

10 SEPTEMBER 2025 (MORNING)

KADI BURHANEDDİN HALL	
08:30	REGISTRATION
10:00	OPENING CEREMONY
11:00	TEA AND COFFEE BREAK
11:15	Chair Prof.Dr.Müjdat ÇAĞLAR
	Invited Speaker Prof.Dr. Marilena CARBONE "Zn ² G: Next Generation ZnO and its application"
12:00	LUNCH TIME

10 SEPTEMBER 2025 (AFTERNOON)

	VEHBİ CEM AŞKUN HALL	ERGUN GÖZE HALL
13:30	Chair Prof.Dr. Mustafa AKYOL	Chair Prof.Dr. Cumali SABAH
	Invited Speaker Prof.Dr. Sezai ELAGÖZ <i>"Sivas Cumhuriyet University Nanophotonics Application and Research Center (CÜNAM): A Journey from Vision to National Research Infrastructure Success"</i>	Effect of Annealing Time on the Optical, Structural and Mott-Schottky Measurement of the Constant Electrodeposited WO ₃ Thin Films E. Değirmenci , G. Atak
14:00	Dr. İhsan ÖZSOY ASELSAN Sivas Precision Optics Inc. CEO <i>"Evolution of Material Use in the Defense Industry; Aselsan Sivas Nanotechnology Applications"</i>	Impact of TMAI and SiH ₄ Flow Rates on the Structural and Electronic Properties of Lattice-Matched InAlAs for Quantum Cascade Lasers Abdulrhman ALKRDY , Dudu Hatice ÜNAL, Merve Nur KOÇAK, İsmail ALTUNTAŞ, İlkey DEMİR
14:30	Optimization of Si-Doped n-AlGaAs Growth by MOVPE G. Yolcu , İ. Perkitel, İ. Demir	Impact of Initial Processing Conditions on the Structure and Electrical Properties of Mixed-Phase Manganite Composite Materials B. Altan , Y.S. Ak, Ö. Birgi, A. Coşkun

14:45	Bandstructure and Material Engineering of InGaAs/InAlAs Quantum Cascade Lasers for Mid-IR Applications <u>Merve Nur Koçak</u>, İzel Perkitel, İsmail Altuntaş, İlkey Demir	Limitations of the Halpin-Tsai Model in Nanoparticle-Reinforced Epoxy Composites <u>Ahmet Çetin</u>
15:00		Controllable synthesis of Ni₈₀Fe₂₀-BiFe_{0.9}Cr_{0.1}O₃ core-shell one-dimensional nano geometry for enhanced magnetic and optical properties <u>S.Parajuli</u>, M.Akyol
15:00-16:00	PANEL Moderator: Prof.Dr. Müjdat ÇAĞLAR “University – Industry Collaboration” KADI BURHANEDDİN HALL	
15:15	POSTER SESSION 1	
15:45	TEA AND COFFEE BREAK	
16:00	Chair Assoc.Prof.Dr. İlkey DEMİR	Chair Prof.Dr. Marilena CARBONE
	Invited Speaker Prof.Dr. Yüksel ERGÜN "Pseudopotential Approximation from the Crystal of Atoms or Molecules to Superlattice Application"	Invited Speaker Prof.Dr. Recep ZAN “Dual Graphene Integration in Solution-Processed CTS Thin-Film Solar Cells”
16:30	Photoluminescence Characteristics of MOVPE-Grown InGaAs/InAlAs Quantum Heterostructures <u>I. Perkitel</u>, G.Yolcu, D.H.Unal, I. Demir	Investigating effect of A-Site Pb substitution with La on the magnetic, and magnetocaloric properties of LaPbNiMnO₆ double perovskite manganite <u>Arda Kandemir</u>, Ali Osman Ayaş, Ahmet Ekicibil
16:45	Effect of Absorption, Multiplication, and Grading Layers in Optimizing InGaAs Avalanche Photodetectors <u>D.H. Unal</u>, M.N. Kocak, I. Demir	Towards a Pressure-Sensitive MOSFET-Based Wireless Sensor for Urodynamic Pressure Mapping <u>Ahmed HARB</u>, Mustafa ISTANBULLU
17:00	Multi-functional Polymer based flexible Nano composites for Neutron and EMI Shielding Applications <u>Malik Sajjad Mehmood</u>	The Influence of Sintering Temperature on The Structural Properties of A_{0.67}Sr_{0.33}MnO₃ (A = La, Gd, Nd, Pr) Perovskite Manganites <u>B. Altan</u>, Y.S. Ak, Ö. Birgi, İ.B. Bürhan, E. Taşarkuyu, A. Coşkun
17:30	VISIT TO SIVAS CUMHURİYET UNIVERSITY NANOPHOTONICS RESEARCH CENTER	
19:30	CONFERENCE DINNER	

