

PhD STUDENTS AND YOUNG RESEARCHERS CONFERENCE

PROGRAM

OCTOBER 21st

15



	A101	D401
09:00	Opening remarks	
	Chair: dr. Vincentas Mindaugas Mačiulis	
	O1 Agnė Boguševičė E. meliloti pagrįstų MKE naudojimas žemės ūkio mėginių analizei	
	O2 Adei Abouhagger Microfluidic Synthesis of Tetracycline-Loaded Chitosan Nanoparticles for Antibiofilm Applications	
	O3 Muhammad Usman Khalid Tailoring niobium pentoxide nanoparticles via distinct chemical routes: structural characterization and antibacterial evaluation	
09:10-10:55	O4 Viktorija Reinikováitė Back to basics: Geometric surface area as the most relevant metric for graphite granule bioanodes	
	O5 Justina Stonytė Electrochemical Pathways to Archaeological Fungal Detection: Integrating B-Vitamin Derived Polymer Sensors, Stable Isotopes, and Yeast Genomics	
	O6 Mantvydas Usvaltas Affinity Evaluation of Polyclonal Human Antibodies to Antigen from a Repurposed Vaccine Using an Optical Method	
	O7 Tadas Jelinskas Jėgų spektrometrijos taikymas tiriant mikrogravitacijos poveikį audinių modeliams	
11:00-12:00	Meeting of the FTMC Director and the Head of the Doctoral School with FTMC doctoral students	
12:00-13:00	Lunch break	
	Chair: dr. Justinas Jorudas	Chair: dr. Lena Golubewa
	O8 Ihor Krapivin Monitoring UV-Acrylate Photopolymerization by THz-TDS: Transmittance, Refractive Index and Thermal Signatures	O15 Ivan Halimski Optical properties of trans-stilbene in different phases: monomers, aggregates and crystallites
	O9 Mohammad Esmaeil Daraei Phase-Change Vanadium Dioxide Metamaterial Absorber with Radial Symmetry at Terahertz Frequencies	O16 Enayat Mohsenzadeh Rational Design of Molecularly Imprinted Polymer for Melamine and Cyanuric Acid Detection: A DFT Approach
13:00-14:45	O10 Maxim Moscotin Modified Edge-Gating Geometry of High-Electron-Mobility Transistors for Terahertz Detection	O17 Tripura Ganti NiZn/Ti and Au(NiZn)/Ti Anode catalysts for Borohydride Oxidation in Clean Energy Systems
	O11 Simonas Driukas THz spectroscopy of GeSn films for ultrafast optoelectronic applications	O18 Pamela Rivera Bismuth-Doped Laser-Induced Graphene Electrodes for Simultaneous Detection of Zn ²⁺ , Pb ²⁺ , and Cd ²⁺
	O12 Karolis Galvanauskas Stibidų pagrindo infraraudonosios spinduliuotės fotodetektoriai	O19 Ilya Navitski Heavy metal sensing capabilities of MXenes and potential applications in protein detection
	O13 Austėja Trečiokaitė Didelio pralaidumo erdvinė-laikinė optinė koherentinė tomografija	O20 Aswathi Raveendran Comparative study of amino acids influence on the hydrothermally synthesized CoFe ₂ O ₄ nanoparticles
	O14 Justina Žemgulytė Cilindrinės rezonansinės antenos radijo bangų energijos rinkimui	O21 Saqib Ali Au Functionalized MXene for Plasmonic Detection of Organic Molecules in Water
14:45-15:00	Break	
	Chair: dr. Tomas Daugalas	Chair: dr. Nadežda Traškina
	O22 Pavel Piatrou Magnetic field dynamics during magnetic pulse forming and crimping	O29 Germantė Paulikaitė Surface-Modified MXenes as Promising Adsorbents for Organic Pollutant Elimination
	O23 Darius Antonovič Development and Characterization of CoFe/Cu-based Spin-Valves	O30 Gytautė Sirgėdaitė Bimetalinės nanostruktūros sustiprinto Ramano sklaidos tyrimams
15:00-16:45	O24 Ifra Bibi Laser Induced Single Photon Emitters in Hexagonal Boron Nitride for Quantum Key Distribution	O31 Virginija Ulevičienė Azotų ir metalais legiruotos biomasinės anglies katalizatorių (AWC-Co-N, AWC-Cu-N) sintezė ir jų taikymas hidrazino oksidacijai
	O25 Seda Türkcan Carrier Dynamics in n- and p-type InGaN Layers	O32 Huma Amber Cobalt-Based Electrocatalysts: A Pathway Toward Cost-Effective and High-Performance Water Splitting
	O26 Muhammad Adnan Saeed Directly Grown Graphene on Annealed and Non-annealed SiO ₂ Films of Different Thicknesses	O33 Gitana Valeckytė Nikelio-kobalto dangų cheminis nusodinimas ir taikymas vandenilio generavimui
	O27 Aivaras Špokas Extending Bismide Emitter Applications from Medicine to Telecommunication	O34 Tomas Paškevičius Development of Electron Deficient Phosphine Ligands for Palladium(II) Catalysed Fluorination of Arenes
	O28 Deividas Vainauskas SbSeI dangų nusodinimo optimizavimas terminio garinimo metodu	
17:00-18:30	Success is a Habit or How to Awaken Your Motivation: interactive lecture for PhD students by Rima Vanagė	
18:30	 FTMC PhD Student Community Gathering 	

