

| Time          | Wednesday/Srijeda<br>April 9 <sup>th</sup> , 2025                                              | Time        | Thursday/Četvrtak<br>April 10 <sup>th</sup> , 2025                                               | Time                                                                                 | Friday/Petak,<br>April 11 <sup>th</sup> , 2025 |
|---------------|------------------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------|
| 8:30-9:00     | Registration                                                                                   | 9:15-9:30   | Registration                                                                                     | 9:00-9:15                                                                            | Registration                                   |
| 9:00-9:30     | <b>Opening ceremony</b>                                                                        |             |                                                                                                  |                                                                                      |                                                |
|               | <i>Chair</i>                                                                                   |             | <i>Chair</i>                                                                                     |                                                                                      | <i>Chair</i>                                   |
| 9:30-10:15    | PL1 Živković                                                                                   | 9:30-10:15  | PL2 Forsberg                                                                                     | 9:15-10:00                                                                           | PL3 Bogdanović                                 |
| 10:15-10:45   | IL1 Perinović Jozić                                                                            | 10:15-10:45 | SPONSORSHIP                                                                                      | 10:00-10:30                                                                          | IL2 Petrović                                   |
| 10:45-11:25   | <i>Coffee + Poster session 1</i>                                                               | 10:45-11:15 | <i>Coffee + Poster session 3</i>                                                                 | 10:30-11:00                                                                          | <i>Coffee + Poster session 5</i>               |
| 11:25-12:20   | <i>Chair</i>                                                                                   | 11:15-12:20 | <i>Chair</i>                                                                                     | 10:50-11:15                                                                          | <i>KTF tour</i>                                |
|               | OP1.1 Styn                                                                                     |             | OP4.1 Bošnjak Hordov                                                                             | 11:15-11:45                                                                          | SPONSORSHIP                                    |
|               | OP1.2 Tutić                                                                                    |             | OP4.2 Drašković                                                                                  | 11:45-12:15                                                                          | IL3 Badanjak Sabolović                         |
|               | OP1.3 Sadowski                                                                                 |             | OP4.3 Gudelj                                                                                     | 12:15-12:30                                                                          | <b>Closing ceremony</b>                        |
|               | OP1.4 Kranjec                                                                                  |             | OP4.4 Gracin                                                                                     |                                                                                      |                                                |
|               | OP1.5 Kužnik                                                                                   |             | OP4.5 Herceg                                                                                     |                                                                                      |                                                |
|               |                                                                                                |             | OP4.6 Stanković                                                                                  |                                                                                      |                                                |
| 12:30-14:00   |  <i>Lunch</i> | 12:30-14:00 |  <i>Lunch</i> |  |                                                |
| 14:15-15:20   | <i>Chair</i>                                                                                   | 14:15-15:20 | <i>Chair</i>                                                                                     |                                                                                      |                                                |
|               | OP2.1 Prlić                                                                                    |             | OP5.1 Aquilanti                                                                                  |                                                                                      |                                                |
|               | OP2.2 Sedlar                                                                                   |             | OP5.2 Urlić                                                                                      |                                                                                      |                                                |
|               | OP2.3 Roldo                                                                                    |             | OP5.3 Melini/Raffo                                                                               |                                                                                      |                                                |
|               | OP2.4 Surdyk                                                                                   |             | OP5.4 Ashim                                                                                      |                                                                                      |                                                |
|               | OP2.5 Radunović                                                                                |             | OP5.5 Uysal/Zanoli                                                                               |                                                                                      |                                                |
|               | OP2.6 Jonuz                                                                                    |             | OP5.6 Duca                                                                                       |                                                                                      |                                                |
| 15:20-15:50   | <i>Coffee + Poster session 2</i>                                                               | 15:20-15:50 | <i>Coffee + Poster session 4</i>                                                                 |                                                                                      |                                                |
| 15:50-16:55   | <i>Chair</i>                                                                                   | 15:50-16:20 | SPONSORSHIP                                                                                      |                                                                                      |                                                |
|               | OP3.1 Fojtášková                                                                               | 16:20-17:05 | <i>Chair</i>                                                                                     |                                                                                      |                                                |
|               | OP3.2 Florian                                                                                  |             | OP6.1 Štorga                                                                                     |                                                                                      |                                                |
|               | OP3.3 Kunovský                                                                                 |             | OP6.3 Srpak                                                                                      |                                                                                      |                                                |
|               | OP3.4 Andrić                                                                                   |             | OP6.4 Šilić                                                                                      |                                                                                      |                                                |
|               | OP3.5 Radan                                                                                    |             | OP6.5 Runje                                                                                      |                                                                                      |                                                |
|               | OP3.6 Baćović                                                                                  |             |                                                                                                  |                                                                                      |                                                |
| early evening | <i>Diocletian Palace tour</i>                                                                  | evening     | <i>Green Talks</i>                                                                               |                                                                                      |                                                |

