



SERBIAN SOCIETY OF CORROSION AND MATERIALS PROTECTION UDRUŽENJE INŽENJERA SRBIJE ZA KORZIJU I ZAŠTITU MATERIJALA



INTERNATIONAL CONFERENCE

MEĐUNARODNA KONFERENCIJA

MEETING POINT OF THE SCIENCE AND PRACTICE IN THE FIELDS OF CORROSION, MATERIALS AND ENVIRONMENTAL PROTECTION

STECIŠTE NAUKE I PRAKSE U OBLASTIMA KOROZIJE, ZAŠTITE MATERIJALA I ŽIVOTNE SREDINE

PROGRAM

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Jadran d.o.o., Beograd



Sherwin-Williams | Protective & Marine Coatings



PROGRAM

TUESDAY | Utorak 28.05.2024.

10.00-20.00 Registration of the participants | Registracija učesnika

17.00-17.25 Opening ceremony | Otvaranje Konferencije

Plenary lectures | Plenarna predavanja

17.25-18.00 Plenary lecture: Srecko Stopić¹, Nenad Nikolić², Dragana Životić³, Jugoslav Krstić⁴, Milena Rosić⁵, Vladimir Damjanović⁶, Bernd Friedrich¹, Hydrogen Metallurgy, ¹IME Process Metallurgy and Metal Recycling/RWTH Aachen University, Aachen, Germany, ²Institute for Mutlidisciplinary Research, University of Belgrade, Belgrade, Serbia, ³Faculty of Mining and Geology, University of Belgrade, Belgrade, Serbia, ⁴Institute of Chemistry, Technology and Metallurgy, Belgrade, Serbia, ⁵"Vinča" Institute of Nuclear Sciences, Belgrade, Serbia, 6Alumina d.o.o, Zvornik, Bosnia and Herzegovina

18.00-18.35 Plenary lecture: Tea Zuliani^{1,2}, Majda Nikezić^{1,2}, Tjaša Žerdoner^{1,2}, Stable non-traditional isotopes as tracers for the identification of contaminant sources, ¹Jožef Stefan Institute, Department of Environmental Sciences, Ljubljana, Slovenia, ²Jožef Stefan International Postgraduate School, Ljubljana, Slovenia

Oral presentations | Usmena saopštenja

18.35-18.50	Prezentacija kompanije Jadran d.o.o., Beograd
18.50-19.05	Sherwin-Williams Protective & Marine Coatings

19.05 Welcome Reception – COCKTAIL | KOKTEL

Detailed information about the Conference can be found at Detaljnije informacije o Konferenciji mogu se naći na http://uiskozam.rs/yucorr/

WEDNESDAY | Sreda 29.05.2024.

Plenary lectures | Plenarna predavanja

- **O9.00-09.35** Plenary lecture: Ladislav Vrsalović, Solid and semisolid state recycling of aluminium alloys, University of Split, Faculty of Chemistry and Technology, Split, Croatia
- **O9.35-10.10** Plenary lecture: Larisa Ilijin, Insects as potential plastic waste bio-transformers, Department of Insect physiology and Biochemistry, Institute for Biological Research "Siniša Stanković", National Institute of the Republic of Serbia, University of Belgrade, Belgrade, Serbia

Invited lectures | Predavanja po pozivu

- 10.10-10.35 Dendi Vaštag^{1,*}, Peter Majerič^{2,3}, Vojkan Lazić⁴, Jovana Marković⁴, Rebeka Rudolf^{2,3}, Monitoring of electrochemical behaviour of an Au-Ge alloy in an artificial sweat solution, ¹University of Novi Sad, Faculty of Sciences, Novi Sad, Serbia, ²University of Maribor, Faculty of Mechanical Engineering, Slovenia, ³Zlatarna Celje d.o.o., Slovenia, ⁴School of Dental Medicine, University of Belgrade, Serbia
- 10.35-11.00 Sežana Aksentijević¹, Nataša Ćirović¹, Aleksandar Mićić¹, **Marija**Mihailović², Control of stationary gas emissions in the nonferrous metals casting process, ¹Western Serbia Academy of
 Applied Studies, Užice Department, Užice, Serbia, ²Institute of
 Chemistry, Technology and Metallurgy, Department of
 Electrochemistry, Belgrade, Serbia

Oral presentations | Usmena saopštenja

- 11.00-11.15 Prezentacija kompanije ALFATERM d.o.o., Čačak
- 11.15-11.25 Prezentacija kompanije Firestop Internacional d.o.o., Nova Pazova
- 11.25-11.40 Prezentacija kompanije Jadran d.o.o., Beograd
- 13.00 PICNIC | RUČAK U PRIRODI