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PROGRAM
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	A101	D401
	Chair: dr. Ada Steponavičiūtė	Chair: dr. Laurynas Bučinskas
	O35 Julius Lukošius Photodarkening in BGSe and BGGSe	O45 Karolis Daugevičius Star cluster size evolution in the Andromeda galaxy
	O36 Julianija Nikitina Submicron Periodic Structures in Metal Oxide Thin Film via Laser Ablation and Thermal Oxidation	O46 Agnė Minderytė City-produced and transported black carbon: synergy of in-situ optical measurements and modeling
	O37 Darija Astrauskytė Nanostruktūrizuotų dangų stabilizavimas naudojant atominių sluoksnių nusodinimo technologiją	O47 Durre Nayab Habib Tracing Photochemical Aging in Biomass Burning Aerosols Using Carbon Isotopes
	O38 Vita Petrikaitė Lazerinis nanodalelių generavimas iš Ti-Au plonų dangų plazmoninių spalvų analizei	O48 Viachaslau Alifirenka Source apportionment of aerosol particles by positive matrix factorization in urban background environment (Vilnius, Lithuania)
9:00-11:30	O39 Kernius Vilkevičius Hibridinės sidabro-aukso bimetalinės nanogardelės, skirtos plazmonų rezonanso sensorikai	O49 Sonata Pleskytė Impact of the physical properties of LDPE mulch films on photocatalytic degradation efficiency under UV irradiation
	O40 Rodrigas Liudvinavičius Aukso ir sidabro mikrogumbelių gardelės žadinančios plazmonų rezonansą	O50 Kristina Mikalauskienė Development of the Non-Destructive Method for the Determining Surface Contamination in Radioactive Waste
	O41 Karolis Stravinskas Mechanical and Thermal Property Optimization of SiC-Reinforced AISi10Mg Composites via DMLS	O51 Mahrosh Javed Development of modified graphene oxide nanocomposite for the removal of nanoplastics from fresh water
	O42 Dainius Balkauskas Design and Investigation of SSAIL Transparent Electrodes on Glass for Electrochromic Applications	O52 Tayyab Tahir Development of Magnetic Buckwheat Hull–Fe ₃ O ₄ Nanocomposite for Biosorption of Pb(II), Cd(II), and Cr(III) from Mixed Heavy Metal Wastewater
	O43 Ioanna-Angeliki Petsi Two-Photon Polymerization of Low-Density Micro-Targets and Assembly into Rigid Holders for Inertial Confinement Fusion Studies	O53 Gediminas Skarbalius CFD Modeling and Optimization of Forced-Air Cooling in Indoor LiFePO ₄ Battery Energy Storage Cabinets
	O44 Lukas Šalavėjus Design of Wide Input Voltage Range DC-DC Converter Integrated Circuit for Automotive Applications	
12:00-13:00	Lunch break	
13:00-15:00	Poster Session (near A101)	

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POSTERS

	near A101, 13:00-15:00
P1	Benas Stanionis Terahertz Emission from Bi Layers Grown on GaAs(100)
P2	Bilal Islam Additive Manufacturing Approach for the Development of Piezoelectric Polymer–Ceramic Composites
P3	Gabrielė Rankelytė Impact of the Protein Environment on the Excited States of the Pigments in Photosynthetic Complexes
P4	Greta Kasputė Molecularly imprinted polymers as selective recognition elements for geraniol detection
P5	Paulius Baronas Systematic Study of Sulfuric Acid Anodization Parameters for Satellite Grade Aluminum Alloys
P6	Kamilė Kasperavičiūtė Improving membrane coating approaches to promote cell adhesion in two-channel microphysiological systems
P7	Felix Lücke Development of a Biocompatible Polymer-Based Drug Delivery System
P8	Raiane Rodrigues da Silva Pea albumin modification by Pulsed Electric Field (PEF)
P9	Kamila Turuta Synthesis of photoelectrochemically active g-C ₃ N ₄ layers
P10	Marijus Mozdeikis Difrakcinių gardelių periodo ir lazerio impulso energijos tyrimas aukštos kokybės plazmoniniams rezonansams ant ITO padėklų taikant tiesioginį lazerinį rašymą
P11	Barbora Škėlaitė Terahertz Spectroscopy of Semiconductor Metasurfaces in GaAs Based Structures
P12	Patricija Ivanauskaitė Methanol Spectroscopy at 257 GHz Employing CMOS-Based Optopair
P13	Justina Vaičiaitė Kvantinio dimero modeliavimas sukabintais klasikiais harmoniniais osciliatoriais
P14	Paulius Kizevičius Plokščiųjų THz optikos elementų palyginimas skaitmeniniame vaizdinimo eksperimente
P15	Jorūnas Dobilas Monte Carlo Study of the Self-assembly of INDO ₄ Molecules on Ag Surfaces
P16	Justas Žuvelis Impact of AlGaAs Barrier Composition and Profile on the Emission of InGaAs Quantum Wells
P17	Giedrius Puidokas Search for High Triplet Energy Hosts for Stable Blue TADF OLEDs
P18	Mehri Davtalab Investigating the effects of urban structure on urban heat island using machine learning
P19	Aistė Štaupienė Improved Emission Properties of GaAsBi QWs due AlGaAs Graded Barrier Design and Thermal Annealing
P20	Lukas Stacevičius Integration of Digital Terahertz Holography and Light Scattering Modeling in Granular Material Analysis
P21	Miglė Stančiauskaitė Label-Free Immunosensing of AmpC Beta-Lactamase Using Combined SE/QCM-D Method with Subclass-Dependent IgG Capture Layers
P22	Patricija Strumilaitė GaAsBi/(Al,Ga)As kvantinių duobių atkaitinimo greito atkaitinimo krosnyje tyrimas
P23	Karolis Mundrys Fotonių elementų taikymas vieno pikselio THz vaizdinime
P24	Gabriel Slabošev Electrochemical Sensor for Salicylic Acid Based on a Molecularly Imprinted Polypyrrole
P25	Andžej Borel RF galios stiprintuvų elgsenos modeliavimas naudojant interpoliuotus atminties polinomas