PL = plenary lecture; IL = invited lecture; OP = oral presentation

| Plenary Lectures |                           |                                                                                                                                                                                       |
|------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Code             | Name                      | Title                                                                                                                                                                                 |
| PL1              | Igor Živković             | MERCURY IN THE ADRIATIC AND MEDITERRANEAN: ORIGIN, TRANSFORMATIONS, AND TRENDS                                                                                                        |
| PL2              | Kerstin Forsberg          | CHALLENGES IN HYDROMETALLURGICAL PROCESSING OF MATERIALS AND OPPORTUNITIES FOR CIRCULARITY                                                                                            |
| PL3              | Tanja Bogdanović          | MICROPLASTICS - A GROWING ENVIRONMENTAL PROBLEM AND A THREAT TO PUBLIC HEALTH: FINDINGS FROM THE LAST TWENTY YEARS OF RESEARCH                                                        |
| Invited Lectures |                           |                                                                                                                                                                                       |
| IL1              | Sanja Perinović Jozić     | ONION PEEL AS A PART OF ACTIVE PACKAGING                                                                                                                                              |
| IL2              | Maja Petrović             | MONITORING LEACHATE CONTAMINATION IN MUNICIPAL SOLID WASTE LANDFILLS BY ADDRESSING ORGANIC POLLUTANTS AND MICROPLASTICS FOR SUSTAINABLE WASTE MANAGEMENT AND ENVIRONMENTAL PROTECTION |
| IL3              | Marija Badanjak Sabolović | DRYING OF FOOD PLANT WASTE AND BY-PRODUCTS: APPLICATION IN FUNCTIONAL FOOD DEVELOPMENT                                                                                                |

## Wednesday/Srijeda, April 9<sup>th</sup>, 2025

| Oral Presentations – Session 1: Environmental Microbiology and Bioremediation        |                                                                                                   |                                                                                                                                                     |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Code                                                                                 | Authors                                                                                           | Title                                                                                                                                               |
| OP1.1                                                                                | Jan Styn, Kacper Tomasik, Marcin Borowicz, Robert Czajkowski, Dorota Krzyżanowska                 | THE EFFECT OF <i>Dickeya Dadantii</i> P2D1 TAILOCINS ON BACTERIA RESIDING IN THE PLANT RHIZOBIOME AND THEIR ROLE IN SHAPING THE NATURAL ENVIRONMENT |
| OP1.2                                                                                | Josip Tutić, Barbara Bertović, Monika Šabić Runjavec, Marija Vuković Domanovac                    | BIOREMEDIATION OF OIL-CONTAMINATED SOIL USING INDIGENOUS BACTERIAL STRAINS                                                                          |
| OP1.3                                                                                | Adrian Sadowski, Anna Aksmann                                                                     | NANOPLASTIC PARTICLES INFLUENCE GROWTH AND PHOTOSYNTHESIS OF THE GREEN ALGA <i>Desmodesmus armatus</i>                                              |
| OP1.4                                                                                | Jan Kranjec, Anica Pavlinović, Bojana Špirović Trifunović, Gorica Vuković, Iva Ćurić, Davor Dolar | REMOVAL OF A CHEMICAL WARFARE AGENT SIMULANT FROM A BINARY SOLUTION USING NANOFILTRATION AND REVERSE OSMOSIS                                        |
| OP1.5                                                                                | Maja Kužnik, Dominika Saniewska                                                                   | TAKE AND ELIMINATION ROUTES OF MERCURY IN ANTARCTIC SHAG ( <i>Leucocarbo bransfieldensis</i> ) INHABITING KING GEORGE ISLAND (MARITIME ANTARCTICA)  |
| Oral Presentations – Session 2: Waste Management and Global Environmental Challenges |                                                                                                   |                                                                                                                                                     |
| OP2.1                                                                                | Ivica Prlić                                                                                       | VARIOUS PUZZLES CONCERNING RADON GAS IN CROATIAN FRESHWATERS                                                                                        |
| OP2.2                                                                                | Jelena Sedlar, Ivana Smoljko                                                                      | EVALUATION OF THE ENVIRONMENTAL IMPACT OF WASTE MANAGEMENT SYSTEMS OF CROATIAN TOURIST DESTINATIONS                                                 |
| OP2.3                                                                                | Liane Roldo, Jaqueline Dilly                                                                      | SITUATION OF SOLID WASTE MANAGEMENT IN BRAZIL: A COUNTRY OF CONTINENTAL DIMENSIONS                                                                  |
| OP2.4                                                                                | Magdalena Surdyk                                                                                  | CHINESE APPROACH TO SUSTAINABLE DEVELOPMENT AS SEEN IN THE BELT AND ROAD INITIATIVE PROJECTS                                                        |
| OP2.5                                                                                | Filip Radunović                                                                                   | SHIP RECYCLING AS PILLAR OF SUSTAINABLE DEVELOPMENT                                                                                                 |
| OP2.6                                                                                | Alen Jonuz                                                                                        | THE INFLUENCE OF SHIPBUILDING STEEL ROUGHNESS ON THE EXTENT AND INTENSITY OF MARINE FOULING                                                         |
| Oral Presentations – Session 3: Innovative Approaches in Cement and Material Science |                                                                                                   |                                                                                                                                                     |
| OP3.1                                                                                | Helena Fojtášková                                                                                 | REDUCTION OF THE PROBABILITY OF POLYTYPE SWITCHING DURING THE GROWTH OF 4H-SiC                                                                      |
| OP3.2                                                                                | Vojtěch Florian, Pavel Šiler, Ondřej Kunovský                                                     | UTILIZING NON-KAOLINITIC CLAYS FOR LOW-COST ECOLOGICAL MIXED CEMENT                                                                                 |
| OP3.3                                                                                | Ondřej Kunovský, Pavel Šiler, Vojtěch Florian                                                     | INFLUENCE OF FORMATE-BASED ACCELERATORS ON HYDRATION PROCESS AND MECHANICAL PROPERTIES OF PORTLAND CEMENT DOPPED BY ZINC                            |
| OP3.4                                                                                | Vasilije Andrić                                                                                   | APPLICATION OF BIOCOMPOSITES IN MARITIME INDUSTRY                                                                                                   |
| OP3.5                                                                                | Milan Radan                                                                                       | ENVIRONMENTAL IMPACT OF SELF-POLISHING ANTIFOULING COATINGS                                                                                         |
| OP3.6                                                                                | Ivana Baćović                                                                                     | SMART TECHNOLOGIES AND TECHNIQUES IN ENVIRONMENTAL PROTECTION                                                                                       |

