UNIVERSITY OF BELGRADE, TECHNICAL FACULTY IN BOR





FINAL PROGRAM

8TH INTERNATIONAL STUDENT CONFERENCE ON TECHNICAL SCIENCE, ISC 2023 20-21 October 2023, Bor Lake, Serbia

Is organized by

UNIVERSITY OF BELGRADE, TECHNICAL FACULTY IN BOR

and co-organized by

University of Zenica, Faculty of engineering and natural sciences, Zenica, Bosnia and Herzegovina

University in Priština, Faculty of Technical Science, Kosovska Mitrovica, Serbia;

University of Montenegro, Faculty of Metallurgy and Technology, Podgorica, Montenegro;

University of Tuzla, Faculty of Technology, Tuzla, Bosnia and Herzegovina;

University of Chemical Technology and Metallurgy, Faculty of Metallurgy and Material Science, Sofia, Bulgaria;

WITH GREAT THANKS TO OUR SPONSORS AND DONORS

General sponsor

Platinum donor

Platinum donor





Platinum donor



Gold donor

Gold donor





Silver donor





October 20th - 21st, 2023, Bor lake in Bor (Serbia) www.tfbor.bg.ac.rs https://ioc.tfbor.bg.ac.rs/isc2023/

FINAL PROGRAM

Friday, October 20, 2023

- **14:00-15:00** Conference desk opening and registration of participants, Putting up posters for Poster Session <u>Hotel lobby</u>
- **15:00-15:10** Conference opening <u>Room C</u>
- **15:10-15:30** Invited lecture <u>Room C</u>
- **15:30-16:45** Oral Session 1 <u>Room C</u>
- <u>16:45-17:15</u> Coffee break

17:15-18:15 Poster Session 1 – <u>Hotel lobby</u>

Saturday, October 21, 2023

| <u>11:00-12:45</u> | Oral Session 2 - <u>Room C</u> |
|--------------------|------------------------------------|
| 12:45-13:00 | Conference closing - <u>Room C</u> |

Friday, October 20, 2023

15:10-16:45Oral Session 1 - Room CChairpersons:Dragan Manasijević, Ljubiša Balanović, Milan Gorgievski

- 1. Invited lecture: Yuhui Zhang, Shuhong Liu, Yuling Liu; Mentor: Yong Du (China) MICROSTRUCTURAL SIMULATION OF AGEING PRECIPITATION BASED ON THE DIFFUSION STUDY OF THE HCP A3 PHASE IN Mg-Al-Sn ALLOYS
- 2. Student: Marina Marković; Mentor: Milan Gorgievski (Serbia) REMOVAL OF COPPER IONS FROM AQUEOUS SOLUTIONS USING ONION PEELS AS AN ADSORBENT
- **3.** Student: Aleksandra Radić; Mentor: Danijela Voza (Serbia) METHODS FOR PRIORITISATION OF SUSTAINABLE DEVELOPMENT GOALS (SDGS) - AN OVERVIEW
- 4. Student: Marija Kovač; Mentor: Snežana Vučetić (Serbia) NON-DESTRUCTIVE TESTING OF INORGANIC MATERIALS AS DECISION TOOL IN CULTURAL HERITAGE
- **5.** Student: Aleksandar Nikolajević; Mentor: Ljubiša Balanović (Serbia) CHARACTERIZATION OF COPPER ALLOYS MANUFACTURED IN SEVOJNO COPPER MILL

<u>17:15-18:15</u> Poster Session 1 – <u>Hotel lobby</u>

Chairpersons: Uroš Stamenković, Jelena Milosavljević, Maja Nujkić

1. Students: Nizama Baručija, Resul Čehajić, Mahir Dreco; Mentors: Almaida Gigović-Gekić, Amna Hodžić (Bosnia and Herzegovina) INFLUENCE OF MIXING OF QUENCHING MEDIA ON MICROSTRUCTURE AND HARDNESS OF STEEL 23MnB4



October 20th - 21st, 2023, Bor lake in Bor (Serbia) www.tfbor.bg.ac.rs https://ioc.tfbor.bg.ac.rs/isc2023/

