

2 SEPTEMBER 2026 (MORNING)

MUSTAFA VEHBİ KOÇ CONFERENCE HALL	
08:30	REGISTRATION
10:00	OPENING CEREMONY
11:00	TEA AND COFFEE BREAK
11:15	Chair Prof.Dr. Recep ZAN Invited Speaker Prof.Dr. Önder METİN "Rational Design of Nanomaterials for Sustainable Technologies"
12:00	LUNCH TIME

2 SEPTEMBER 2026 (AFTERNOON)

HALL A		HALL B	
13:30	Chair Prof.Dr. Önder Metin	Chair Prof.Dr. Faruk Karadağ	
	Invited Speaker Prof.Dr. Osman Murat Özkendir "Reverse EXAFS Analysis (REA): From Local Probe to Standalone Crystallographic Tool"	Invited Speaker Prof.Dr. Hande Üstünel Toffoli "Overcoming Challenges in Modelling Surface Reactions in Computational Materials Science"	

14:00	Investigation of Strain Effects in InGaAs/InAlAs Superlattices for Quantum Cascade Laser Structures <u>Nisa Nur Yener</u> , Merve Nur Koçak, İlkay Demir	Light Intensity-Dependent Analysis of the Main Electrical and Photo-detector Characteristics of Al/PTCDA/p-Type Si Semiconductor Devices Niyazi Berk, <u>Şükrü Karataş</u>
14:15	Thermodynamic and Mass Balance Simulation Analysis of a Tower-Type Concentrating Solar Power (CSP) Plant <u>E. Önal</u> , A.O. Ayaş	Optical and Raman Characterization of Ga ₂ O ₃ Thin Films Grown at Different Oxygen Ratios by RF Magnetron Sputtering <u>H. Hopoğlu</u> , E. Şenadım Tüzemen
14:30	Synthesis of Calcium Phosphates from Oyster Shell Powder of a Cardiidae Species via Mechanochemical Precipitation E. Yapici, S. Sereflioglu, <u>Y. Ayik</u> , S. Yucel	Site-Selective Tuning of Magnetic Anisotropy in Monolayer Fe ₃ GaTe ₂ via Fe Vacancies and Ru/Os Substitution <u>A. Özkan</u> , H. Çelebi
14:45	Development of Next-Generation Dosimeter Systems for Use in Medical Radiation Applications <u>R.F. Agra</u> , K. Kurt, S. Ertürk	Comparative TCAD Analysis of Superlattice Buffer Layers in High-Indium e-SWIR Photodetectors <u>Z. Khaoatmi</u> , F.K. Özbakır, I. Altuntaş
15:00	POSTER SESSION 1	
15:30	TEA AND COFFEE BREAK	
15:45	Chair Prof.Dr. İlkay Demir	Chair Assoc.Prof.Dr. Doğan Kaya
	Technology Pioneer Speaker Prof.Dr. Fahrettin Yakuphanoglu "Innovating for Tomorrow: Strategic Vision in Next-Generation Materials and Manufacturing"	Invited Speaker Assoc.Prof.Dr. Daniele Toffoli "Computational core-electron spectroscopies: powerful tools for understanding the electronic structure and dynamics in complex systems"
16:15	CÜNAM: A National Research Infrastructure for Epitaxy, Semiconductor, Photonic, and Advanced Material Technologies <u>İlkay Demir</u>	Zr-Doped WO ₃ : A Better Photocatalyst for Dye Degradation <u>İpek Balnan</u> , Sabit Horoz

