



International Conference "Students for Students" XXth edition

SCHEDULE

Wednesday-the 17th of April 2024

10:00 - Official Opening

10:30 - Plenary Session: Dr. Drageş HORVATH: Problem Solving

11:30 - Coffee Break

11:50 - Scientific Session: Chemical Engineering

11:50 - Prediction of Wastewater Treatment Plant Effluent

Concentrations Using Artificial Neural Networks - **Mălina POCLID**

12:05 - A Simulation Tool for the Dynamics of Water Flow and Water
Depth along a Reach of Someşul Mic River (RO) - **Amalia PRODAN**

12:20 - Indium Tin Oxide Precursors

Synthesis: Temperature Control - **Henrietta-Beata NAGY**

12:35 - Real-time Monitoring of Chemical

Processes with IOT-Based Equipment - **Ákos-Sándor MOLNÁR**

12:50 - Lunch Break

13:50 - Scientific Session: Chemistry

13:50 - Thermal Reduced Graphene Oxide Obtained as 3D Membranes
with Controlled Physico-Chemical Properties - **Adriana-Flavia LUPEA**

14:05 - Bandgap Engineering by Gallium and Tin Codoping in Indium
Oxide for Optoelectronic Applications - **Cristian COCIŞ-VAGNER**

14:20 - The Influence of Environmental Factors on FRP (Fiber
Reinforced Polymers) Properties - **Octavian COIAN and Marius MARCIUC**

14:35 - Electrodeposition of a Cobalt Oxide

Film for the Electrocatalytic Oxidation of Water - **Radoslav IVANOV**

14:50 - Coffee Break

15:00 - Scientific Session: Chemistry

15:00 - OH-initiated Degradation of Hydroxy Aromatic Compounds
in the Atmosphere - **Rareş MOCANU**

15:15 - Theoretical Assessment of Chemical Bonding
in Group 14- **David LUCACI**

15:30 - Can Calibration Make a Difference? Faster and More Informative
Chromatographic Determination of Thiosulfinates - **Sebastian DOROFTEI**

15:45 - Kinetic Study of the Gas-phase

Reaction of OH Radicals with Furfuryl Alcohols - **Laurenţiu MOVILĂ**

18:00 - Cocktail Dinner

Thursday-the 18th of April 2024

10:30 - Scientific Session: Chemistry

10:30 - The Effect of Cellulose Fibre Length on the Efficiency
of a Flame Retardant System in Poly(lactic acid) - **Bettina ÖTVÖS (online)**

10:45 - Novel Homoleptic Organotin(IV) Compound as Potential Ligands
for Other Metals - **Iulia CRIŞAN**

11:00 - Homojunction SMOSCs with Small Triphenylamine Derivatives
as Active Materials - **Elena-Maria CHEŢA**

11:15 - Synthesis and Structural Characterization of Novel Polymetallic
Organotin(IV) Compounds - **Marta-Anuţa ANDRIOAIE**

11:30 - Coffee Break

11:45 - Scientific Session: Chemistry

11:45 - Synthesis, Structural Characterization and Coordination Behaviour
of $[(4-[2-CH_3-(4H)-oxazol-5-one]CH)C_6H_4]_2Se$ - **Andrei-Dănuţ DĂNILĂ**

12:00 - Copper(I) - N-Heterocyclic Carbene Catalyzed Auto-click
Reaction to Access New Interlocked Structures - **Maria-Mihaela ŞERBAN**

12:15 - Design, Synthesis and Investigation of Organochalcogen
Compounds - **Cosmina BOHAN**

12:30 - Lunch Break

13:30 - Scientific Session: Chemistry

13:30 - Structural Particularities of Multifunctional

Lanthanide-Based Materials - **Andreea-Diana ZAMFIRESCU**

13:45 - Structural and Spectral Characterization of Metal
Complexes with Oxime Type Ligands - **Ana-Maria LUNTRARU**

14:00 - Hypervalent Organopnictogen
(III) Cations - **Alexandru-Andrei TOMUŢĂ**

14:15 - Site-Specific Immobilization of D-amino-acid Dehydrogenase
(DAADH) Enzyme - **András-Ernő ISZLAI**

14:30 - Scouting the Route: Exploring the Biocatalytic Potential of the
Aromatic Ammonia-lyase from *Loktanella Atrilutea* - **Gyopárka ÁGOSTON**

