



# 31st International

## Symposium on Analytical and Environmental Problems

### **POSTER SCHEDULE**



Szeged, Hungary October 13-14, 2025 University of Szeged

#### **Poster Presentations: Monday**

Poster presenters are asked to hang up their posters between  $8^{30}$ - $10^{00}$  Monday, and remove them after  $16^{30}$ .

- Mo\_1. Mirela Ahmadi: MOLECULAR NUTRITION MEETS ENVIRONMENTAL SCIENCE: A REVIEW OF NOVEL BIOACTIVE COMPOUNDS AND THEIR ECOTOXICOLOGICAL IMPACT
- **Mo\_2.** Radu Banica: PRECURSOR-DRIVEN RAPID SOLID-STATE SYNTHESIS OF YBO<sub>3</sub>: TOWARD EFFICIENT Pr<sup>3+</sup>-DOPED UPCONVERSION HOSTS
- MO\_3. Alexandra Bargan: NEW SILICONE-BASED MEMBRANES WITH FUNCTIONALIZED SILSESQUIOXANES. CHARACTERIZATION AND PERSPECTIVES FOR ENVIRONMENTAL AND BIOLOGICAL APPLICATIONS
- Mo\_4. Maria-Roxana Biricioiu: UNCOVERING GANGLIOSIDE BIOMARKERS IN HUMAN EPILEPSY BY ION MOBILITY MS/MS
- Mo 5. Alexandra Ioana Bucur: REINTEGRATION OF SEASHELLS WASTE FOR WATER PURIFICATION
- Mo\_6. Alexandra Ioana Bucur: SEM STUDY OF CALCIUM PHOSPHATES ELECTRODEPOSITED ON Ti SUPPORT FROM ACIDIC ELECTROLYTE SOLUTION
- Mo\_7. Bucur Raul Alin: PRELIMINARY STUDY OF TiO2@In2O3 OBTAINED FROM SOLVOTHERMAL SYNTHESIS AS POTENTIAL RECOMBINATION BARRIER LAYER IN DYE SENSITIZED SOLAR CELLS
- Mo 8. Simon Busuioc: ELECTROCHEMICAL RESPONSE OF METAL OXIDES IN SODIUM HYDROXIDE
- Mo\_9. Doru Buzatu: ADVANCED HYBRID THIN FILMS BASED ON MONTMORILLONITE FUNCTIONALIZED WITH PEROVSKITE NANOSTRUCTURES
- Mo\_10. Mihaela Lăcătuș, Ioan Ladislav Caba: THE INFLUENCE OF CLIMATIC CONDITIONS ON AMARANTHUS RETROFLEXUS L. AND CHENOPODIUM ALBUM L. PLANTS
- Mo\_11. Cristian Casut: CONDUCTIVITY AND CHARGE TRANSPORT IN SILICONE COMPOSITES CONTAINING PEROVSKITE POWDERS
- Mo\_12. Anișoara Duma Copcea: STUDIES ON REDUCING ENVIRONMENTAL POLLUTION PRODUCED BY AGRICULTURAL TRACTORS
- Mo\_13. Anemona-Mariana Cornea: ELECTROCHEMICAL BEHAVIOR OF COPPER N,N'-BIS[(2-HYDROXYBENZILIDENEAMINO)-PROPYL]-PIPERAZINE AS COORDINATION POLYMER IN SALINE SOLUTION
- Mo\_14. Cozma Antoanela: EVALUATION OF THE NUTRITIONAL PROFILE OF RED ONION (ALLIUM CEPA L.) PRELIMINARY RESULTS
- Mo 15. Aurelia Visa, Luminita Crisan: CHEMISTRY WITH IMPACT IN EDUCATION FOR A HEALTHY LIFESTYLE
- Mo\_16. Raluca Ica: GLYCOLIPIDOMIC CHARACTERIZATION OF ASTROCYTOMA AND ADJACENT TISSUE: A MASS SPECTROMETRY APPROACH TO GANGLIOSIDE PROFILING
- Mo\_17. Ioana M.C. Ienașcu: DETERMINATION OF THE SUPRAMOLECULAR ARCHITECTURE OF SOME N-(2-BROMO-PHENYL)-2-HYDROXY-BENZAMIDE INCLUSION COMPLEXES