16:30	Comprehensive Optoelectronic and Photodetectivity Profile of a Silicon Solar Cell under 370–1100 nm spectral range by Advanced Fytronix Photoreponse Systems <u>A. Dere</u>, F.Yakuphanoglu	Impact of Annealing Atmosphere on Properties of CZTSSe Thin Films: Experimental and SCAPS-1D Analysis <u>M.S.M. Abualrob</u>, F.Rehman, Yavuz Atasoy, Recep Zan, Mehmet Ali Olğar
16:45	Optimization of AsH₃ Flow Rate for High-Quality MOCVD-Grown n-InGaAs/InP Epitaxial Layers <u>M. Alyosuf</u>, G. Yolcu, İ. Demir	Optimization of TMIn Flow for Enhanced Structural and Surface Quality of InGaAs Layers in QCL Heterostructures <u>Ferhan Kübra Özbakır</u>, İsmail Altuntaş, İlkay Demir
17:00	Effect of Sputtering Pressure on Surface Morphology and Magnetic Domain Evolution of DC Magnetron-Sputtered Ni₅₂Mn₃₃Ga₁₅ Thin Films Deposited on Glass Substrates <u>G. Durak Yüzüak</u> E. Yüzüak	
19:00	CONFERENCE DINNER	

3 SEPTEMBER 2026 (MORNING)

HALL A		HALL B		HALL C
	Chair Prof.Dr. Sefa Ertürk		Chair Prof.Dr. Metin Özdemir	Chair Assoc.Prof.Dr. Berrin Özdemir
09:00	Invited Speaker Prof.Dr. Hüsnü Emrah Ünal "Engineering Triboelectric Nanogenerators from Fibers to Free-Standing Configurations"	09:00	Magnetic Transition and Magnetocaloric Response of $\text{La}_{0.6}\text{Eu}_{0.1}\text{Sr}_{0.2}\text{Ca}_{0.1}\text{MnO}_3$ Manganite G. Akca , M.S. Aslan, S. Kılıç Çetin, Faruk Karadağ, A. Ekicibil	The Effect of Layer Arrangement on the Properties of CdS/ZnS Multilayer Thin Films Deposited by CBD Sahide Gülizar Kızıl , Sevdal İdan Özmen, Hülya Metin Gübür
09:30	Tuning Electromagnetic Wave Attenuation via Electric Field in $\text{PANI@MoS}_2/\text{GE}/\text{PANI@MoS}_2$ Symmetric Devices M. Akyol , A. Bozdoğan, H. Eroglu, M. Karaaslan	09:15	Green Synthesis of Pure and Boron-Doped TiO_2 Nanoparticles Synthesized via Sambucus nigra Extract and Photocatalytic Degradation of Tetracycline T. Öztürk , B. Gül	Effect of Nitrogen Annealing on the Structural, Optical and Electrical Properties of CdTe Thin Films Deposited on Different Substrates by Chemical Bath Deposition Zeynep Karabacak , Sevdal İdan Özmen, Hülya Metin Gübür
09:45	First Principles Investigation of ScAuPb Half-Heusler Alloy: Mechanical, Vibrational, Electronic and Optical Properties Belgin Koçak, Yasemin O. Çiftci	09:30	Comparative Analysis of Structural and Magnetic Behaviour in $\text{Co}_{1-x}\text{Y}_x$ (Y = Cu and Gd) Magnetic Nanoparticles Synthesized by the Polyol Process I. Adanur , M. Akyol, A. Ekicibil	Effect of Ag doping on YBCO Superconductors Selin Karavul , Veysi Guckan, Ahmet Ekicibil
10:00	Nanoscale Dynamics of Methylene Blue at the PD-1/SHP2 Interface: Evidence for Non-Specific Protein-Protein Interaction Disruption Ege Vural	09:45	Effects of Ge and Sn Doping on the Photovoltaic Performance of CsSiF_3 Perovskite Solar Cells Gülçin Çorbacı , Yasemin Ö. Çiftci, Doğukan Alkan, İrem A. Gemici, İlknur K. Durukan, M. Gökhan Şensoy, İrem O. Alp	Density Functional Theory Investigation of the Structural and Electronic Properties of the Pt_3Ni (111) Surface Çağatay Yalçın , Faruk Karadağ, Ahmet Ekicibil, Dogan Kaya
10:15	Temperature Difference and MHD Effects on Nanofluid Hydrodynamics and Heat Transfer Murat Erdem , Yasin Varol	10:00	Prototyping and Clinical Performance Evaluation of a Portable Spectrophotometer Based on Micro-Electro-Mechanical Systems (MEMS) Furkan Ülengin , Sadullah Öztürk, Dildar Konukoğlu	Effect of Nitrogen Content on the Optical and Structural Properties of TiN Thin Films Deposited by DC Reactive Magnetron Sputtering E.E. Bulut , G. Yolcu, İ. Demir, E. Şenadım Tüzemen