| Poster Presentations – Session 1 Waste Management and Circular Economy                                                                                                         |                                                                                                                                                                                                                                                                                                                                          |
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| Marija Čosić, Antonija Čelan, Tamara Đolonga, Tina Smoljan                                                                                                                     | HYDRODYNAMIC CHARACTERIZATION AND SCALE-UP OF BATCH CRYSTALLIZER FOR BATTERY MATERIALS RECOVERY                                                                                                                                                                                                                                          |
| Berina Hadžalić, Elma Bajrić, Amina Bjelić, Zehrudin Osmanović, Ervin Karić, Damir Mulamehmedović                                                                              | WASTE GLASS AS AN ALTERNATIVE RAW MATERIAL IN THE CEMENT INDUSTRY                                                                                                                                                                                                                                                                        |
| Amra Odobašić, Indira Šestan, Amna Karić, Melisa Ahmetović, Husejin Keran                                                                                                      | BENTONITE AFTER ADSORPTION OF LEAD AND COPPER: CHARACTERIZATION AND POTENTIAL APPLICATION AS STARTING RAW MATERIAL - CIRCULAR ECONOMY CONCEPT                                                                                                                                                                                            |
| Petra Slišković, Ana Kokeza, Antonija Jurić, Marin Ugrina                                                                                                                      | TOTAL MERCURY DETERMINATION IN MICROWAVE-ASSISTED ACID DIGESTED MERCURY-CONTAMINATED SOIL FROM THE IDRIJA MINE SITE IN SLOVENIA WITH ADVANCED MERCURY ATOMIC ABSORPTION SPECTROMETRY                                                                                                                                                     |
| Pero Dabić, Marija Čosić, Damir Barbir, Jelena Sedlar, Danijela Jurić Kačunić                                                                                                  | UTJECAJ DODATKA LEBDEČEG PEPELA OD SPALJIVANJA BIOMASE NA FIZIKALNO-KEMIJSKA SVOJSTVA PORTLAND CEMENTA CEM II: PERSPEKTIVA ODRŽIVOG GRAĐEVINARSTVA<br>(THE INFLUENCE OF THE ADDITION OF FLY ASH FROM BIOMASS COMBUSTION ON THE PHYSICAL AND CHEMICAL PROPERTIES OF PORTLAND CEMENT CEM II: THE PERSPECTIVE OF SUSTAINABLE CONSTRUCTION ) |
| Ivan Pavičić                                                                                                                                                                   | OCCURRENCE OF ASBESTOS FIBERS IN THE AIR AT SOME CROATIAN CITIES                                                                                                                                                                                                                                                                         |
| Maida Smajlović, Hana Alihodžić, Abdel Đozić, Mirnesa Čorbić                                                                                                                   | THE IMPACT OF AMBIENT SO <sub>2</sub> AND PM <sub>2.5</sub> CONCENTRATIONS ON AIR QUALITY IN URBAN AREAS OF TUZLA, LUKAVAC, AND ŽIVINICE (2019 – 2024                                                                                                                                                                                    |
| Milica Zdravković, Vesna Grekulović, Nada Štrbac, Edina Huseinović, Milan Gorgievski, Miljan Marković, Kristina Božinović                                                      | WHITE WILLOW BARK EXTRACT AS A COPPER CORROSION INHIBITOR IN 0.5 M NaCl SOLUTION                                                                                                                                                                                                                                                         |
| Marijan Gotić, Monika Šoltić, Izabela Đurasović, Nikola Baran, Ivan Marić, Matthijs A. van Spronsen, Goran Dražić, Goran Štefanić, Marijan Marciaus, Robert Peter, Mile Ivanda | SYNTHESIS AND CHARACTERIZATION OF PLATINUM NANOPARTICLES ON REDUCIBLE METAL OXIDE SUPPORTS FOR CATALYTIC APPLICATIONS AND HYDROGEN SENSING                                                                                                                                                                                               |
| Mirko Gojić, Stjepan Kožuh, Ivana Ivanić, Sanja Šolić                                                                                                                          | PROIZVODNJA ČELIKA I ZAŠTITA OKOLIŠA<br>PRODUCTION OF STEEL AND ENVIRONMENTAL PROTECTION                                                                                                                                                                                                                                                 |
| Nena Šilić                                                                                                                                                                     | ADRIABIOHUB - HUB ZA KRUŽNU BIOEKONOMIJU JADRANSKE REGIJE<br>(ADRIABIOHUB - CIRCULAR BIOECONOMY HUB OF THE ADRIATIC REGION)                                                                                                                                                                                                              |