- Mo\_18. Mazăre Veaceslav: THE CHARACTERIZATION AND VALUATION OF THE POTENTIAL OF THE AGRICULTURAL LAND FUND IN THE MUNICIPALITY OF SACALAZ, TIMIŞ COUNTY
- **Mo\_19. Mihaela Gherban:** CORROSION TEST IN 0.1 M HCl OF THE PSEUDO-BINARY OXIDES UNDOPED AND DOPED WITH Er<sup>3+</sup> IONS
- **Mo\_20. Casiana Mihuţ:** THE IMPACT OF PEDOCLIMATIC CONDITIONS AND TECHNOLOGICAL ADAPTATION ON WINE PRODUCTION IN THE RECAŞ VINEYARD CENTER (2023–2024)
- Mo\_21. Vlad Dragoslav Mircov: CHARACTERIZATION OF THE RAINFALL AND WIND REGIME AT THE TIMISOARA AND SANNICOLAU MARE METEOROLOGICAL STATIONS OVER A FIVE-YEAR PERIOD
- Mo 22. Diana Moigradean: OXIDATIVE STABILITY OF FORTIFIED SESAME OIL WITH SPICES
- Mo\_23. Mina Morariu (Popescu): ANTICORROSIVE NANOMATERIALS OF THE TYPE ZN<sub>3</sub>NB<sub>2</sub>O<sub>8</sub> UNDOPED AND DOPED WITH TRIVALENT ER<sup>3+</sup> IONS IN SALINE ENVIRONMENT
- Mo\_24. Cristina Mosoarca: BLUE-TO-UVC UPCONVERSION PHOSPHOR-POLYMER HYBRIDS FOR LIGHT-DRIVEN ANTIMICROBIAL APPLICATIONS
- Mo\_25. Simona Gabriela Muntean: REMOVAL OF DYES FROM TERNARY SYSTEM BY ADSORPTION
- Mo\_26. Ileana Nichita: THE CHARACTERIZATION OF RECYCLED ACRYLONITRILE-DIVINYLBENZENE POLYMER FOR POSSIBLE ANTIMICROBIAL TESTS
- Mo 27. Mircea Nicolaescu: INTEGRATION OF AEROTITANIA MICROTUBES IN UV PHOTODETECTORS
- Mo\_28. Okros Adalbert: THE COURSE AND EVOLUTION OF AGRICULTURE IN THE BERLIȘTE AREA, CARAȘ SEVERIN COUNTY
- Mo\_29. Okros Adalbert: THE COURSE AND EVOLUTION OF AGRICULTURE IN CUJMIR, MEHEDINTI COUNTY
- Mo 30. Nomuun Oyunbat: CHARACTERIZATION OF NEW PEPTAIBIOTICS IN MONGOLIAN TRICHODERMA ISOLATES
- Mo\_31. Muhammad Iqbal Perdana: CHARACTERIZATION AND APPLICATION OF STARCH/CHITOSAN-BASED FILM INCORPORATED WITH VANILLIN FOR ACTIVE FOOD PACKAGING
- MO 32.Ádám Pitó: SYNTHESIS AND CHARACTERIAZTION OF PROMOTED FE<sub>3</sub>O<sub>4</sub> CATALYSTS FOR CO<sub>2</sub> REDUCTION
- Mo 33. Mariana-Atena Poiana: FORMULATION OF FUNCTIONAL ORANGE JELLIES ENRICHED WITH ROSEHIP POWDER
- Mo 34. Sofia Popescu: CHEMICAL PROPERTIES AND NUTRITIONAL RELEVANCE OF ROMANIAN EDIBLE FOREST FRUITS
- Mo\_35. Florina Radu: IMPACT OF ESSENTIAL OILS FROM ROMANIAN AROMATIC PLANTS ON MICROBIOLOGICAL QUALITY OF SOFT GOAT CHEESE
- Mo 36. Laura Rădulescu: EXOTIC FRUIT JAM SENSORY AND PHYSICOCHEMICAL CHARACTERIZATION
- Mo\_37. Zoltán Gergő Rojkó: FROM LABORATORY TO SEMI-PILOT SCALE: FISCHER-TROPSCH SYNTHESIS OVER A NA-FE<sub>3</sub>O<sub>4</sub> CATALYST FOR E-FUEL APPLICATIONS