16.00-18.0 POSTER SESSION | POSTER SEKCIJA

- 1. Teodora Vidović¹, Dina Tenji², Tamara Ivetić³, Ivana Jagodić¹, Jovana Cvetić¹, Nemanja Banić¹, Efficiency of methylene blue removal and hydrogen production using Au modified TiO₂ under simulated solar and UV radiation, ¹University of Novi Sad, Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental Protection, Novi Sad, Serbia, ²University of Novi Sad, Faculty of Sciences, Department of Biology and Ecology, Laboratory for Ecophysiology and Ecotoxicology LECOTOX, Novi Sad, Serbia, ³University of Novi Sad, Faculty of Sciences, Department of Physics, Novi Sad, Serbia
- 2. Nemanja Banić¹, Ivana Jagodić¹, Dina Tenji², Teodora Vidović¹, Removal of methylene blue from water using ZnO immobilized on glass spheres in an annular fixed bed photoreactor, ¹University of Novi Sad, Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental Protection, Novi Sad, Serbia, ²University of Novi Sad, Faculty of Sciences, Department of Biology and Ecology, Laboratory for Ecophysiology and Ecotoxicology LECOTOX, Novi Sad, Serbia
- 3. Božidarka Arsenović, Development of alternative jet fuels from the aspect of reducing CO₂ emissions (fuels for the future) part 2, "ORAO" AD for production and repair of Bijeljina, Republic of Serbia, Bosnia and Herzegovina
- 4. Danijela Jovičić¹, Zorica Ristić¹, Bojana Lukić¹, Stanko Spasojević¹, Marija Mitrović², Nebojša Vasiljević², Milorad Tomić², Characterization of coating Al applied by physical vapor phase (PVD) on nickel alloy, ¹"ORAO" AD for production and repair of Bijeljina, Republic of Serbia, Bosnia and Herzegovina, ²University of East Sarajevo, Faculty of Technology, Zvornik, Republic of Srpska, ³Engineering academy of Serbia, Belgrade, Serbia
- 5. D. Vuksanović, J. Šćepanović, D. Radonjić, Pollutants During Simultaneous Operation Of Plants For The Production Of Concrete-Concrete Base And Plants For The Production Of Asphalt-Asphalt Base, University of Montenegro, Faculty of Metallurgy and Technology, Podgorica, Montenegro
- **6.** Dijana Ašćerić¹, Jelena Vulinović¹, Slađana Petronić², Ecological Characteristics of the Macrophytic Flora of Bardača Wetland, ¹Faculty of Technology Zvornik, University of East Sarajevo, Zvornik, Bosnia and Herzegovina, ²Faculty of Agriculture, University of East Sarajevo, East Sarajevo, Bosnia and Herzegovina

- 7. Đenđi Vaštag, Suzana Apostolov, Gorana Mrđan, Borko Matijević, Selected thiazole derivative as copper corrosion inhibitor in acidic solution, University of Novi Sad, Faculty of Sciences, Novi Sad, Serbia
- 8. Dušica Jovanović¹, Nina Finčur¹, Sanja Panić², Vesna Despotović¹, Sabolč Bognar¹, Daniela Šojić Merkulov¹, Solar-Driven Photocatalytic Degradation of the Fluoroquinolone Antibiotic Ciprofloxacin Employing ZnO Nanoparticles Synthesized Using Green Tea Extract, ¹University of Novi Sad Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental Protection, Novi Sad, Serbia, ²University of Novi Sad, Faculty of Technology, Novi Sad, Serbia
- 9. Enisa Selimović¹, Bojana Veljković¹, Aleksandra Pavlović², Emilija Pecev-Marinković², Distribution of essential and potentially essential elements in wild fruit from the Pešter Plateau in the Republic of Serbia, ¹State University in Novi Pazar, Department of Natural Sciences and Mathematics, Novi Pazar, Serbia, ²Department of Chemistry, Faculty of Sciences and Mathematics, University of Niš, Niš, Serbia
- 10. Snežana Joksić, Jovana Živić, Živče Šarkoćević, Marija Matejić, Corrosion of oil and gas pipelines with special reference to high-frequency welded pipes, ¹University of Pristina with temporary settled in Kosovska Mitrovica, Faculty of Technical Science, Kosovska Mitrovica, Serbia
- 11. Katarina Đ. Božić¹, Miroslav M. Pavlović¹, Đorđe N. Veljović², Marijana R. Pantović Pavlović¹, Biocompatibility Testing of Zein/Hydroxyapatite Composite Coatings on Titanium Substrate, ¹Institute of Chemistry, Technology and Metallurgy, Department of Electrochemistry, Belgrade, Serbia, ²Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia
- 12. Katarina R. Pantović Spajić¹, Marijana R. Pantović Pavlović², Srećko Stopić³, Đorđe V. Gjumišev², Branislav Marković¹, Miroslav M. Pavlović², Ksenija Stojanović⁴, Comparative Analysis of Desulfurization Efficiency and Activation Energy in Graphite and Dimensionally Stable Anode (DSA) Electrodes at Various Conditions, ¹Institute for Technology of Nuclear and Other Mineral Raw Materials, Belgrade, Serbia, ²University of Belgrade, Institute of Chemistry, Technology and Metallurgy, National Institute of Republic of Serbia, Belgrade, Serbia, ³Process Metallurgy and Metal Recycling, RWTH Aachen University, Aachen, Germany, ⁴University of Belgrade, Faculty of Chemistry, Belgrade, Serbia
- 13. Marijana R. Pantović Pavlović¹, Evelina A. Herendija², Miloš M. Lazarević³, Nenad L. Ignjatović⁴, Miroslav M. Pavlović¹, Efficacy of Novel Hybrid Coating on Titanium Substrates in Targeting Cancerous Cells, ¹Institute of Chemistry, Technology and Metallurgy, Department of