| Poster Presentation – Session 2: Environmental Impact of Pharmaceuticals and Medical Waste Management                                         |                                                                                                                                                              |
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| Vittorio Coen, Bianca Lerotić, Stjepan Jozinović, Lucija Svorcina, Katarina Sokač, Krunoslav Žižek                                            | ZELENO KOPROCESIRANJE POMOĆNIH TVARI ZA POBOLJŠANI TERAPEUTSKI UČINAK LIJEKA<br>(GREEN CO-PROCESSING OF EXCIPIENTS FOR IMPROVED THERAPEUTIC OUTCOME OF DRUG) |
| Dora Lastovčić, Luka Večenaj, Martina Miloloža, Matija Cvetnić, Marinko Markić, Lidija Furač, Tomislav Bolanča, Šime Ukić, Dajana Kučić Grgić | PRISILNA RAZGRADNJA SARS-CoV-2 ANTIVIRUSNIH SUPSTANCI<br>(FORCED DEGRADATION OF SARS-CoV-2 ANTIVIRAL SUBSTANCES)                                             |
| Tea Franjić, Nives Vladislavić, Ivana Škugor Rončević                                                                                         | MODELING OF MICROWAVE EXTRACTION OF TOTAL PHENOLS AND ANTIOXIDANT ACTIVITY OF ROSEMARY ( <i>Rosmarinus officinalis</i> L.)                                   |
| Selma Bureković, Tea Jurišić                                                                                                                  | HOW TO PROPERLY DISPOSE OF MEDICAL WASTE?                                                                                                                    |
| Luka Đuran, Stela Relota, David Đuranec, Monika Šabić Runjavec, Marija Vuković Domanovac                                                      | ECOLOGICAL RISKS AND MICROBIAL DEGRADATION OF MACROLIDE ANTIBIOTICS                                                                                          |
| Leona Čakić, Kristina Tolić Čop, Dragana Mutavdžić Pavlović                                                                                   | PHOTOCATALYTIC DEGRADATION OF PROCAINE USING A PHOTOCATALYST WITH THE PROCAINE MOLECULE IMPRINT – DEGRADATION MECHANISM AND MATRIX EFFECT                    |
| Livia Slišković, Petra Brzović, Olivera Politeo, Marijana Popović, Ivana Generalić Mekinić                                                    | ANTIRADICAL ACTIVITY OF SEA FENNEL HYDROLATES FROM DIFFERENT PLANT PARTS                                                                                     |