10:30	TEA AND COFFEE BREAK				
Chair Prof.Dr. Mustafa Akyol			Chair Assoc.Prof.Dr. Oğuz Özbek		Chair Prof.Dr. Esin Kasapoğlu
10:45	Invited Speaker Prof.Dr. Hakan Usta "Engineering Organic π -Frameworks for Optoelectronics and Nanotechnology"		10:45	Luminescence investigations of BeO ceramics produced by green synthesis <u>Volkan Altunal</u>	Mg-Al LDH/g-C ₃ N ₄ Hybrid Nanomaterials for Next-Generation Biodegradable Food Packaging <u>Hasan Eskalen</u> , Mustafa Kavgacı, Hakan Yaykaşlı, Sevim Kaya, Gökhan Ceyhan, Esen Çakmak, Hacı Veli Kalmış
11:15	Electrochemical study of a multiphase Pt, Co, Ni ternary nanoalloy as ORR Catalyst <u>Gediz Korkmaz</u> , Dogan Kaya, Tunc Tuken		11:00	Role of Ag Precursor Stacking Sequence in Enhancing the Properties of CZTS Thin-Film Photodetectors <u>Fazal Rehman</u> , Yavuz Atasoy, Salih Yılmaz, Emin Bacaksız, Recep Zan, Mehmet Ali Olğar	Experimental Investigation of Curvature-Induced Performance Changes in Flexible Photovoltaic Modules under Simultaneous Outdoor Measurements <u>Salih Öztürk</u> , Ali Yüce
11:30	Investigation of the Optical Properties and Band Gap of Mn-Doped CdO Thin Films Prepared by Sol-Gel Spin Coating <u>A.Qahtan Sabah</u> ,F.Yakuphanoglu		11:15	Electromagnetic Wave Absorption Performance of Electrically Tunable MoS2@PANI/GE/MnO2 Asymmetric Solid-State Cells <u>A. Bozdoğan</u> , M. Akyol	Engineering Band Gap through BaTiO ₃ - PCL/PVC Nanocomposites: A Study of Optical, Structural, Morphological, and Thermal Properties <u>E. Balci</u> , H.K. Ibrahim, F. Dagdelen
11:45	A viable asymmetric molecular engineering for extremely high solubility and green solvent processed organic field-effect transistors <u>İbrahim Deneme</u> , Hakan Usta		11:30	Determining the Supercapacitor Performance of the Activated Carbon Produced from Black Carrot <u>A. Aydınlı</u>	
			11:45	Critical Behavior and Magnetic Exchange Interactions in Double Perovskites: An Iterative Modified Arrott Plot and Kouvel-Fisher Analysis <u>Arda Kandemir</u> , İbrahim Barış Sever, Ali Osman Ayaş, Ahmet Ekicibil	
12:00	LUNCH TIME				