11 SEPTEMBER 2025 (MORNING)

	VEHBİ CEM AŞKUN HALL	ERGUN GÖZE HALL
	Chair Assoc.Prof.Dr. Mehmet Ali OLĞAR	Chair Prof.Dr. Ahmet EKİCİBİL
09:00	Biocorrosion Behaviour of Laser Beam Welded AISI 2205 Duplex Stainless Steel in Simulated Body Fluid C. Köse, <u>M. Gündüz</u> , H. B. Mutu, E. İlhan, O. Gündüz, S. Durdu	Illumination effect on the current-voltage (I-V) characteristics in the metal/insulator/semiconductor (MIS) type photodiodes <u>Arif Baştuğ</u>
09:30	Fabrication of Polymeric Artificial Cornea Using a Dual Electrospinning Technique G. Bozdoğan, M.C. Karaaslan, <u>Ö. Eğri</u>	Design And Construction Of An In-Situ Magnetron Sputtering Plasma Monitoring Setup <u>B. Bilki</u> , M. Tosun
09:45	Investigation of the Therapeutic Potential of Rosmarinus officinalis Derivative Exosomes in Regenerative Hair Mesotherapy <u>R. B. Taşdemir</u> , S. Dayan	Frequency dependent electrical parameters, voltage dependent surface states and series resistance in Au/n-Si (MS) structures with polymer interlayer from admittance technique <u>Çiğdem Ş. Güçlü</u>
10:00	Production of Ion-Doped Novel Bioactive Glass-Containing Polymeric Membranes and Evaluation of Their Bioactivity Properties Gözde Keleş, Tülay Merve Temel-Soylu, Kübra Özkan Güner, Yeşim Ayık, Bilge Sema Tekerek, Mine Kucak, İlkay Turhan Kara, Cem Özel, Ali Can Özarslan, <u>Sevil Yücel</u>	Physical and Photodiode Properties of Ir-doped NiO Films <u>Arsen Demiroglu</u> , Mujdat Caglar
10:15	Synthesis, Characterization, and in vitro Biological Evaluation of Boron, Magnesium, and Vanadium Doped Bioactive Glasses for Tissue Engineering Applications Kübra Özkan Güner, <u>Bilge Sema Tekerek</u> , Ali Can Özarslan, Yeliz Elalmış, Cem Özel, İlkay Turhan Kara, Mine Kucak, Yeşim Ayık, Sevil Yücel	Frequency-dependent capacitance-conductance-voltage characteristics and dielectric properties of the Al/(GO:PTCDA)/p-Si structures <u>Şükrü Karataş</u> , Niyazi Berk
10:30	TEA AND COFFEE BREAK	
	Chair Prof.Dr. Ali Osman AYAŞ	Chair Prof.Dr. Metin ÖZDEMİR
10:45	Effect of Hydrogen Incorporation on the Structure and Storage Capacity of WS ₂ <u>Ali ALTUNTEPE</u> , Recep ZAN	Invited Speaker Prof.Dr. Cumali SABAH <i>"Metamaterial-Enabled RF Monitoring of Earth Structures with Photogrammetric Validation"</i>

