Correlation Between Electrical Performance and Local Structure in LaSrCoO SOFC Films: Probing Sr Segregation and Multiphase		
	Behavior"		
10:45- 11:15	COFFEE BREAK		
	Chairperson: Ersin Kayahan		
PLENARY SESSION 11:15-12:00	Meltem Izzetoglu		
ARY 1:15	Villanova University, USA		
PLEN,	"ID616- Optical Neuromonitoring for the Study of Cognitive Aging and Age-related Diseases"		
12:30- 14:00	LUNCH		

	APMAS ENEFM GENERA MEDOPTICS
	HALL 1
	Chairperson: Balázs Illés
08	14:00-14:30
PARALLEL SESSIONS 14:00-15:30	Balázs Illés Budapest University of Technology and Economics, Hungary
14:00	(invited speaker) ID2837- Quality and reliability of SnAgCu composite solder joints
ONS	
SESSI	14:30-15:00 Antonio Barbier
ILEL	CEA, France (invited speaker)
PARA	ID2914- Multiferroic embedded ferrite platelets in BaTiO3
	15:00-15:30
	Branko Stankovic Energonauts LLC, Canada
	(invited speaker) ID651- Modified Rankine Cycle Without Heat Rejection, Driven by a Wet-Vapor-Region Thermocompressor
15:30-	West vapor region members resident regions at the vapor region members resident region members resident region reg
16:00	COFFEE BREAK
	APMAS ENEFM GENERA MEDOPTICS
	HALL 1
	Chairperson: Nadezhda Kudryasheva
	16:00-16:30 Nadezhda Kudryasheva
	Institute of Biophysics SB RAS, Russian Federation
SNOI3 0	(invited speaker) ID622- Application of Luminous Bacteria in Nanobiotechnology and Biomedicine: Monitoring of Biological Activity and Biosynthesis of
PARALLEL SESSIONS 16:00-17:10	Nanoparticles
XALLE 16:00	16:30-16:50 Krishna Thej Pammi Guru
PAF	University of South Africa, South Africa
	ID2858- Bio-Inspired ReRAM: Turmeric-Based Memory for Green Computing
	16:50-17:10 Ngonidzashe Masunga
	University of South Africa, South Africa 2861- Spinel ferrite functionalised C3N5 nanocomposite for hydrogen evolution and photodegradation of organic pollutants in water:
	Progress made and way forward
6.0	
17:10- 17:30	COFFEE BREAK
	FOYER (Poster Session Area)
8:30	Chairperson: A. Yavuz Oral
7:30-18:30	POSTER SESSION I
17	APMAS & GENERA & MEDOPTICS
1:30	SPECIAL DINNER WITH ENEFM & MEDOPTICS & GENERA PLENARY - INVITED SPEAKERS
19:30-21:30	(Authentic Turkish Cuisine)
15	

	TENTATIVE PROGRAM	
	FRIDAY, OCTOBER 24, 2025	
	APMAS & ENEFM & MEDOPTICS	
	HALL 4	
	Chairperson: A.Yavuz Oral	
SPECIAL SESSION 10:30-12:30	10:30-11:00 Desireé Cranfield University of Swansea, UK (invited speaker) ID209- The AI Wake-Up Call: Are Academics Ready to Redesign Assessment?	
	11:00-12:30 SPECIAL SESSION (FOYER) A conversational Al-Cafe: "Academic Assessment in Crisis: Who's Rethinking, Who's Ready, and Who's Left Behind?"	
12:30- 14:00	LUNCH	
	APMAS ENEFM MEDOPTICS	
	HALL 1	
	Chairperson: Martin Bernier	
PARALLEL SESSIONS 14:00-15:20	14:00-14:30 Martin Bernier COPL, Laval University, Canada (invited speaker) ID625- Mid-infrared fiber lasers for medical applications	
	14:30-15:00 Georgi Vayssilov Sofia Unviersity, Bulgaria (invited speaker) ID2829-Computational study of the cerium dioxide nanoparticles and surfaces under reaction conditions 15:00-15:20 Tebogo Sfiso Mahule University of South Africa, South Africa ID2851- Photoluminescence and ESR study of nanosized TMCexDyxFe2-2xO4 (TM = Co, Ni) ferrites	