3 SEPTEMBER 2026 (AFTERNOON)

HALL A		HALL B	
Chair Prof.Dr. Hüsnu Emrah Ünalın		Chair Prof.Dr. Osman Murat Özkendir	
13:30	Invited Speaker Prof.Dr. İlkay Demir "Epitaxial Material Engineering of MOVPE-Grown AlN Thin Films for Wide-Bandgap Device Application"	13:30	Strain Effects on the Structural, Elastic, Electronic, and Optical Properties of the KSIF3 Yasemin Ö. Çiftci, Gülçin Çorbacı, Doğukan Alkan, İrem A. Gemici, İlknur K. Durukan, M. Gökhan Şensoy, İrem O. Alp
14:00	Comparative First-Principles Study of the Electronic, Vibrational, and Carrier-Phonon Scattering Properties of Monolayer WSe2 and ZrSe2 M.F. Yıldırım, B. Özdemir, M. Özdemir	13:45	Green Synthesis of Pd Nanoparticles Using Olives Leaves Extract: Investigation of Structural and Catalytic Properties Nurhan Kaya, Batuhan Berk Sahin, Emre Can Tayfun, Faruk Karadag, Ahmet Ekicibil, Dogan Kaya
14:15	Development of an α-Ketoglutaric Acid-Functionalized Fe₃O₄@Silica Nanocarrier Platform for Magnetically Targeted Paclitaxel and Docetaxel Delivery and In Vitro Evaluation of Anticancer Potential Rümeysa Beyan Taşdemir, Serkan Dayan	14:00	Optical Characterization and Thickness Optimization of CaF₂ Thin Films on Al₂O₃ for 3–5 μm Anti-Reflectance Applications Birsen Kesik Zeyrek, Ahmed Medhat, E. Şenadım Tüzemen
14:30	Development of PdCo-Modified NiFe₂O₄/Carbon Nanocomposites for Hydrogen and Oxygen Evolution Reactions Dogan Kaya, Emre Can Tayfun, Zafer Eroğlu, Ruveyda Uguz, Onder Metin, Faruk Karadag, Ahmet Ekicibil	14:15	Development of an 8x8 Hybrid P3HT:PCBM:ZnO Matrix Array for 2D Spatial X-Ray Imaging N.N. Selcuk, F. Ulengin, S. Ozturk, Y. Kalkan, A. Kosemen
14:45	Structural and Magnetocaloric Features of PrBa_{1-x}CaxMn₂O₆ (0.6 $\leq$ x $\leq$ 1.0) Double Perovskite for Magnetic Refrigeration Arda Kandemir, Selda Kılıç Çetin, Ali Osman Ayaş, Gönül Akça, Mustafa Akyol, Ahmet Ekicibil	14:30	Growth and Characterization of SiH₄-Controlled In_xAl_{1-x}As Layers for Application in QCL Injector Regions R. Delvia, M. N. Koçak, İ. Demir
15:00	POSTER SESSION 2		

15:30	TEA AND COFFEE BREAK			
Chair Prof.Dr. Ali Osman Ayaş			Chair Prof.Dr.ERCÜMENT YÜZÜAK	
15:45	University & Industry Panel		15:45	Invited Speaker Prof.Dr. Sefa Ertürk "Dosimeters in Medical Radiation Applications: From Traditional Systems to New Generation Technologies"
			16:15	Design Strategies for Next-Generation Liquid Crystal Mesogens: From Molecular Engineering to Supramolecular Functional Materials <u>B. Korkmaz</u>
			16:30	The Effect of Low-Level Bipartite Doping on the Morphological and Magnetocaloric Properties of La-Mn-O Perovskite Manganite <u>Y. Samancıoğlu</u>
			16:45	2.5D Printing of Red and Green InP-Based QDs Using Maskless Lithography <u>R.Ozdemir</u>
			17:00	
19:00	GALA DINNER			