- 2. Students: Mahir Dreco, Armin Čaušević; Mentors: Branka Muminović, Behar Alić, Almaida Gigović-Gekić (Bosnia and Herzegovina) TESTING OF WELDED JOINTS WITH LIOUID PENETRANTS
- **3.** Students: Vedran Milanković, Tamara Tasić; Mentor: Tamara Lazarević-Pašti (Serbia) REMOVAL OF CHLORPYRIFOS AND MALATHION USING SPENT COFFEE GROUNDS – ISOTHERM STUDY
- **4.** Student: **Milena Stajić;** Mentor: **Uroš Stamenković** (Serbia) EFFECT OF THE AUSTENITIZING TEMPERATURE ON THE PROPERTIES OF 51CrV4 SPRING STEEL
- **5.** Students: Željka Nikolić, Nebojša Radović; Mentor: Olga Tešović (Serbia) WHY SHOULD USED CREOSOT IMPREGNATED WOOD WASTE BE CHARACTERIZED AS HAZARDOUS?
- 6. Students: Nebojša Radović, Željka Nikolić; Mentor: Ksenija Stojanović (Serbia) CAPTURING SULFUR DIOXIDE AT ITS SOURCE: SIMPLE AND EFFICIENT METHOD FOR SAMPLING AND QUANTIFICATION
- 7. Student: Milan Nedeljković; Mentors: Srba Mladenović, Jasmina Petrović (Serbia) STUDIES OF THE INFLUENCE OF GRAPHENE NANOSHEETS ON THE WETTABILITY OF LEAD-FREE SOLDER ALLOYS
- 8. Students: Tamara Tasić, Vedran Milanković; Mentor: Tamara Lazarević-Pašti (Serbia) ACTIVATED POROUS CARBON MATERIALS DERIVED FROM VISCOSE FIBERS FOR CHLORPYRIFOS REMOVAL FROM WATER
- **9.** Students: Veljko Pelić, Sandra Milićević; Mentors: Žaklina Tasić, Maja Nujkić (Serbia) THE EFFICIENCY OF NICKEL ION ADSORPTION FROM SYNTHETIC SOLUTIONS USING MULLEIN
- **10.** Students: Sandra Milićević, Veljko Pelić; Mentors: Maja Nujkić, Žaklina Tasić (Serbia) THE EFFICIENCY OF ZINC ION ADSORPTION FROM SYNTHETIC SOLUTIONS USING MULLEIN
- **11.** Student: Andreja Grujić; Mentor: Srba Mladenović (Serbia) APPLICATION OF SOFTWARE PACKAGES IN THE VISUALIZATION OF THE CASTING PROCESS-EXPERIENCE
- **12.** Students: Jovana Mitrović, Milica Borisavljević, Vanja Milovanović, Predrag Radulović; Mentor: Filip Miletić (Serbia) ANALYSIS OF WORKING EFFICIENCY OF THE BUCKET WHEEL EXCAVATOR SCHRS 1400.28/3 ON OPEN CAST MINE FIELD C
- **13.** Students: Marko Krpić, Aleksandar Đorđević; Mentor: Boris Rajčić (Serbia) INVESTIGATION ON THE CO2 BREAKTHROUGH BEHAVIOUR OF DIFFERENT MATERIALS
- **14.** Students: Željka Nikolić, Adrijana Šutulović, Boris Rajčić, Dubravka Milovanović, Vladimir Nikolić, Zoran Šaponjić; Mentor: Milica Marčeta (Serbia) TRACKING THE ABSORPTION ABILITY OF EXHAUST GASES MODEL MIXTURE USING AN AQUEOUS SOLUTIONS OF NaOH AND KOH
- **15.** Students: Nebojša Radović, Željka Nikolić; Mentor: Olga Tešović (Serbia) MANAGING THE HAZARDOUS CHEMICAL WASTE IN LABORATORIES: ARE WE ON THE RIGHT PATH?
- 16. Students: Marija Divac, Lana Mitrovic, Jovana Milosevic, Marko Rakita; Mentor: Filip Miletić (Serbia) MODELLING AND STRESS ANALYSIS OF MACHINE ELEMENTS IN SOLIDWORKS SOFTWARE



October 20th - 21st, 2023, Bor lake in Bor (Serbia) www.tfbor.bg.ac.rs https://ioc.tfbor.bg.ac.rs/isc2023/