**Thursday/Četvrtak, April 10<sup>th</sup>, 2025**

| Oral Presentations - Session 4: Green Technologies, Sustainable Energy, and Recycling |                                                                          |                                                                                                                                                     |
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| Code                                                                                  | Authors                                                                  | Title                                                                                                                                               |
| OP4.1                                                                                 | Jelena Bošnjak Hordov , Marija Čosić, Sandro Nižetić                     | INVESTIGATION OF NOVEL WASTE-BASED PHASE CHANGE MATERIALS FOR THERMAL ENERGY STORAGE                                                                |
| OP4.2                                                                                 | Dominik Drašković, Josip Gudelj, Srećko Herceg, Nenad Bolf, Marko Sejdić | SUSTAINABLE HYDROGEN PRODUCTION FROM SURPLUS WIND ENERGY USING PEM WATER ELECTROLYSIS                                                               |
| OP4.3                                                                                 | Josip Gudelj, Dominik Drašković, Srećko Herceg, Nenad Bolf, Marko Sejdić | ANALYSIS OF TECHNOLOGIES FOR GREEN HYDROGEN PRODUCTION                                                                                              |
| OP4.4                                                                                 | Petra Gracin, Bojan Kropf, Ladislav Vrsalović, Aleš Nagode               | ALUMINIUM RECYCLING IN IMPOL-TLM CORPORATION                                                                                                        |
| OP4.5                                                                                 | Ana Herceg, Nik Maselj, Vasko Jovanovski, Nejc Hodnik, Primož Jovanović  | CONNECTING KNOWLEDGE ACQUIRED DURING HIGHER EDUCATION TO INNOVATIVE RESEARCH ON DICYNAMIDE-BASED PLATINUM MODIFICATION FOR SUSTAINABLE TECHNOLOGIES |
| OP4.6                                                                                 | Igor Stanković, Marina Šumanović, Nikola Hanžek & Mario Šiljeg           | DRIVERS OF EUTROPHICATION IN CROATIAN RIVERS: THE ROLE OF AGRICULTURE, URBANIZATION, AND RIVER TYPOLOGY                                             |

| Oral Presentations – Session 5: PRIMA project SEAFENNEL4MED |                                |                                                                                                                          |
|-------------------------------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| OP5.1                                                       | Lucia Aquilanti                | CHARACTERIZATION OF MEDITERRANEAN SEA FENNEL ECOTYPES                                                                    |
| OP5.2                                                       | Branimir Urlić                 | SUSTAINABLE PRODUCTION OF ORGANIC SEA FENNEL CROP                                                                        |
| OP5.3                                                       | Valentina Melini/Antonio Raffo | EXPLOITATION OF SEA FENNEL EDIBLE AERIAL PARTS FOR MANUFACTURING OF INNOVATIVE SEA FENNEL-BASED FOODS                    |
| OP5.4                                                       | Aizhan Ashim                   | VALORISATION OF SEA FENNEL CROP BY-PRODUCTS FOR PRODUCTION OF FUNCTIONAL FOOD INGREDIENTS/NUTRACEUTICALS/SOIL AMENDMENTS |
| OP5.5                                                       | Ozlem Uysal                    | DEMONSTRATION OF SOCIO-ECONOMIC BENEFITS OF THE PROPOSED INNOVATIONS                                                     |
| OP5.6                                                       | Daniele Duca                   | DEMONSTRATION OF ENVIRONMENTAL IMPACTS AND SUSTAINABILITY OF THE PROPOSED INNOVATIONS                                    |

| Oral Presentations – Session 6: From Knowledge to Action: Circular Economy and Sustainability |                                                                                                                       |                                                                                                                                                                                         |
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| OP6.1                                                                                         | Lara Štorga, Donna Danijela Dragun, Marta Pleše, Ana Sikavica, Nera Bebek, Leda Kolarek, Hana Širić, Ernest Meštrović | OVERVIEW OF TASK-SOLVING EFFICIENCY IN CHEMISTRY AND CHEMICAL ENGINEERING EDUCATION USING LARGE LANGUAGE MODELS (LLMS)                                                                  |
| OP6.3                                                                                         | Melita Srpak, Ivan Mesić                                                                                              | KRUŽNO GOSPODARENJE OTPADOM U VARAŽDINSKOJ ŽUPANIJI - ODRŽIVA RJEŠENJA ZA ZELENU BUDUĆNOST<br>(CIRCULAR WASTE MANAGEMENT IN VARAŽDIN COUNTY – SUSTAINABLE SOLUTIONS FOR A GREEN FUTURE) |
| OP6.4                                                                                         | Nena Šilić                                                                                                            | ADRIABIOHUB - HUB ZA KRUŽNU BIOEKONOMIJU JADRANSKE REGIJE<br>(ADRIABIOHUB - CIRCULAR BIOECONOMY HUB OF THE ADRIATIC REGION)                                                             |
| OP6.5                                                                                         | Božidar Nikić, Hrvoje Runje                                                                                           | BIOREAKTOR IKA HABITAT KAO POMOĆ U RIJEŠAVANJU GLOBALNIH IZAZOVA U 21. STOLJEĆU<br>(IKA HABITAT BIOREACTOR TO HELP SOLVE GLOBAL CHALLENGES IN THE 21 <sup>ST</sup> CENTURY)             |

