



INTERNATIONAL SCIENTIFIC
AND PROFESSIONAL CONFERENCE
POLITEHNIKA 2023

AGENDA

Belgrade, 15th December 2023

SUPPORTED BY

Ministry of Education
Ministry of Environmental Protection
Ministry of European Integration
Directorate for Occupational Safety and Health
The Office for Dual Education and
The National Qualifications Framework
Conference of Academies for Applied Studies in Serbia
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The Association of Belgrade Architects
The City of Požarevac
Tourist Organization of The City of Požarevac



THE ACADEMY OF APPLIED
TECHNICAL STUDIES
BELGRADE

Organizer
The Academy of Applied Technical Studies Belgrade
Katarine Ambrozić 3, Belgrade
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INTERNATIONAL SCIENTIFIC
AND PROFESSIONAL CONFERENCE
POLITEHNIKA 2023

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INTERNATIONAL SCIENTIFIC AND PROFESSIONAL CONFERENCE POLITEHNIKA 2023

15th December 2023

Belgrade, Hotel Hyatt Regency



AGENDA

09:00 – Registration of participants

10:00 – 11:15 Official opening of the Conference

11:15 – 11:45 Coffee Break

11:45 – 14:15 Work in parallel sessions

- Scope 1. **Environment and Sustainable Development**
- Scope 2. **Occupational Health and Safety and Fire Safety**
- Scope 3. **Smart Management Systems**
- Scope 4. **Graphic Engineering**
- Scope 5. **Design**
- Scope 7. **Biotechnology and Healthcare**
- Scope 8. **Mechanical Engineering**
- Scope 9. **Mechatronics**
- Scope 10. **Ecotourism and Rural Development**

14:15 – 14:45 Cocktail / light lunch break

14:45 – 17:00 Work in parallel sessions

- Scope 1. **Environment and Sustainable Development**
- Scope 2. **Occupational Health and Safety and Fire Safety**
- Scope 4. **Graphic Engineering**
- Scope 5. **Design**
- Scope 6. **Traffic Engineering**
- Scope 7. **Biotechnology and Healthcare**
- Scope 8. **Mechanical Engineering**
- Scope 9. **Mechatronics**
- Scope 10. **Ecotourism and Rural Development**

17:00 – 17:15 Coffee Break

17:15 – 18:30 Work in parallel sessions

- Scope 1. **Environment and Sustainable Development**
- Scope 4. **Graphic Engineering**
- Scope 5. **Design**
- Scope 6. **Traffic Engineering**
- Scope 7. **Biotechnology and Healthcare**
- Scope 8. **Mechanical Engineering**
- Scope 9. **Mechatronics**

17:45 – 18:30 Poster Presentations

18:30 Conclusions and official closing of the Conference

19:00 Official Gala Dinner – Crystal Ballroom



CONFERENCE SCOPES:

**ENVIRONMENT AND
SUSTAINABLE DEVELOPMENT
OCCUPATIONAL HEALTH
AND SAFETY AND FIRE SAFETY
SMART MANAGEMENT SYSTEMS
GRAPHIC ENGINEERING
DESIGN
TRAFFIC ENGINEERING
BIOTECHNOLOGY AND HEALTHCARE
MECHANICAL ENGINEERING
MECHATRONICS
ECOTOURISM AND
RURAL DEVELOPMENT**

DETAILED AGENDA OF THE CONFERENCE

10:00 – 11:15 Official opening of the Conference at the Crystal Hall

Address of the organizers and representatives of institutions, official supporters of the International scientific and professional Conference **POLITEHNIKA 2023**

SCOPE 1. Environment and Sustainable Development *Conference room: Beograd*

The allocated time for Invited Speakers presentations is up to 20 minutes.
The allocated time for Speakers is up to 10 minutes.

11:45 – 12:45 Invited Speakers Presentations – Chair: Dominik Brkić, PhD

Srećko Stopić, Bernd Friedrich

Advances in understanding of a role of unit metallurgical operations for recycling

Svetlana Grujić

Emerging pollutants in the environment: contamination of the Danube River basin in Serbia

Marija Nikolić

Biodegradable polyesters – from ecology to medicine

12:45 – 14:15 Paper Presentations – Chair: Vesna Alivojvodić, MSc

Ana Stojković, Miodrag Stanisavljević, Ivan Krstić,

Nenad Krstić, Dragan Đorđević

Physical-chemical characterization of waste glass of general use

Ljiljana Tolić Stojadinović, Svetlana Grujić, Nikolina Antić, Tatjana Đurkić

Impact of wastewater antibiotics on river water quality in Belgrade area

Katarina Popović, Davor Antanasijević, Jelena Antanasijević, Viktor Pocajt

Carbon footprint of bio-based and recycled plastic materials

Katarina Popović, Davor Antanasijević, Jelena Antanasijević, Viktor Pocajt

Application of machine learning for the simulations and modeling in environmental science

Slavica Krsmanović, Danijela Pecarski, Jasmina Bašić

Quality of swimming pool water and hygiene

14:45 – 17:00 Paper Presentations – Chair: Aleksandra Božić, PhD

Alessandro Gasparetto, Stefano Grimaz

The ESPeRT project: a "polytechnic" strategic plan focused on sustainability

**Jasmina Bašić, Danijela Pecarski, Dragana Dragaš Milovanović,
Slavica Krsmanović, Daka Tešić**

Air quality according PM concentration in the city of Belgrade
in September 2023

Milan Trumić, Vladimir Nikolić, Mirjana Marić, Jelena Janković

Mining solid waste around Bor, yesterday, today, tomorrow

Filip Živković, Milica Stojković, Maja Đolić, Mirjana Čujić

Elemental analysis of rare earth elements in coal fly ash from thermal power
plants in the Republic of Serbia