4 SEPTEMBER 2026 (MORNING)

HALL B		HALL C
	Chair Prof.Dr. Melike Behiye Yücel	Chair Prof.Dr. Ebru Şenadım Tüzemen
09:00	DFT and XRD Investigation of Quantum Chemical, Topological, and Optoelectronic Properties of a Novel Quinoline-Derived Cadmium(II) Complex M.N. Güney , C. Küçük, S. Çelik, Ş. Yurdakul, N. Özdemir	Fabrication of a lead(II)–selective PVC–membrane potentiometric sensor and its analytical applications Sarmad Luqman Hasan Sheekhoo, Oguz Özbek, Onur Cem Altunoluk , Kıymet Berkil Akar, Ömer Isildak
09:15	Correlation Between the Structural, Magnetic and Magnetocaloric Properties of Sol–Gel Synthesized La _{0.7} Ca _{0.27} Na _{0.03} MnO ₃ Perovskite Manganite M.S. Aslan , G. Akça, S. Kılıç Çetin, A. Ekicibil	Composition-Controlled Pd–Co Alloy Nanoparticles with Tunable Structural and Magnetic Properties Ruveyda Beyza Uguz , Emre Can Tayfun, Zafer Eroğlu, Onder Metin, Faruk Karadag, Ahmet Ekicibil, Dogan Kaya
09:30	Electrical Characterization of an AAO-Based GEM Detector Y. Kandeger , Y. Kalkan, A. Kosemen, S. Ozturk, Ramazan Lok	Structural, morphological and luminescence properties of Ag-doped SrSiO ₃ ceramics A. Mesto, V. Altunal, A. Ozdemir , Z. Yegingil, A. Ekicibil
09:45	Microhardness Properties of Graphene-Doped YBCO Superconductors V. Guckan , A.O. Ayas, F. Karadag, M. Akyol, A. Ekicibil	Effect of Growth Temperature and Substrate on the Electrochemical Performance of Manganese Oxide Thin Films Grown by RF Reactive Sputtering Ozan Öztürk, Fatih Bozkurt
10:00	Optical and Photocatalytic Properties of Composition-Controlled NiCoFe ₂ O ₄ Nanoparticles Hasan Huseyin Isik , Dogan Kaya, Faruk Karadag, Ahmet Ekicibil	Luminescence investigations on lanthanide doped CaB ₄ O ₇ phosphors T. Çağrı Kütük , V. Altunal, H. Ozturk

10:15	TEA AND COFFEE BREAK	
10:30	Chair Assist.Prof.Dr. Resul Özdemir	Chair Prof.Dr. Rana Özbakır
	Optical Band Gap Determination and Photocatalytic Degradation of Methylene Blue over Ru-Co ₃ O ₄ Nanostructures <u>I. Baldan Isik</u>	The Preparation of PVA based nanofibers by Electrospinning System <u>Gülşah Tuncel</u> , Habibe Özmen, Fahrettin Yakuphanoglu
10:45	Effect of Plasma Nitriding Parameters on H13 Tool Steel <u>F. Sehitoglu</u> , Y. Yurekturk	Investigation of Laser Photonic Sensor and Optical Properties <u>A. Salar</u> , F.Yakuphanoglu
11:00	Carbon Black-Supported Multifunctional Pd–Ni Nanoparticles: Magnetic Behavior and Electrocatalytic Activity <u>Emre Can Tayfun</u> , Ruveyda Uguz, Zafer Eroğlu, Onder Metin, Faruk Karadag, Ahmet Ekicibil, Dogan Kaya	Synthesis of novel sensor materials and potentiometric applications: Highly sensitive detection of In(III) ions in environmental samples Oguz Özbek, Kıymet Berkil Akar, <u>İsa Mert Eski</u> , Meliha Burcu Gürdere
11:15	Exceptional UV Shielding Properties of Corn Starch-Based Polymer Composite Films Modified with Mg-Al LDH/g-C ₃ N ₄ Nanostructures Hacı Veli Kalmış, <u>Hasan Eskalen</u> , Mustafa Kavgacı, Hakan Yaykaşlı, Sevim Kaya, Gökhan Ceyhan	Investigation of the Structural, Morphological, and Optical Properties of PANI-Doped ZnO Nanocomposites Synthesized by the Hydrothermal Method <u>Y. Orman</u>
11:30	A Highly Linear Two-Finger Suspended-Gate Pressure-FET for Urodynamic Pressure Sensing <u>Ahmed Harb</u> , Mustafa İstanbullu	Growth-Temperature Dependence of Si δ-Doped Al _x Ga _{1-x} As for GaAs-Based Laser Diode Structures <u>G. Yolcu</u> , R. Delvia, İ. Demir

11:45		Fabrication of a high–performance polymeric–membrane potentiometric sensor for chromium(III) determination <u>Oguz Özbek</u>, Abdulkadir Akyasan, Caglar Berkel, Kıymet Berkil Akar
12:00		Physical Characterization of Nanostructured CdO Thin Films Grown by SILAR Method <u>O. Erken</u>