	TENTATIVE P R O G R A M		
	SATURDAY, OCTOBER 25, 2025		
	APMAS & ENEFM & MEDOPTICS		
	HALL 1		
	Chairperson: Sergey Katsyuba		
PARALLEL SESSIONS 10:30-12:30	Sergey Katsyuba FRC Kazan Scientific Centre of RAS, Russian Federation (invited speaker) ID2831- The structural pathway from its solvated molecular state to the solution crystallization of para-amino benzoic acid 11:00-11:30 Maciej Wojtaś University of Wroclaw, Poland (invited speaker) ID2898- Structure and Piezoresponse of Novel Alanine-Based Hybrid Crystals 11:30-11:50 Zineb Bouhssine Internationale University of Rabat, Morocco ID632- Thermal performance analysis of two eco-friendly wall materials in a Moroccan climate 11:50-12:10 Jae Young JOO Korea Photonics Technology Institute ID2848- DEVELOPMENT OF STICKING ROAD LINE FOR HIGH VISIBILITY UNVER HEAVY WEATHER		
12:30- 14:00	LUNCH		
	APMAS ENEFM MEDOPTICS		
	HALL 1		
	Chairperson: Eduard Gevorkyan		
PARALLEL SESSIONS 14:00-15:00	14:00-14:30 Eduard Gevorkyan Moscow Witte University, Russian Federation (invited speaker) ID2790- Resonant Interaction of a Signal Electromagnetic Wave with a Modulation Wave of a Dielectric Plate, Placed in a Waveguide 14:30-15:00 Sreedevi Vallabhapurapu University of South Africa, South Africa (invited speaker) ID2852- Development of Organic-Inorganic Tandem Resistive ReRAMs for Green Computing		
15:00- 15:30	COFFEE BREAK		

	Chairperson: Konstantin Vorotilov
PARALLEL SESSIONS 15:30-16:50	15:30-16:00 Konstantin Vorotilov MIREA - Russian Technological University, Russian Federation (invited speaker) 2816- CHEMICAL SOLUTION DEPOSITION: FUNDAMENTALS AND NEW APPROACHES
	16:00-16:30 Shaomin Shuang Shanxi University, China (invited speaker) ID2894-Ratiometric fluorescent metal-organic frameworks: rational designs and analytical applications
	16:30-16:50 Muthumuni Managa University of South Africa, South Africa 2784- Visible-light-driven degradation of pollutants in aqueous solution using TiO2-porphyrin conjugates
17:00- 17:30	COFFEE BREAK
17:30-18:30	FOYER (Poster Session Area) Chairperson: A. Yavuz Oral POSTER SESSION II APMAS & ENEFM
19:30-21:30	SPECIAL DINNER WITH APMAS PLENARY - INVITED SPEAKERS (Authentic Turkish Cuisine)

TENTATIVE PROGRAM SUNDAY, OCTOBER 26, 202

	SUNDAY, OCTOBER 26, 2025				
	APMAS & ENEFM & MEDOPTICS				
	HALL 1				
	Chairperson: Darya Alontseva				
	10:30-11:00				
	Darya Alontseva				
	D. Serikbayev East Kazakhstan Technical University, Kazakhstan				
	(invited speaker)				
NS	ID2844- Strategies for Implant-Associated Infection Control: In Vivo Insights on TaCu and NbCu Magnetron-Sputtered Coatings				
PARALLEL SESSIONS	11:00-11:30 Oleg V. Levin St Petersburg State University, Russian Federation (invited speaker)				
SE.	Oleg V. Levin				
	St Petersburg State University, Russian Federation				
RAI	(ministration)				
PA	ID644- Direct Electrochemical Co-polymerization of 3,4-Ethylenedioxythiophene and Hydroquinone: Toward Conducting Redox Polymers for				
	Aqueous Organic Batteries				
	11:30-12:00				
	Vijaya Srinivasu Vallabhapurapu				
	University of South Africa, South Africa				
	(invited speaker)				
	ID2853- Green ReRAMs through Biomaterials				

12:30- 13:15	LUNCH				
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SOCIAL PROGRAM

13:15-18:00

13:15-18:00 THE BOAT CRUISE AROUND EXCELLENT BAYS OF BLUE LAGOON & VISIT TO St. NICHOLAS ISLAND

(Gathering at Congress registration desk)

TENTATIVE P R O G R A M **MONDAY, OCTOBER 27, 2025**

APMAS ENEFM MEDOPTICS

HALL 1

Chairperson: Karolina Siskova

PARALLEL SESSIONS 10:00-11:30

10:00-10:30 Karolina Siskova

Palacký University in Olomouc, Czech Republic

(invited speaker)