- **17.** Student: Vesna Miljić; Mentors: Bojan Miljević, Snežana Vučetić (Serbia) VISIBLE-LIGHT PHOTOCATALYTIC DEGRADATION OF MODEL POLLUTANT (MO-METHYL ORANGE) IN SOLID-STATE
- **18.** Student: Avram Kovačević; Mentor: Uroš Stamenković (Serbia) COMPARATIVE ANALYSIS OF TENSILE STRENGTH IN EN-AW 7075 ALUMINUM ALLOY: EMPIRICAL VS. THEORETICAL ASSESSMENT
- **19.** Student: **Miljan Pankalujić;** Mentor: **Ivana Marković** (Serbia) PROPERTIES OF SOME COINS IN CIRCULATION FROM SERBIA
- **20.** Student: Nemanja Marić; Mentor: Ivana Marković (Serbia) STUDY OF ISOTHERMAL AGEING IN Cu-Al-Ni-Fe ALLOY
- **21.** Student: Olivera Dragutinović; Mentors: Đorđe Veljović, Vaso Manojlović (Serbia) INVESTIGATION OF THE EFFECTS OF Ca/P RATIO AND DIFFERENT POLYMER-BASED COATINGS ON THE PROPERTIES OF MACROPOROUS CALCIUM PHOSPHATE MATERIALS
- 22. Student: Ognjen Stanković; Mentors: Milovan Stanković, Mirjana Filipović, Vaso Manojlović (Serbia) THE FAVORABLE INFLUENCE OF Ni ON THE REDUCTION OF SEGREGATIONS DURING SOLIDIFICATION OF LEAD-TIN BRONZES CuSn10Pb10
- 23. Student: Nemanja Prvulović; Mentor: Ana Radojević (Serbia) RECYCLING OF END-OF-LIFE VEHICLES
- **24.** Student: **Dalibor Jovanović;** Mentor: **Milan Gorgievski** (Serbia) REMOVAL OF COPPER IONS FROM AQUEOUS SOLUTIONS USING HAZELNUT SHELLS AS AN ADSORBENT

Saturday, October 21, 2023

<u>11:00-12:45</u> Oral Session 2 - <u>Room C</u>

Chairpersons: Ljubiša Balanović, Jelena Milosavljević, Uroš Stamenković

- 1. Students: Nizama Baručija, Armin Čaušević, Merjem Delibašić; Mentor: Hasan Avdušinović (Bosnia and Herzegovina) INFLUENCE OF GRAPHITE MORPHOLOGY ON THERMAL CONDUCTIVITY
- 2. Student: Alexandr Chesnyak; Mentor: Tamara Tikhomirova (Russia) WAYS TO SOLVE ALTERNATIVE ENERGY SOURCES
- **3.** Student: Nikolay Palienko; Mentor: Tamara Tikhomirova (Russia) DEVELOPMENT OF GEOTHERMAL ENERGY IN THE WORLD
- **4.** Student: Andrey Slyunkin; Mentor: Tamara Tikhomirova (Russia) THE USE OF BIOENERGY RESOURCES IN THE PRODUCTION OF ELECTRICITY
- Students: Alida Kusić, Ilma Bošnjak; Mentor: Miliša Todorović (Bosnia and Herzegovina) SAFETY AND HEALTH IN COKING PLANTS THROUGH THE APPLICATION OF ENGINEERING MEASURES
- 6. Student: Edita Bjelić; Mentors: Mersiha Suljkanović, Jasmin Suljagić (Bosnia and Herzegovina) HYDROPHOBIC DEEP EUTECTIC SOLVENTS: PROMISING GREEN MEDIA FOR BIOMASS TREATMENT

7. Student: **Miloš Vuleta;** Mentor: **Jasmina Petrović** (Serbia) CONSIDERATION OF THE INFLUENCE OF STIR CASTING PROCESS PARAMETERS ON OBTAINING MMC CASTINGS



> October 20th – 21st, 2023, Bor lake in Bor (Serbia) www.tfbor.bg.ac.rs https://ioc.tfbor.bg.ac.rs/isc2023/

WITH GREAT THANKS TO OUR EXHIBITIONISTS AND FRIENDS