| Poster Presentations – Session 3: Green Technologies and Waste Valorization                                                                                                                                                                                                  |                                                                                                                                                                 |
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| Authors                                                                                                                                                                                                                                                                      | Title                                                                                                                                                           |
| Laura Jaklenec, Sabina Fućak, Dora Bramberger, Karlo Grgurević, Martina Miloloža, Matija Cvetnić, Vesna Očelić Bulatović, Krešimir Stublić, Jasmina Ranilović, Stela Jokić, Krunoslav Aladić, Ivica Strelec, Marinko Markić, Tomislav Bolanča, Šime Ukić, Dajana Kučić Grgić | VALORIZATION OF APPLE WASTE THROUGH THE BIOSYNTHESIS OF POLYHYDROXYALKANOATE USING SOLID-STATE FERMENTATION                                                     |
| Vilim Marijan Boroša, Kristian Koštan, Renata Vičević, Ivan Karlo Cingesar, Domagoj Vrsaljko, Bruno Zelić, Anita Šalić                                                                                                                                                       | OPTIMIZATION OF GLUCOSE DEHYDROGENASE IMMOBILIZATION IN A 3D-PRINTED MILLIREACTOR                                                                               |
| Ana Coban, Ivona Zirn, Martina Miloloža, Dajana Kučić Grgić                                                                                                                                                                                                                  | THE DETERMINATION OF ECOTOXICITY OF CHITOSAN, TITANIUM DIOXIDE AND THYMOL USING THE MARINE BACTERIUM <i>Vibrio fischeri</i> AND MICROALGAE <i>Chlorella sp.</i> |
| Lucija Vrbić, Ana Tutić, Martina Miloloža, Matija Cvetnić, Dajana Kučić Grgić                                                                                                                                                                                                | BIOREMEDIATION OF WATER POLLUTED WITH PHENOLS, CYANIDES AND RHODANIDES BY GREEN MICROALGAE <i>Chlorella sp.</i>                                                 |
| Leonarda Leskovar, Dinka Omerčić, Dora Bramberger, Karlo Grgurević, Martina Miloloža, Matija Cvetnić, Vesna Očelić Bulatović, Krešimir Stublić, Jasmina Ranilović, Marinko Markić, Tomislav Bolanča, Šime Ukić, Dajana Kučić Grgić                                           | PHYSICO-CHEMICAL AND MICROBIOLOGICAL CHARACTERIZATION OF AGRO-INDUSTRIAL WASTE                                                                                  |
| Nina Roglić, Martina Čagalj, Danijela Skroza, Helena Virić Gašparić, Darija Lemić, Vida Šimat                                                                                                                                                                                | THE EFFECT OF OZONE TREATMENT ON SELECTED PATHOGENIC BACTERIA                                                                                                   |
| Vanesa Begura, Martina Čagalj, Danijela Skroza, Helena Virić Gašparić, Darija Lemić, Vida Šimat                                                                                                                                                                              | THE EFFECT OF OZONE TREATMENT ON SHRIMP (PARAPENAEUS LONGIROSTRIS) MEAT QUALITY PARAMETERS DURING REFRIGERATED STORAGE                                          |
| Tamara Dabro, Lucija Karamatić, Martina Čagalj, Maja Veršić Bratinčević, Mira Radunić, Vida Šimat, Danijela Skroza                                                                                                                                                           | PHENOLIC CONTENT AND ANTIOXIDANT POTENTIAL OF POMEGRANATE BY-PRODUCTS                                                                                           |
| Marina Kranjac, Elda Vitanović, Barbara Soldo, Saša Prđun, Kristijan Čačija, Željana Fredotović                                                                                                                                                                              | ECO-CONSCIOUS EXTRACTION METHODS IN UNLOCKING THE CHEMICAL PROFILES AND BIOACTIVE POTENTIAL OF MONOFLOAL BEE POLLEN                                             |
| Marijana Franičević, Ivana Kavain, Vlatka Paštar                                                                                                                                                                                                                             | VOLATILE COMPOUNDS IN MERLOT WINE POMACE SUPERCRITICAL EXTRACT                                                                                                  |
| Marek Chajduk, Marek Gołębiowski, Marzena Stańska, Christophe Lucas                                                                                                                                                                                                          | PLANT-BASED VOLATILE ORGANIC COMPOUNDS AND THEIR POTENTIAL TO DETER SPIDERS                                                                                     |
| Kacper Tomasik, Jan Styn, Marcin Borowicz, Dorota M. Krzyżanowska, Robert Czajkowski                                                                                                                                                                                         | BRING BALANCE TO THE FORCE: TAILOCINS FROM <i>Dickeya dadantii</i> 3937 AS EFFECTIVE WEAPONS AGAINST ENVIRONMENTAL BACTERIA                                     |
| Marin Ugrina, Nediljka Vukojević Medvidović, Mila Bulić                                                                                                                                                                                                                      | ENHANCING DIGITAL SKILLS FOR SUSTAINABLE ENGINEERING: A SIMULATION-BASED APPROACH IN PROCESS DESIGN                                                             |
| Ljiljana Najev Čačija, Ivana Ninčević Pašalić, Smiljana Pivčević, Maja Čukušić                                                                                                                                                                                               | INTERDISCIPLINARY APPROACHES TO SUSTAINABLE TOURISM: INTEGRATING DIGITAL AND GREEN COMPETENCIES FOR IDENTIFYING AND SOLVING DEVELOPMENT CHALLENGES              |