ID2902- Bimetallic and trimetallic luminescent nanocomposites applied as multimodal bio-imaging and sensing platforms

10:30-10:50

Bartłomiej Pabich

AGH University of Krakow, Poland

ID2850- Challenges in the plastic deformation of structurally heterogeneous materials

10:50-11:10

Bartosz Środa

West Pomeranian University of Technology in Szczecin, Poland

ID620- gCN/MXene derived TiO2 composites for photocatalytic hydrogen generation under solar

12:00 | Hotel Check Out

PROGRAM LEGEND DESCRIPTIONS		
ID-	APMAS 2025 oral presentations	
ID-	ENEFM 2025 oral presentations	
ID-	GENERA 2025 oral presentations	
ID-	MEDOPTICS 2025 oral presentations	

POSTER P R O G R A M

THURSDAY, OCTOBER 23, 2025 17:30-18:30

FOYER (Poster Session Area)

Chairperson: A. Yavuz Oral

POSTER SESSION

APMAS & GENERA & MEDOPTICS

ID	TITLE	CONTACT AUTHOR
2804	Surface modification of semiconductors using radicals generated by heated catalyst	Akira Izumi
2797	Synthesis and SERS Application of Microtubes for Trace Detection of Organic Contaminants	Ilya Korolkov
2796	Comparative Analysis of Two Acrylate Adhesives Exposed to Water Immersion	Klára V. Machalická
2793	Effect of Glass Surface Orientation on Mechanical Behavior of Acrylate Adhesive Joints	Miroslav Vokáč
2787	Determination of substances formed during combustion of wood-based materials	Kamila Mizera
2802	Mechanical properties of apple tissue under impact loading conditions	Krzysztof Gołacki
2845	In Vitro Biocompatibility of Robotic Microplasma Sprayed Zirconium Coatings on Titanium Alloy for Orthopedic Applications	Albina Kadyroldina
2846	Magnetron sputtering of radio-absorbing multilayer Co-C-Cr coatings on undoped monocrystalline silicon	Nadezhda Prokhorenkova
2880	Histopathological Assessment of Cytoprotective Effects of 3-Aminopyridone Derivatives in a Rat Model of Metabolic Syndrome	Shynggys Sergazy
2878	Cytoprotective Potential of Novel 3-Aminopyridin- 2(1H)-one Derivatives in NIH/3T3 Fibroblast Culture	Assel Urazbayeva
2875	Polymer-Engineered Aβ-Degrading Enzymes for Alzheimer's Disease Therapy via ATRP Conjugation	Bibifatima Kaupbayeva
2879	Evaluation of 3-Aminopyridone Derivatives in a Rat Model of Metabolic Syndrome: Evidence of In Vivo Cytoprotection	Alexander Gulyayev
2895	Targeting Accelerated Cellular Senescence for the Prevention of Post-COVID-19 Pulmonary Fibrosis: Screening of Synthetic and Natural Senolytics	Zarina Shulgau
2799	Facile Synthesis Route for Bulk Production of Complex Fullerene-Like MoS2 Nanostructures With Enhanced Tribological Properties	Aleš Mrzel
2806	Corrosion of Al-Mg-Sc alloy and its inhibition by surface organosilicon micro and nanolayers	Maxim Petrunin

2869	RSM Modeling of Cu–TiO2/2D Nanocomposites for Photocatalytic Removal of Rhodamine B	Bachir Balarabe
2870	Photoelectrochemical Activity Testing of Graphene Oxide Embedded TiO2 Thin Films Decorated With Au or Ir Nanoparticles	Imanzhussip Serkul
2881	Rare-Earth Codoping Strategy in TiO2 Downconverting Layer for Enhanced Performance of Sensitized Solar Devices	Darya Goponenko
2882	MICROWAVE-ASSISTED SYNTHESIS OF GRAPHENE- ZNO NANORODS FOR EFFICIENT SOLAR PHOTOCATALYTIC DEGRADATION OF METHYLENE BLUE (MB) DYE	Laura Khamkhash
2883	Enhanced Photoelectrochemical Performance of TiO2-Au Films via Infrared Harvesting with Li-Codoped NaYF4:Yb,Er Upconversion Layers	Kamila Zhumanova
2905	SYNTHESIS OF HIGH ENTROPY COMPOSITE COATINGS OF (TIAITaZrNbN)Agx: INFLUENCE OF SILVER CONTENT ON MICROSTRUCTURAL, MECHANICAL AND TRIBOLOGICAL PROPERTIES	Gilberto Bejarano
23	GENOTYPE-DEPENDENT ENDOPHYTIC PGP BACTERIA Bacillus subtilis INOCULATION EFFICIENCY IN WHEAT: RELATIONSHIP WITH SEEDS ENDOPHYTIC MICROBIOME AND FIELD RESPONSE	Liudmila Pusenkova