17:00 - Animal therapy with Dog Assist



International Conference "Students for Students" XXth edition

SCHEDULE

Friday-the 19th of April 2024

10:00 - Plenary Session: Prof. Dr. Eng. Tony KISS - Challenges and opportunities in implementing advanced (chemical) recycling solutions for plastics

11:00 - Coffee Break

11:30 - Poster Section

Effect of Different Cosolvents and Surfactants on the Thermostability and Activity of (S)-selective Pseudomonas psychrotolerans (PpS-TA) ω -transaminase - **Márk VÉGH**

Selectivity Studies on the Human Carbonic Anhydrase Enzyme in the Reduction of Diketones and Hydroxy Ketones - **Bence TÓKÉS**

The Structural Details of Aspirin, Ibuprofen Molecules and Cocrystal - **Maria MINCU**

Potential Biological Activities of Lamium Album Extract - **Julia BAUMLI**

Development of a Paper-Based Immunochromatographic Method for C-Reactive Protein - **Franciska BÉKÉSI**

Development of Antibody-Functionalized Fluorescent Nanoparticles for High-Sensitivity Immunoassay - **Péter SZABÓ**

Towards Metal Substitution in Vitamin B12 - **Radu-Ioan ONIJA**

D-Amino Acid Oxidase Coupled Assay for Directed Evolution of Phenylalanine Ammonia Lyase - **Naomi BONDILĂ**

Chitosan-Polyvinyl Alcohol-Based Films Modified with Ca²⁺, Zn²⁺ and Mg²⁺, Respectively for Potential Medical Applications - **Mihaela DANCIU**

Development and Characterization of Polyvinyl Alcohol-Based Films Modified with Gelatine for Potential Medical Applications - **Mirela BUTUZA COSTIN**

Nanocomposite Materials Based on Ordered Mesoporous Silica-Preparation and Possible Application - **Bianca-Ioana FURNEA**

Ga Concentration Optimization to Enhance the Optical Properties of Ga-Doped ZnO Nanopowders Prepared by Solid State Reaction - **Oana-Rebeka NEMETHI**

Impact of Silica-Coated Silver Nanoparticles on DNA Sensing - **Maria LUGOJANU**

Selective Adsorption of Anionic and Cationic Analytes to Silver Nanoparticles - **Georgiana ION**

13:30 - Lunch Break

14:30 - Poster Section

Quality Assessment and Classification of Drinking Water - **Alexia-Maria NIȚU**

Modeling of Lithium Ion Battery Discharge Process - **Alexandru MANDACHE and Andrei IONESCU**

Mechanochemically Formation of Starch-Iodine Complex in Solid State for Analytical Application - **Miruna-Maria ISACHE**

Small Molecular n-Conjugated Organic Semiconductors for Single Material Organic Solar Cells (SMOSCs) - **Nichita MELNIC**

Synthesis in Preliminary Study on the Insecticide Effect of the 1-Phenyl-1,2,3-Triazol Derivatives - **David-Emanuel PETREUȘ, Christina ARDELEAN and Dalia AVRAM**

Synthesis of the 2,7-Dicarbonyl-Alkylfluorene Derivatives and Study of Their Photophysical Properties - **Levente BIRÓ**

Synthesis of NIR-Fluorescent Organic Dyes - **Hegedüs BALÁZS**

A study of the Influence of Phenothiazine Substituents of the Photophysical Properties of Curcuminoids and Boron Complexes - **Balázs-Ákos KIS**

Harnessing New Rubery Organic Frameworks for CO₂ Capture and Separation - **Cristina-Mihaela ROTARU**

Cationic Covalent Organic Polymers for Zinc-Air Battery Applications - **Călina-Simina CRIȘAN**

Synthesis and Optical Properties of Novel Phenothiazinyl Phthalocyanine Derivatives - **Ștefana-Maria GRAMA**

Determining of the Surface Coverage of Antibody Ligands immobilized by off-line microspotting: An SPRi Study - **Henrietta DUDÁS**

Synthesis of Curcuminoids Containing p-Dimethylaminophenyl Group - **Andreea-Anita SZÁSZ**

Photosensitizers Based on Metallophthalocyanines, Electronic Properties and Oxygen Singlet Generation - **Silviu-Florin GROZA**

16:30 - Closing Ceremony

20:00 - Quiz night

Saturday-the 20th of April 2024

11:00- Cluj guided tour