| Poster Presentations – Session 4: Water Treatment and Environmental Remediation                                         |                                                                                                                                                 |
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| Authors                                                                                                                 | Title                                                                                                                                           |
| Anita Bašić, Gabrijela Jakovljević, Renato Stipišić, Sandra Svilović                                                    | KINETIC SORPTION OF COPPER CATIONS ON ZEOLITE NAX: INFLUENCE OF ZEOLITE NAX MASS CONCENTRATION                                                  |
| Nediljka Vukojević Medvidović, Lucija Peran, Sandra Svilović, Senka Gudić, Ladislav Vrsalović                           | ELECTROCOAGULATION, ZEOLITE AND MAGNETIC ASSISTANCE FOR WASTEWATER TREATMENT: ASSESSING THE ROLE OF ELECTRODE MATERIAL                          |
| Anica Pavlinović, Mislav Marinčić, Nikoletta Kovacz, Gabor Maasz, Ildiko Galambos, Ivana Panžić, Iva Ćurić, Davor Dolar | REMOVAL OF PESTICIDES FROM BINARY SOLUTIONS USING NANOFILTRATION AND REVERSE OSMOSIS                                                            |
| Anna Rojewska, Magda Caban, Klaudia Godlewska, Paweł Rostkowski, Anna Białk-Bielińska                                   | SELECTION OF SOLID PHASE EXTRACTION CONDITIONS FOR EMERGING CONTAMINANTS IN WATER SAMPLES - TOWARDS GREEN CHEMISTRY AND SUSTAINABLE DEVELOPMENT |
| Stela Rotim, Lidija Tadić                                                                                               | HYDROLOGICAL IMPACTS ON ECOLOGICAL VALUES OF REGIONAL PARK MURA - DRAVA                                                                         |
| Antea Ivančević, Marin Ugrina, Antonija Jurić, Ivona Nuić, Marina Trgo, Martin Gaberšek, Teja Čeru, Mateja Gosar        | MODELING AND OPTIMIZATION OF MERCURY REMOVAL ONTO NATURAL AND Fe(III)-MODIFIED ZEOLITE                                                          |
| Maja Knezović, Marin Ugrina, Martin Gaberšek                                                                            | SULFIDIZATION OF NATURAL ZEOLITE CLINOPTILOLITE AS A PROMISING METHOD FOR IMPROVING THE SELECTIVE SORPTION OF Hg(II)                            |
| Ivona Nuić, Karla Galov, Marin Ugrina, Franko Burčul, Ana Vučak                                                         | THE EFFECTIVENESS OF VARIOUS SUSTAINABLE LOW-COST MATERIALS IN THE TREATMENT OF PESTICIDE-CONTAMINATED WATER                                    |
| Sunčica Mileta, Ivona Nuić                                                                                              | RECYCLING OF OLIVE PITS AS SUSTAINABLE ADSORBENT IN WATER TREATMENT                                                                             |
| Erik Mihelič, Marjana Simonič                                                                                           | Effect of Biochar on Drying Performance of Municipal Sewage Sludge                                                                              |