#### 31st International Symposium on Analytical and Environmental Problems

- Mo\_38. Gyula Kajner, Szabolcs Roszik: PERFORMANCE COMPARISON OF TWO SUBSTRATE-BASED APPROACHES FOR LIQUID LIBS ANALYSIS: NANOPOROUS GLASS vs. Si-WAFER
- Mo 39. Nataliia Rudenko: STAINLESS STEEL-BASED ELECTROCATALYSTS FOR SULFITE OXIDATION IN ALKALINE MEDIA
- Mo\_40. Florina Stefania Rus, Cadis Adrian-Ionut: OBTAINING AND CHARACTERIZATION OF TiO2 BY DIP COATING FOR UV-BLOCKING APPLICATIONS
- Mo\_41. Scedei Daniela Nicoleta: DETERMINATION OF BIOMETRIC AND CHEMICAL PARAMETERS IN THE FRUITS OF SOME QUINCE VARIETIES
- Mo\_42. Daniela Stoin: FABA BEAN FLOUR: AN ALTERNATIVE SOURCE FOR DEVELOPING GLUTEN-FREE PASTA WITH FUNCTIONAL PROPERTIES
- Mo\_43. Stroia Marius: IMPACT OF PEDOGENETIC FACTORS ON THE MORPHOLOGICAL AND CHEMICAL PROPERTIES OF REPRESENTATIVE SOILS IN PECICA, WESTERN ROMANIA
- Mo\_44. Boglárka Szász, József Mihalkó: ANALYSIS OF THE AMOUNT AND ENVIRONMENTAL IMPACT OF FOOD WASTE IN THE FOOD INDUSTRY
- Mo\_45. Nermin Tahboub: AEROBIC FERMENTATION OF SORGHUM BY LACTOBACILLUS ACIDOPHILUS: IMPACT ON BACTERIAL GROWTH, PHENOLIC COMPOSITION, AND ENZYMATIC ACTIVITY
- Mo\_46. Eszter Takács: MONITORING OF CARBAMAZEPINE PHARMACEUTICAL ACTIVE INGREDIENT IN RIVER DANUBE AND LAKE BALATON
- Mo\_47. Milica Țară-Lungă-Mihali: ELECTROCHEMICAL IMPEDANCE SPECTROSCOPY STUDY OF ZINC METAL PHOSPHONATES IN SALINE SOLUTION
- Mo\_48. Bogdan-Ovidiu Taranu: AN OVERVIEW OF SPECIFIC PORPHYRIN DERIVATIVE-INVOLVING STUDIES REPORTED IN A TEN YEAR PERIOD AT THE INTERNATIONAL SYMPOSIUM ON ANALYTICAL AND ENVIRONMENTAL PROBLEMS (ISAEP)
- Mo 49. Kitti Tari: HPLC-MS/MS-BASED METABOLOMIC ANALYSIS OF PSEUDOMONAS ISOLATES
- Mo 50. Gréta Tari: 3D-PRINTED DYNAMIC PROMOTER EFFICIENCY TESTING IN A LOW-PRESSURE MIXING CELL
- Mo\_51. Patricia-Cristina Tarkanyi: THE INFLUENCE OF WATER CONTENT ON THE MINERAL CONTENT OF URTICA DIOICA PLANT
- Mo\_52. Marina Alexandra Tudoran: STATISTICAL ANALYSIS METHODS IN EXPLAINING THE RELATIONSHIP BETWEEN THE BIOCONCENTRATION FACTOR AND MOLECULAR DESCRIPTORS APPLICATIONS TO SMALL POLYCYCLIC AROMATIC HYDROCARBONS
- Mo\_53. Melinda Vajda: TOWARD Pt-FREE INDOOR DYE SENSITIZED SOLAR CELLS: PEDOT/GRAPHENE OXIDE SUSTAINABLE COUNTER ELECTRODES
- Mo\_54. Cristian-George Vaszilcsin: USE OF HYDROQUINONE AS CORROSION INHIBITOR FOR CARBON STEEL IN ACETIC ACID / SODIUM ACETATE BUFFER SOLUTION
- Mo 55. Ariana-Bianca Velciov: EVALUATION OF SOME NUTRITIONAL PARAMETERS OF WILD ROSE HIP POWDER
- Mo\_56. Mirela Sarbu: UNRAVELLING THE COMPLEXITY OF HUMAN BRAIN GLYCOSAMINOGLYCANS: A STUDY OF CHONDROITIN/ DERMATAN SULFATES BY ION MOBILITY MASS SPECTROMETRY
- **Mo\_57. Selena Samardžić Cvijanović:** AMBIENT MONITORING: A POTENTIAL APPROACH TO ENHANCING EMPLOYEE PERFORMANCE AND PRODUCTIVITY
- Mo\_58. Ivana Jevtić: ASSESSMENT OF MIGRATION OF SUBSTANCES FROM BIODEGRADABLE PACKAGING MATERIALS INTO FOOD PRODUCTS USING ADVANCED ANALYTICAL TECHNIQUES: CHALLENGES AND POTENTIAL FOR SUSTAINABLE DEVELOPMENT
- Mo\_59. Mira Pucarević: PESTICIDE RESIDUES IN AGRICULTURAL SOILS: EMPHASIZING THE NEED FOR NATIONAL-LEVEL MONITORING