- Electrochemistry, Belgrade, Serbia, ²University of Belgrade, Multidisciplinary PhD Studies, Belgrade, Serbia, ³School of Dental Medicine, University of Belgrade, Belgrade, Serbia, ⁴Institute of Technical Science of the Serbian Academy of Sciences and Arts, Belgrade, Serbia
- 14. Miroslav Pavlović¹, Katarina Đ. Božić¹, Srećko Stopić², Alexander Birich², Bernd Friedrich², Marija M. Jonović³, Marijana R. Pantović Pavlović¹, Innovative Multimetal Multivalent Oxides for Sustainable Energy Solutions: Emphasizing Oxygen Evolution Reactions, ¹Institute of Chemistry, Technology and Metallurgy, Department of Electrochemistry, Belgrade, Serbia, ²Process Metallurgy and Metal Recycling, RWTH Aachen University, Aachen, Germany, ³ Mining and Metallurgy Institute Bor, Bor, Serbia
- **15.** Bojana Radojković, Milica Košević, **Marija Mihailović**, **Voltametric evaluation of essential oils antioxidative properties,** Department of Electrochemistry, Institute of Chemistry, Technology and Metallurgy, University of Belgrade, Belgrade, Serbia
- 16. Sanja Stevanović¹, Dragana Milošević¹, Marija Pergal¹, Ivan Pešić¹, Dušan Tripković¹, Lazar Rakočević², Vesna Maksimović², Microwave-assisted polyol synthesis of Pt/MXene catalyst for the methanol oxidation reaction, ¹University of Belgrade Institute of Chemistry, Technology and Metallurgy, Belgrade, Serbia, ²University of Belgrade Vinča Institute of Nuclear Sciences, Vinča-Belgrade, Serbia
- 17. Nataša M. Petrović¹, Nebojša D. Nikolić¹, Vladimir D. Jović², Tanja S. Barudžija³, Silvana Dimitrijević⁴, Jovan N. Jovićević¹, Vesna S. Cvetković¹, CuPd alloy formation by Cu electrodeposition from a deep eutectic solvent, ¹Department of Electrochemistry, Institute of Chemistry, Technology and Metallurgy, University of Belgrade, Belgrade, Serbia, ²Institute for Multidisciplinary Research, University of Belgrade, Belgrade, Serbia, ³Institute for Nuclear Sciences Vinča, University of Belgrade, Belgrade, Serbia, ⁴Mining and Metallurgy Institute, Bor, Serbia
- 18. Nebojša D. Nikolić¹, Jelena D. Lović¹, Nikola Vuković², Sanja I. Stevanović¹, Designing of the Shape of Zinc particles by Variation of Electrolysis Conditions, ¹University of Belgrade, ICTM-Department of Electrochemistry, Belgrade, Serbia, ²Institute for Technology of Nuclear and Other Mineral Raw Materials, Belgrade, Serbia
- 19. Natalija Radulović¹, Olga Kostić¹, Olivera Košanin², Dragana Pavlović¹, Dimitrije Sekulić¹, Milica Jonjev¹, Miroslava Mitrović¹, Pavle Pavlović¹, Evaluation of the phytoremediation potential of Tilia tomentosa Moench. for Cu, Pb and Zn on green areas in Belgrade, ¹Institute for Biological Research 'Siniša Stanković' National Institute of the Republic