TENTATIVE POSTER PROGRAM

SATURDAY, OCTOBER 25, 2025

17:30-18:30

FOYER (Poster Session Area)

Chairperson: A. Yavuz Oral

POSTER SESSION

APMAS & ENEFM

ID	TITLE	CONTACT AUTHOR
2822	SINGLE DOMAIN WALL PROPAGATION IN CO-RICH MAGNETIC MICROWIRES WITH GRADED MAGNETIC ANISOTROPY	Valentina Zhukova
2833	Nanomaterials with bactericidal properties for medical textile applications	Bauyrzhan Maratuly
2832	SYNTHESIS OF COUMARINPHOSPHONIUM SALTS AND REACTIONS WITH AROMATIC ALDEHYDE	Rositca Nikolova
2843	One-pot synthesis of fused-rings heterocyclic systems based on symmetrically benzofuran annulated 1,8-naphthalimides	Yulian Zagranyarski
2865	CORRELATION OF THE ELECTRONIC PROPERTIES OF 2D CONJUGATED MOFS WITH THEIR LINKER AROMATICITY USING NUCLEAR INDEPENDENT CHEMICAL SHIFT	Kristina Simeonova
2912	Plant-Derived Exosome-Like Nanoparticles from Berries as Novel Carriers of Polyphenols: Safety and Anti-Inflammatory Properties In Vitro	Nursultan Kalamov
2906	ANALYSIS OF OIL-PAPER INSULATION MATERIAL IN POWER TRANSFORMERS USING FREQUENCY DIELECTRIC SPECTROSCOPY	Miroslav Gutten
2860	Insights into the defect structure of NaBa12(BO3)7F4 (NBBF) crystals using Raman spectroscopy and dielectric measurements	Tatyana Bekker
2791	TESTING OF CLAY-CARBONATE TYPE LITHIUM-BORATE ORE. PART I: CHEMICAL-MINERALOGICAL CHARACTERIZATION OF THE ORE	Ivana Jovanović
2792	TESTING OF LITHIUM - BORATE ORE OF CLAY - CARBONATE TYPE PART 2: METHODS OF SELECTIVE SEPARATION OF LI FROM B	Vesna Conic
2899	Modification of photoactive PVA containing WO3 thin films by Intense Pulsed Ion Beam	Alshyn Abduvalov
2857	A FACILE ELECTROCHEMICAL METHOD FOR FUNCTIONALIZATION OF ANTHRAQUINONE DERIVATIVES	Jelena Kirilova
2801	ADSORPTION EFFICIENCY OF ACTIVATED MACADAMIA NUTSHELL FOR THE REMOVAL ORGANOCHLORINE PESTICIDES: ENDRIN AND 4,4-DDT FROM AQUEOUS SOLUTION	Mokete Phele
2864	LOW-COST SYNTHESIS OF IODINE-DOPED CARBON DOTS AS A PROMISING CONTRAST AGENT FOR CT	Timur Atabaev
2901	Intense Pulsed Ion Beam based Research Activity at Nazarbayev University	Marat Kaikanov
2884	Surface Deposition of Ti3N4 MXene and MoS2 on TiO2 Nanorods for Enhanced Photoelectrochemical Performance	Kuralay Rustembekkyzy

607	Combustion indicators of a hydrogen-fueled TJI engine with passive and active pre-chamber under knocking conditions	Ireneusz Pielecha
608	Particulate matter emissions from disc brakes of automotive vehicles	Jacek Pielecha
610	ANALYSIS OF THE CLEAN TRANSPORT ZONE IN A SELECTED AREA OF THE CITY OF POZNAŃ	Piotr Pielecha
625	Design of peri-disubstituted tellurolo-1,8-naphthalimides	Monika Mutovska
624	Refined Characterization of Biomass Tar: Discrete Profiling of Phenolic and Aromatic Fractions	Sergejs Osipovs
654	Synthesis of Double peri-PEG Substituted 1,8-Naphthalimides	Denitsa Anastasova