11:00	Disentangled UHMWPE Synthesis: New opportunities for UHMWPE processing G. Korkmaz	Development of High-Quality CTS Thin Films on Flexible Mo-Foil Through Two-Stage Processing M. Çam, Y. Atasoy, R. Zan, M.A. Olgar
11:15	Development of a Permanent Hair Dye Formulation Made from Natural Ingredients E. ECER, Ü. AÇIKEL	The Electrical and Magnetic Properties of Sodium and Large-Scale Nano-Sized Europium Co-Substituted Bi,Pb-2223 Superconducting Materials Mehmet Ersin Aytekin , Mustafa Akyol
11:30	Properties of Polypropylene-Based Micro Synthetic Fiber Reinforced Mortars Containing Calcined Marl Blended Cement Y. Akgün , C. Özdem Baş	The optical, structural, and morphological properties of SnS/ITO thin film obtained by chemical bath deposition Mohamed El Moustapha Abd Dayem , Sevda İldan Özmen, Hülya Metin Gübür
11:45	Investigation of Catalytic Activities of PtAu-Co Nanoparticles in Alkaline Media Dogan Kaya , Emre Can Tayfun, Mustafa Akyol, Faruk Karadag, Ahmet Ekicibil	Precision Engineering of Dental Aligners: The Role of Additive Manufacturing Materials and Techniques O. Er , D.A. Bircan
12:00	LUNCH TIME	

11 SEPTEMBER 2025 (AFTERNOON)

	VEHBİ CEM AŞKUN HALL	ERGUN GÖZE HALL
	Chair Prof.Dr. Recep ZAN	Chair Assoc.Prof.Dr. Ali Kemal HAVARE
13:30	Invited Speaker Prof.Dr. Mustafa AKYOL "Recent Developments on Electromagnetic Wave Absorbing Materials"	Enhanced Optoelectronic Performance of Chemically Synthesized Al-Graphene Co-Doped ZnO Thin Films: A Promising TCO Approach for Thin-Film Photovoltaics Y. Atasoy , D. Özbek, A. Altuntepe, M.A. Olğar, R.Zan
14:00	Modification of YBCO Superconductors with 2D Graphene: Effects on Transition Temperature and Morphology V. Guckan , S. Karavul, F. Aslan, A.O. Ayas, F. Karadag, M. Akyol, A. Ekicibil	Biocompatibility Properties and Bacterial Attachment of Laser Beam Welded AISI 2205 Duplex Stainless Steel C. Köse, M. Gündüz , H. B. Mutu, E. İlhan, O. Gündüz, S. Durdu
14:15	The Evolution of Digital Workflows and Biomaterials in Dental Implantology: A Clinical Protocol from Planning to Restoration O. Er , D.A. Bircan	Fabrication and characterization of three-dimensional PCL/PEG artificial nerve conduits loaded with cobalt (II) oxide and H.perforatum oil Mustafa Caner KARAASLAN, Özlem EĞRİ , E. Çağan