- of Serbia, University of Belgrade, Department of Ecology, Belgrade, Serbia, ² Faculty of Forestry, University of Belgrade, Belgrade, Serbia
- 20. Marija Matić, Dragana Pavlović, Veljko Perović, Olga Kostić, Snežana Jarić, Miroslava Mitrović, Pavle Pavlović, Assessment of As and Pb in Solanum tuberosum L. from urban areas of Belgrade and potential dietary health risk for the population, Department of Ecology, Institute for Biological Research "Siniša Stanković", National Institute of the Republic of Serbia, University of Belgrade, Belgrade, Serbia
- **21.** Branimir Jugović¹, Zorica Knežević-Jugović², **Milica Gvozdenović**², **Estimation of enzyme affinity of chemically bonded Glucose Oxidase onto polyaniline-based enzyme electrode**, ¹Institute of Technical Science, SASA, Belgrade, Serbia , ²Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia
- 22. Milica Gvozdenović¹, Tijana Kovač², Branimir Jugović³, Bojan Jokić⁴, Enis Džunuzović¹, Electrochemical polymerization of pyrrole on mild steel from p-toluensulfonic acid electrolyte, ¹Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia, ²Innovation Center of the Faculty of Technology and Metallurgy in Belgrade, Belgrade, Serbia, ³Institute of Technical Science, SASA, Belgrade, Serbia, ⁴Faculty of Applied Arts, University of Arts in Belgrade, Belgrade, Serbia
- 23. Nebojša Vasiljević¹, Marija Mitrović¹, R.F. Godec², Jovan Vujić³, Milorad Tomić^{1,4}, Optimization of Process Parameters for Assessing the Inhibitory Potential of Dandelion Root Extract in NaCl Solution, ¹University of East Sarajevo, Faculty of Technology, Zvornik, Republic of Srpska, ²University of Maribor, Faculty of Chemistry and Chemical Engineering, Slovenia, ³Jugoinspekt Beograd a.d., Belgrade, Serbia, ⁴Enginering academy of Serbia, Serbia
- **24.** *Nenad M. Zarić*¹², *Miloš Petrović*³, *Ratko Pavlović*⁴, **Recycling honey bee drone brood,** ¹University of Belgrade Faculty of Biology, Belgrade, Serbia, ²University of Natural Resources and Life Sciences (BOKU), Department of Agrobiotechnology (IFA-Tulln), Institute of Bioanalytics and Agro-Metabolomics, Tulln, Austria, ³University of Novi Sad, Faculty of Agriculture, Novi Sad, Serbia, ⁴University of Belgrade Faculty of Chemistry, Department of Biochemistry, Belgrade, Serbia
- **25.** *Nenad M. Zarić*^{1,2}, Monitoring of arsenic in the environment using honey bees, ¹University of Belgrade Faculty of Biology, Belgrade, Serbia, ²University of Natural Resources and Life Sciences (BOKU), Department of Agrobiotechnology (IFA-Tulln), Institute of Bioanalytics and Agro-Metabolomics, Tulln, Austria