#### **Poster Presentations: Tuesday**

Poster presenters are asked to hang up their posters between  $8^{30}$ - $10^{00}$  Tuesday, and remove them after  $16^{30}$ .

- Tu 1. Edina Albert: AWARENESS OF MICROPLASTIC POLLUTION
- Tu 2. László Berényi: USING ENERGY SAVING FUNCTIONS: PERSONAL OPINIONS
- Tu\_3. Sándor Beszédes: MONITORING OF ORGANIC MATTER REMOVAL EFFICIENCY IN WASTEWATER AND SLUDGE TREATMENT PROCESSES BASED ON DIELECTRIC MEASUREMENTS
- Tu 4. Patrik Szabó: PLASTICS HIT DIFFERENT: GRAM-NEGATIVE VS. GRAM-POSITIVE RESPONSES
- Tu\_5. Tamás Bodor: SYNTHESIS AND CHARACTERIZATION OF NITRIC OXIDE DONOR NANOSTRUCTURED DENDRITIC MESOPOROUS TETRASULFIDE-BRIDGED ORGANOSILICA WITH PROSPECTS FOR ENVIRONMENTAL APPLICATION
- Tu\_6. Aleksandra Čavić: PM10 AND PM2.5 EMISSION AND ANALYSIS FROM RESIDENTAL COMPLEX CONSTRUCION SITE IN SREMSKA KAMENICA, SERBIA
- Tu 7. Jovana Čugalj: EVALUATION OF ENERGY EFFICIENCY MEASURES IN PUBLIC INSTITUTIONS
- Tu\_8. Tatjana Dujković: ASSESSMENT OF ANTIBIOTIC RESISTANCE IN A GRAPEVINE-DERIVED Bacillus sp. ISOLATE
- Tu 9. Botond Dezső: ANALYSIS AND POSSIBLE USES OF CANNING PLANT WASTE
- Tu\_10. Nataša Đurišić-Mladenović: EXPLORATION OF QuECHERS EXTRACTION FOR MULTICLASS EMERGING CONTAMINANTS
- Tu 11. Réka Dobozi: RESISTANCE STRUCTURE AND SOLUTE REMOVAL PATHWAYS IN UF-DF OF SWEET WHEY
- Tu\_12. Tatjana Dujković: PLANT GROWTH-PROMOTING POTENTIAL OF Bacillus sp. ISOLATED FROM VINEYARD SOIL
- Tu\_13. Laura C. Erdei: A MULTIDRUG RESISTANCE SELECTIVE ANTICANCER 8-HYDROXYQUINOLINE DERIVATIVE AND ITS RhCp\* COMPLEX
- Tu\_14. Kornél Erdős: APPLICATION OF UV/SULFITE ADVANCED REDUCTION PROCESS FOR ELIMINATION OF THE PFOA, A "FOREVER CHEMICAL"
- Tu 15. Zita Farkaš Agatić: COMPLEXATION OF SALICYLIC ACID WITH SELECTED SURFACTANTS
- Tu\_16. Boglárka Gábor: THE INCORPORATION OF PROPANOLOL HYDROCHLORIDE INTO LIPOSOMES
- Tu\_17. Bojana G. Velečković Gajinović: QUANTITATIVE INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT: AN OPTIMIZATION PERSPECTIVE
- Tu 18. Dorina R. Gál: INTERACTIONS OF As(III), Sb(III) AND Hg(II) SPECIES WITH HUMAN SERUM ALBUMIN