14:30	Effect of Low Cu Doping on Optical and Electrical Properties of ZnO Thin Films <u>S. Gürakar</u>	Fabrication and characterization of dual electrospun polymeric dental membranes M.C. Karaaslan, A. Bülbül, <u>Ö. Eğri</u>, S. Eğri
14:45	Negative dielectric constant controlling in nanostructure CdO material by heat treatment <u>Y. Orman</u>, F.Yakuphanoglu	Bioactive Pollen-Integrated Cryogels: Potential Applications in Tissue Engineering <u>D.Demir</u>, S.Ceylan, S.L.İpek, O.Kahraman
15:00	POSTER SESSION 2	
15:30	TEA AND COFFEE BREAK	
15:45	Chair Prof.Dr. Esin KASAPOĞLU	Chair Assoc.Prof.Dr. İsmail ALTUNTAŞ
	Structural, Magnetic and Magnetocaloric properties of La based Na substituted LaNaMnNiO₆ Double Perovskite Manganite system İbrahim Barış Sever, Arda Kandemir, <u>Ali Osman Ayaş</u>, Ahmet Ekicibil	Fabrication of potentiometric sensors based on newly synthesized rhodanine derivatives for the direct determination of copper(II) ions in environmental samples <u>O. C. Altunoluk</u>, O. Özbek, E. Kalay, C. Berkel, Ö. Isildak
16:00	Electron and Hole Mobilities of Monolayer ZrS₂: ab initio Calculation B. Özdemir, N.T. Yıldız, H.C. Çekil, M. A. Sabaner, Ü. Dömekeli, F. İşık, S. Şengül, <u>M. Özdemir</u>	CaAl₁₂O₁₉:Tm,Be Ceramics for Optically Stimulated Luminescence Dosimetry <u>V. Altunal</u>, Z. Yegingil
16:15	Fast and selective polymer membrane potentiometric sensors based on 5-arylidene rhodanine derivatives for the determination of Nd(III) ions <u>I. M. Eski</u>, O. N. Aslan, O. C. Altunoluk, O. Özbek, E. Kalay	Evaluation of Morphological and Structural Properties of Silicate-Based Bioactive Glass Nanoparticles as a Function of Production Conditions and Sodium Content <u>Y. Ayik</u>, A. Alizadeh, C. Ozel, A. C. Ozarslan, S. Yucel
16:30	A highly selective potentiometric sensor for the rapid and reliable detection of etodolac O. Özbek, <u>M. Elik</u>	High Photocatalytic Efficiency of CoFe₂O₄ Nanoparticles for Dye Degradation Under UV Light <u>Hasan Huseyin Isik</u>, Ilknur Baldan Isik, Dogan Kaya, Ahmet Ekicibil, Faruk Karadag
16:45	Enhanced Visible-Light Photocatalytic Activity of La-Doped Cd_{1-x}Zn_xS Solid Solutions: Structural and Optical Characterization <u>İpek Balnan</u>, Sabit Horoz	Optimization of FDM 3D Printer Parameters: An Experimental and Data-Driven Investigation on Tensile Strength and Surface Roughness with PETG Filament <u>A.Kaptan</u>
19:30	GALA DINNER	