- **26.** Regina Fuchs—Godec¹, Marija Riđošić², Milorad. V. Tomić², Improvement of the corrosion-inhibiting properties of the hydrophobic layer through the addition of eugenol, ¹Faculty of Chemistry and Chemical Engineering, University of Maribor, Maribor, ²Faculty of Technology Zvornik, University of Eastern Sarajevo, Republic of Srpska
- 27. Maša Islamčević Razboršek¹, Regina Fuchs-Godec¹, Sabina Begić², Examining the Potential of Deep Eutectic Solvents for Eco-Friendly Extraction of Bioactive Compounds from Peels of Allium cepa L., ¹University of Maribor, Faculty of Chemistry and Chemical Engineering, Maribor, Slovenia, ²University of Sarajevo, Faculty of Science, Bosnia and Herzegovina
- 28. Marija Mitrović¹, Aleksandra Mijatović², Anđela Simović³, Miroslav Pavlović³, Regina Fuchs Godec⁴, Milorad Tomić^{1,5}, Miomir Pavlović^{1,5}, Jelena Bajat², Electrodeposition and characterization of smart selfhealing composite Zn-Co-RE coatings, ¹University of East Sarajevo, Faculty of Technology, Zvornik, Republic of Srpska, ²Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia, ³Institute of Chemistry, Technology and Metallurgy, National Institute of the Republic of Serbia, ⁴University of Maribor, Faculty of Chemistry and Chemical Engineering, Maribor, Slovenia, ⁵Engineering academy of Serbia, Belgrade, Serbia
- 29. Szabolcs Bognár¹, Vesna Despotović¹, Sanja Panić², Nina Finčur¹, Dušica Jovanović¹, Predrag Putnik³, Daniela Šojić Merkulov¹, Application of ZnO nanomaterials based on green tea leaf extract for enhanced photocatalytic degradation of tembotrione, ¹University of Novi Sad Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental Protection, Novi Sad, Serbia, ²University of Novi Sad, Faculty of Technology, Novi Sad, Serbia, ³University North, Department of Food Technology, Koprivnica, Croatia
- 30. Slađana Laketić¹, Bojan Međo², Miloš Momčilović², Jelena Bajat², Đorđe Veljović², Vesna Kojić³, Ivana Cvijović-Alagić¹, Improvement of the β-Ti alloy properties in bio-environment, ¹Vinča Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia, ²Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia, ³Oncology Institute of Vojvodina, Sremska Kamenica, Serbia
- 31. Vesna Despotović¹, Nataša Tot², Nina Finčur¹, Tamara Ivetić³, Sabolč Bognar¹, Dušica Jovanović¹, Daniela Šojić Merkulov¹, Enhanced photocatalytic removal of fluroxypyr using newly synthesized green ZnO nanocomposites under simulated solar irradiation, ¹University of Novi Sad Faculty of Sciences, Department of Chemistry, Biochemistry and

Environmental Protection, Novi Sad, Serbia, ²Technical College of Applied Sciences in Zrenjanin, Zrenjanin, Serbia, ³University of Novi Sad Faculty of Sciences, Department of Physics, Novi Sad, Serbia

THURSDAY | Četvrtak 30.05.2024.

11.00-18.00 EXCURSION | IZLET - Registration on Conference desk is mandatory on the first day | Obavezna prijava na pultu za registraciju prvog dana

EXCURSION includes visiting: Ribnica Monastery, Mionica, Ribnička cave, Struganik, Visiting birth house of Živojin Mišić, Vrujci | IZLET ukljucuje posetu Manastiru Ribnica, Mionici, Ribničkoj pećini, Struganiku, Posetu kuce Živojina Mišića, Vrujci

20.30 GALA DINNER | SVEČANA VEČERA

FRIDAY | Petak 31.05.2024.

Plenary lecture | Plenarno predavanje

10.00-10.35 Plenary lecture: Jelena Šćepanović, Analysis of the possibility of applying modern technology for mechanical plastic processing on the Montenegrin coast, University of Montenegro, Faculty of Metallurgy and Technology, Podgorica, Montenegro

Invited lectures | Predavanje po pozivu

10.35-11.00 Dragana Pavlović*, Marija Matić, Veljko Perović, Snežana Jarić, Olga Kostić, Miroslava Mitrović, Pavle Pavlović, Levels of As and Pb in soil and Allium cepa L. and associated health risk in three Belgrade municipalities, Department of Ecology, Institute for Biological Research "Siniša Stanković"-National Institute of the Republic of Serbia, University of Belgrade, Belgrade, Serbia

- 11.00-11.25 Željko Krivačević, Dejan Grgić, Saša Stojanović, Aleksandar Pešić,
 Drilling and equipping of new wells due to contamination of the
 near-well zone by various chemical and mechanical processes on
 existing wells, "Transnafta " corp., Pančevo, Serbia
- 11.25-11.50 Dragana L. Milošević¹, Sanja I. Stevanović², Dušan V. Tripković²
 Enhanced Pt@Ni catalysts obtained by galvanic displacement
 method for successful methanol electrooxidation, ¹University of
 Belgrade Institute of Chemistry, Technology and Metallurgy Department of Ecology and Techoeconomic, Belgrade, Republic
 of Serbia, ²University of Belgrade Institute of Chemistry,
 Technology and Metallurgy Department of Electrochemistry,
 Belgrade, Republic of Serbia

11.50-12.00 CLOSING CEREMONY | CEREMONIJA ZATVARANJA

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Serbian Society of Corrosion and Materials Protection UDRUŽENJE INŽENJERA SRBIJE ZA KOROZIJU I ZAŠTITU MATERIJALA



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