- Tu\_19. Attila Nagy, Gábor Galbács: TECHNICAL AND ANALYTICAL CHALLENGES INVOLVED IN DRONE-BASED LASER-INDUCED BREAKDOWN SPECTROSCOPY MEASUREMENTS FOR SECURITY APPLICATIONS
- Tu\_20. Zsolt Garzó: PREPARATION AND STABILITY TESTING OF FLAVOURED WHIPPED CREAM WITH LYOPHILIZED INGREDIENTS
- Tu\_21. Gerda T. Gátszegi: COPPER(II) COMPLEXES OF THIOSEMICARBAZONES WITH EXCELLENT WATER SOLUBILITY: SOLUTION EQUILIBRIUM STUDIES AND NANOFORMULATION
- Tu\_22. Lenka Grubač, Milana Pribić: USE OF UNMALTED CEREALS IN WORT PRODUCTION: TECHNOLOGICAL EVALUATION AND QUALITY ASSESSMENT
- Tu\_23. Réka S. Gyimesi: ARSENIC(III) DETECTION USING A WHOLE-CELL BIOSENSOR
- Tu\_24. Gergő Gyurcsó: OVERVIEW OF THE POTENTIAL ROLE OF LACTIC ACID BACTERIA IN THE REDUCTION OF MYCOTOXINS AND PESTICIDE RESIDUESIN FOOD AND FEED
- Tu\_25. Dániel Hercegfalvi: HRMS ANALYSIS OF SURFACTIN-TYPE COMPONENTS PRODUCED BY BACILLUS STRAINS ISOLATED FROM ENVIROMENTAL SAMPLES
- Tu\_26. Klaudia Hoffmann: SEQUENTIAL EXTRACELLULAR ORGANIC MATTER-TREATMENT BOOSTS BIOREMEDIATION EFFICIENCY
- Tu 27. Zoltán Péter Jákói: COMPARATIVE KINETIC ANALYSIS OF ANAEROBIC BIOLOGICAL DEGRADATION OF SLUDGE
- Tu\_28. Annabella Juhász-Erdélyi: BOOSTING ANAEROBIC LIGNOCELLULOSE UTILIZATION VIA SYNTROPHIC INTERACTIONS
- Tu\_29. Mariann Kis: COLORIMETRIC QUANTIFICATION OF CYANOBACTERIAL BIOFILM UNDER DIFFERENT LIGHT ENVIRONMENT
- Tu\_30. Szandra Klátyik: APPLICABILITY OF FLUORESCENCE-BASED IMMUNOBIOSENSOR ON HEAT SHOCK PROTEIN DETERMINATION IN GREEN ALGA CHLORELLA VULGARIS
- Tu 31. Etelka Kovács: THE HAPPY MARRIAGE OF METHANOGENIC ARCHAEA AND ANAEROBIC FUNGI
- Tu 32. Dániel Kovács: INVESTIGATION OF RECOMBINANT B-GALACTOSIDASE FROM RHIZOMUCOR PUSILLUS
- Tu\_33. J. Kozić: CARBON QUANTUM DOTS: GREEN MICROWAVE-ASSISTED SYNTHESIS, PROPERTIES AND APPLICATION IN ROSE BENGAL DYE REMOVAL
- Tu\_34. Zsóka Kratofil: UNVEILING HOUSEHOLD FOOD WASTE: SURVEY RESULTS FROM THE HOUSEHOLDS FROM VOJVODINA REGION, SERBIA
- Tu\_35. Borbála Machlik: INVESTIGATION OF POLYMER SPECTRA WITH NANO- AND FEMTOSECOND LASER INDUCED BREAKDOWN SPECTROSCOPY
- Tu 36. Ivana Maksimović: SCREENING OF WHEAT CULTIVARS FOR TRAITS RELATED TO WATER USE EFFICIENCY