12 SEPTEMBER 2025 (MORNING)

	VEHBİ CEM AŞKUN HALL	ERGUN GÖZE HALL
	Chair Prof.Dr. Hülya METİN GÜBÜR	Chair Assoc.Prof.Dr. Doğan KAYA
09:00	Invited Speaker Prof.Dr. Şemsettin ALTINDAL "On the temperature and voltage dependence of complex dielectric, complex electric modulus, ac conductivity, and Nyquist behavior in Au/(CF:rGO:PVA)n-Si structures"	Effect of 1 wt% Carbon Nanotube Reinforcement on Epoxy's Mechanical and Thermal Properties G. K. Boztepe, <u>M. H. Boztepe</u>, A. Ekicibil, F. Karadağ
09:30	Influence of RF Power on Structural and Optical Properties of Nitrogen-Doped Ga₂O₃ Thin Films <u>Hicret Hopoğlu</u>, Ebru Şenadım Tüzemen	Analysis of impedance spectroscopy for hydroxyapatite-based biosensors <u>A. Dere</u>, N. Özdemir, F. Yakuphanoglu
09:45	Photocatalytic Performance of TiO₂ Thin Films Deposited at Different Substrate Temperatures <u>Hafize Seda Aydınoğlu</u>, Ebru Şenadım Tüzemen	Field-Tunable Optical Response of a Planar Liquid Crystal Cell: A Monte Carlo and Mueller Matrix Approach with RGB-Based Visualization <u>Y. Emül</u>
10:00	Effect of Some Organic Inhibitors on General Corrosion of Various Surface AA 2024 and AA 7075 Alloys Using Electrochemical Methods <u>Ş.Yılmaz</u>, A.Yılmaz	The Tuning the Magnetocaloric Properties of La_{0.7}Nd_{0.1}Na_{0.2}MnO₃ by Mn-Site Bi Substitution <u>S. Kılıç Çetin</u>, M. S. Aslan, G. Akça, F. Karadağ, A. Ekicibil
10:15	Layered V/III Ratio Optimization for Sandwich-Structured AlN/PSS Films <u>F. K. Özbakır</u>, İ. Altuntaş	Investigation of Catalytic Activities of PtAuCo Nanoparticles in Alkaline Media <u>Emre Can Tayfun</u>, Dogan Kaya, Mustafa Akyol, Faruk Karadag, Ahmet Ekicibil
10:30	TEA AND COFFEE BREAK	
	Chair Assist.Prof.Dr. Yakup EMÜL	Chair Assoc.Prof.Dr. Volkan ALTUNAL
10:45	Investigation of Structural, Morphological, Optical and Photocatalytic Effects of ZnO-TiO₂ Heterostructured Thin Film Produced by Physical Vapor Deposition (PVD) Method <u>A. Çetin</u>, M. Şimşir, E. Şenadım Tüzemen, A. Özer	Modified Polyol Route for Synthesis of PtCuNi Nanocatalysts with Excellent HER Activity Across pH Conditions <u>I. Baldan Isik</u>, H.H. Isik, F. Karadag, A. Ekicibil, D. Kaya
11:00	Analysis of Experimental Data of Schottky Diode Characteristics in Wide Temperature Range Using Artificial Neural Network Modeling <u>M.Koç</u>, N. Yıldırım, M. Göndük, S. Koçkanat, H. Doğan	Analysis of the magnetocaloric properties of La_{0.85}Na_{0.15}MnO₃ perovskite <u>M.S. Aslan</u>, G. Akca, S. Kılıç Cetin, A. Ekicibil

11:15	Optimizing Ammonia Flow to Achieve High Structural and Optical Quality in AlN Thin Films on Patterned Sapphire Substrates <u>F. K. Özbakır</u>, İ. Altuntaş	Artificial Intelligence-Based Decision Support Systems in Semiconductor Manufacturing: MOVPE Application <u>E. Kayhan</u>, M.N. Koçak, İ. Demir, E. Şenadım Tüzemen, A.G. Yüksek
11:30	Effect of Substrate Temperature on the Photocatalytic Degradation Performance of NiO Thin Films <u>Hafize Seda Aydınoğlu</u>, Ebru Şenadım Tüzemen	Structural and Surface Morphology of Martensitic Stainless Steel – Glass powder Composite Materials During Corrosion Study <u>Ayşe Nur ACAR</u>, Dogan Kaya, Abdul Kadir Eksi, Ahmet Ekicibil
11:45	Investigation of the Optical and Structural Properties of Si/Ga₂O₃ Thin Films <u>H. Hopoglu</u>, E.S. Tüzemen	First-Principles Investigation of 2D o-Al₂C₂ Monolayer: A High-Performance Anode for Li/Na-Ion Batteries <u>M. Agouri</u>, A. Benaddi, N. Khossossi, S. El Filali, A. Abbassi, A. Hasnaoui, S. Taj, B. Manaut
12:00	Analysis of Current-Voltage and Capacitance-Voltage Characteristics in Inhomogeneous n-Si/Mo Schottky Diodes <u>S.Tokmanav</u>, H. Doğan	Computing-Based Measurement Architecture for Semiconductor and Photovoltaic Characterisation <u>E. Kayhan</u>, M.N. Koçak, İ. Demir, E. Şenadım Tüzemen, A.G. Yüksek