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near A101, 13:00-15:00

P26	Artem Yerniazov Nanofilm conductive polymer MIP platform for detection of BSA
P27	Danielius Ragoža Optimization of Exposure Parameters for SLA-Fabricated SiO ₂ Nanoceramic Composites
P28	Dainius Ratkus Femtosecond laser ablation and polishing of silicon carbide wafers by bibursts
P29	Brigita Žakevičiūtė Vienfazio pulsuojančio srauto dinamikos ir struktūros mikrokaneluose tyrimas
P30	Gintarė Ruginytė Design and Application of MXene–Noble Metal Nanostructure Composites for Colourimetric Water Quality Testing
P31	Deividas Rūškys Formation of H, C, Si, La Ion targets to use in the Negative Cs-sputtering Ion source Hiconex
P32	Evita Spalinskaitė Plasmon–exciton polaritonic emission lifetime dynamics under strong coupling
P33	Jonas Paukštys Electron-deficient phosphine ligands for palladium catalysed C–N cross-coupling reactions
P34	Edgard Aleinikov Comprehensive Literature Review of Thermal and Electrical Challenges in Electro-Optic Pulse Drivers
P35	Mantas Mackelis Leidenfrosto garo plėvelės poveikio karšto kūno šilumos perdavimui skaitinis modeliavimas
P36	Dovilė Vasiliauskaitė Investigation of New Electron-Transporting Materials in Perovskite Solar Cells Using the Kinetic Photoconductivity Method
P37	Rugilė Pečiulytė Priverstinės Briliueno sklaidos lazerio impulsų spaustuvus naudojant HT-230 skystį
P38	Robertas Virkėtis YAG:Ce 3D mikrostruktūrų gamyba naudojant dvifotonę polimerizaciją ir kalcinaciją
P39	Jelizaveta Fedotova Investigation of Spectroscopic Properties of Free-Base Tetraphenylporphyrin and Hexagonal Boron Nitride Van Der Waals Complex
P40	Noor ul Ain Ahmed Charge Carrier Dynamics at the Perovskite/Graphene–MoO ₃ Interface
P41	Titas Tamošauskas Elektrochrominių sluoksnių ir skaidrių vario takelių elektrodų spektrinis tyrimas
P42	Samanta Gelumbickytė Microfluidic Preparation of Chitosan Nanoparticles for Drug Delivery
P43	Dmytro Shyshkin Enhanced Performance of Gold Nanoparticles Modified Nickel-Iron for Sodium Borohydride Oxidation
P44	Daumantas Sriubas Formation of channels in soda-lime glass using a laser ablation and chemical etching through a thin chromium layer mask
P45	Ugnė Šilingaitė Terahercinių vaizdų raiškios gerinimas naudojant neuroninius tinklus
P46	Milda Valytė Ar kosmologiniai modeliai atkuria stebimas galaktines tėkmes?
P47	Eimantas Dermauskas Fazės pokyčio priklausomybė nuo geometrijos formuojant daugiasluoksnes modifikacijas lydytame kvarce femtosekundiniu lazeriu
P48	Paulius Rindzevičius Polikristalinių deimantinių darinų su metalinėmis nanostruktūromis KARS tyrimas/CARS study of polycrystalline diamond structures with metal nanostructures
P49	Aidas Mikalauskas Bismuto koncentracijos įtaka GaAs _{1-x} Bi _x optinėms savybėms
P50	Muhammad Tayyib Spread Spectrum signals applications in thickness resonant ultrasound spectroscopy
P51	Adomas Strazdas Humidity-Induced Stress Variations in Nanostructured GLAD Coatings for High-LIDT Optical Mirrors