## Friday/Petak, April 11<sup>th</sup>, 2025

| Poster Presentations – Session 5: Recycling, Composting, and Biodegradable Materials                          |                                                                                                                                                                                                                                                  |
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| Authors                                                                                                       | Title                                                                                                                                                                                                                                            |
| Jelena Jakić, Dragana Petrović, Ladislav Vrsalović, Senka Gudić                                               | REMOVAL OF MICROPLASTICS FROM SYNTHETIC SEAWATER (MICROPLASTIC PARTICLES IN DRINKING WATER SAMPLES: TAP WATER AND BOTTLED WATER)                                                                                                                 |
| Nimai Bubalo Kotnik, Mihael Sever, Vivian Malnar, Hana Blajić, Laura Filipović-Grčić, Biljana Apostolska      | MIKROPLASTIKA U VODI ZA PIĆE: VODOVODNA VODA I VODA U BOCAMA                                                                                                                                                                                     |
| Miće Jakić, Anna Pastuović, Mario Nikola Mužek, Sanja Perinović, Jozić                                        | MEHANIČKO RECIKLIRANJE POLIAMIDNE NITI ZA KOŠNJU: RJEŠENJE ILI GUBITAK VREMENA (MECHANICAL RECYCLING OF THE POLYAMIDE TRIMMER LINE: SOLUTION OR A WASTE OF TIME? )                                                                               |
| Petra Juranović, Anamaria Perić, Karlo Grgurević, Dajana Kučić Grgić, Vesna Ocelić Bulatović                  | COMPATIBILIZATION EFFECTS ON THE THERMAL AND MECHANICAL PROPERTIES OF BIODEGRADABLE POLY(LACTIC ACID)/POLYHYDROXYALKANOATE BLENDS                                                                                                                |
| Lucija Vlahović, Ena Miletić, Dora Milički, Karlo Grgurević, Dajana Kučić Grgić, Vesna Ocelić Bulatović       | BIODEGRADABLE PLA/PHBV POLYMER BLENDS FOR SUSTAINABLE PACKAGING IN THE FOOD INDUSTRY                                                                                                                                                             |
| Matea Nižić, Irena Krešić, Sanja Perinović Jozić, Miće Jakić                                                  | RECYCLING OF WASTE PACKAGING MATERIAL                                                                                                                                                                                                            |
| Ida Bulić, Anita Štrkalj, Mateo Lončar, Zoran Glavaš                                                          | ANALIZA SASTAVA MIJEŠANOG KOMUNALNOG OTPADA PRIJE I NAKON UVOĐENJA ODVOJENOG SAKUPLJANJA BIORAZGRADIVOG OTPADA (ANALYSIS OF MUNICIPAL SOLID WASTE COMPOSITION BEFORE AND AFTER THE IMPLEMENTATION OF SEPARATE COLLECTION OF BIODEGRADABLE WASTE) |
| Kuzmičić Rosandić Tea, Dalka Zanki , Matea Taraš                                                              | “CITIZEN SCIENCE” - ULOGA GRAĐANA U KVANTITATIVNOJ I KVALITATIVNOJ ANALIZI MORSKOG OTPADA ("CITIZEN SCIENCE" – THE ROLE OF CITIZENS IN THE QUANTITATIVE AND QUALITATIVE ANALYSIS OF MARINE LITTER)                                               |
| Hana Bekan, Lucija Jovanović, Ivana Peraga, Nediljka Vukojević Medvidović                                     | COMPOST VS. SUBSTRATES: A PHYSICOCHEMICAL INSIGHT INTO ORGANIC SOIL AMENDMENTS                                                                                                                                                                   |
| Petra Koceić, Valentina Knežević, Mladenka Šarolić                                                            | PREGLED MOGUĆNOSTI ISKORIŠTAVANJA KOŠTICA MASLINA (OVERVIEW OF THE POSSIBILITIES OF OLIVE KERNELS UTILIZATION)                                                                                                                                   |
| Maša Buljac, Nediljka Vukojević Medvidović, Josip Radić, Sanja Perinović Jozić, Petra Ključarić, Ena Miloloža | EVALUATING THE EFFECTIVENESS OF THE C-ECOFORHOME COMPOSTER FOR INSTITUTIONAL BIOWASTE PROCESSING                                                                                                                                                 |
| Fani Bakalić, Klara Zelenika, Ana Puzić, Maša Buljac, Nediljka Vukojević Medvidović, Josip Radić              | SUSTAINABLE APPROACHES TO BIOWASTE MANAGEMENT: TOWARDS A GREENER FUTURE                                                                                                                                                                          |