#### 31st International Symposium on Analytical and Environmental Problems

- Tu\_37. Edit Mali-Gáspár: INVESTIGATION OF SOME PHYSICAL AND PHYSICOCHEMICAL CHARACTERISTICS OF CORNELIAN CHERRY (CORNUS MAS L.) GENOTYPES
- Tu\_38. Beáta Kőrösi Sóti, Maja Manojlović: CHARACTERISATION, COMPOSTING AND USE OF SPENT MUSHROOMS SUBSTRATE AS ORGANIC FERTILIZER
- Tu\_39. Masoud Shirzadi Ahoudashti: ENABLING THE REVERSE WATER GAS SHIFT REACTION AT HIGH PRESSURE AND LOW TEMPERATURE TOWARDS EFFICIENT CO<sub>2</sub> CONVERSION
- Tu\_40. Corina-Iuliana Megyesi: DEVELOPMENT AND EVALUATION OF PEAR JAM ENRICHED WITH POPPY SEEDS AS A FUNCTIONAL FOOD PRODUCT
- Tu\_41. Damir Pinter, Nataša Milošević: IN SILICO EVALUATION OF THE ECOTOXICOLOGICAL POTENTIAL AGAINST DAPHNIA MAGNA OF SUCCINIMIDE DERIVATIVES FROM FOUR HOMOLOGOUS SERIES
- Tu\_42. Damir Pinter, Nataša Milošević: ECOTOXICITY OF DIHYDROPYRIDINES, CALCIUM CHANNELS BLOCKERS: IN SILICO SURVEY
- Tu\_43. Mirjana Antonijević-Nikolić: A NEW Zn(II) COMPOUND WITH A MACROCYCLIC LIGAND tpmc. SYNTHESIS AND CHARACTERIZATION
- Tu 44. Sándor J. Papp: SECOND-LIFE ASSESSMENT OF AUTOMOTIVE BATTERIES AT THE UNIVERSITY OF SZEGED
- Tu\_45. Milana Pribić: EFFECT OF UNMALTED TRITICALE AND MASHING REGIME ON WORT AMINO ACID PROFILES
- Tu\_46. Marina Putnik-Delić: EFFECTS OF CADMIUM ON THE MINERAL CONTENT OF SWISS CHARD AND STRATEGIES FOR REDUCING ITS HARMFUL IMPACT
- Tu\_47. Radoš Raonić: DIFFUSE REFLECTANCE SPECTROSCOPY OF (Y,Me)NbO4:Er,Yb PHOSPHORS (Me = In, Al)
- Tu\_48. Miloš Simić: UTILIZATION OF SILICON-MODIFIED CORN WASTE BIOCHAR FOR CADMIUM AND LEAD REMOVAL FROM AQUEOUS SOLUTIONS
- Tu 49. Marjana Simonič: DETERMINATION OF PHENOLIC COMPOUNDS IN INDUSTRIAL WASTE
- Tu\_50. Aleksandra Stanojković-Sebić: EFFECT OF ASCOPHYLLUM NODOSUM EXTRACT ON THE GROWTH PARAMETERS AND YIELD OF WILD ROCKET (DIPLOTAXIS TENUIFOLIA)
- Tu\_51. Jelena Živančev: INNOVATIVE BIOFERTILIZATION STRATEGIES FOR MITIGATING EMERGING CONTAMINANTS IN SUSTAINABLE AGRICULTURE
- Tu\_52. Katarina Zsarkó: ADDITION OF ENCAPSULATED LACTOBACILLUS HILGARDII IN PEA PROTEIN FOR OBTAINING KOMBUCHA BEVERAGE WITH PROBIOTIC PROPERTIES
- Tu\_53. Tamás Kovács: VALUE-ADDED UTILIZATION OF OAT PROCESSING RESIDUES VIA RHIZOMUCOR MIEHEI-BASED ENZYMATIC TREATMENT