Darja Žarković, Saša Marković

Sustainable production in cardboard industry

17:00 – 17:45 Paper Presentations – Chair: Ana Popović, PhD

Ana Momčilović, Marta Trninić

A comprehensive analysis: offshore renewable energy methodologies,
benefits, and limitations

Dorđe Karić, Aleksandra Sretenović-Dobrić

Analysis of energy-saving measures in residential buildings connected
to district heating systems using information technology

Bosiljka Srebro, Stefan Milojević, Miljan Adamović

Environmental accounting education for sustainable development:
a comprehensive overview

Danijela Jeremić, Daniela Ristić

Influence of "Stubo-Rovni" dam on climate change in the city of Valjevo

17:45 – 18:30 Poster Section

**Nataša Karić, Marija Vukčević, Marina Maletić, Mirjana Ristić,
Aleksandra Perić Grujić, Katarina Trivunac**

Removal of organic and inorganic pollutants from aqueous solutions
using starch-diatomaceous earth adsorbent

**Nataša Karić, Marina Maletić, Sara Živojinović, Marija Vukčević,
Milena Milošević, Katarina Trivunac, Aleksandra Perić Grujić**

Alkali modification of fly ash for adsorption of selected dyes

**Jelena Vesković, Milica Lučić, Slavica Ražić, Ivana Deršek-Timotić,
Andrijana Miletić, Maja Đolić, Antonije Onjia**
Multivariate analysis of the Morava River plain groundwater

Eleonora Gvozdić, Ivana Matić Bujagić, Tatjana Đurkić, Svetlana Grujić
Ecological risk assessment of aspartame and neotame in river sediments

Jelena Lukić, Latinka Slavković-Beškoski, Katarina Trivunac, Antonije Onjia
Analysis of heavy metal(loid)s in coal fly ash leachate by inductively coupled plasma optical emission spectrometry

Andrijana Miletić, Antonije Onjia
Analysis of carbon monoxide in ambient air using passive sensors

**Ivana Trajković, Milica Sentić, Slobodan Cvetković,
Andrijana Miletić, Antonije Onjia**
Analysis of BTEX in sediments by purge-and-trap gas chromatography-mass spectrometry

**Jelena Milosavljević, Snežana Šerbula, Tanja Kalinović,
Jelena Kalinović, Ana Radojević**
Overview of air pollution in the city of Bor during the period of 2020–2022

Marija Prosheva, Jadranka Blazhevaska Gilev
Sensors for ammonia detection based on carbon nanofiller

Marija Prosheva, Jadranka Blazhevaska Gilev
Investigation of the UV stability of lignin/polymer composites

Zaga Trišović, Tomislav Trišović, Ana Virginia Socalici, Corneliu Banesa Birtok
Innovative system for electrochemical active chlorine production in coaxial and cabinet-type reactors

**Radmila Marković, Zoran Stevanović, Zoran Štirbanović, Vojka Gardić,
Renata Kovačević, Vesna Marjanović, Jelena Petrović**
Monitoring of the surface water quality in copper mining and metallurgy operation areas in Bor

Biljana Angjushева, Ildiko Merta, Emilja Fidancevski
Sustainable synergy: alkali-activated coal fly ash and CDW in sustainable construction

Vesna Alivojvodić, Aleksandra Vučinić
EU taxonomy as a framework for a functioning circular economy

Milica Marković, Ana Momčilović, Maja Stanković
Environmental concerns of lithium battery disposal

Miloš Kovačević, Nataša Radić
Air pollution caused by modern-day armed conflicts

SCOPE 2. Occupational Health and Safety and Fire Safety *Conference room: Crystal Hall (Section C)*

The allocated time for Speakers presentations is up to 15 minutes.

11:45 – 14:15 Paper Presentations – Chair: Svetozar Sofijanić, PhD

Radenko Rajić, Ivan Arandžević, Nikola Tanasić

A novel tabular method for estimation of water flow rate at the hydrant nozzle

**Goran Đorđević, Martina Petković, Ljubinko Rakonjac,
Marko Tomić, Anita Klikovac**

Selection and use of mechanized equipment for extinguishing forest fires in order to increase efficiency – methodological approach

Svetozar Sofijanić, Vladan Pantović, Veljko Ognjanović

Centralized information system for monitoring workplace injuries

Drago Pupavac, Ljudevit Krpan, Josip Knežević

Cost-benefit analysis in employee health and safety protection

Marta Trninić

Application of 3D random e-glass fiber composites in construction hardhat design

Dragan Živanić, Nikola Ilanković

Safety concerning cableways

Dragan Živanić, Nikola Ilanković

Basic safety measures for chain conveyors

Darko Marković, Nebojša Čurčić

Prevention of occupational risks in transport and installation of concrete prestressed T-girders on project Iverak-Lajkovac

Saša Kuzmanović

Analysis of assessed professional risks at the workplace of forklift drivers in the Logo company with comparative risk assessment methodologies and reference to the current law

14:45 – 16:00 Paper Presentations – Chair: Marta Trninić, PhD

Milena Andrejević

"Near miss" events in the TPS Zemun reconstruction project: a research and analysis

Maja Đikić, Novak Milošević

Research and analysis of professional stress issues among employees in security roles

Lazar Milićević, Novak Milošević

The impact analysis of stress accumulated outside the workplace on the occupational safety and health of employees in Institute of Nuclear Sciences "Vinča"

Milica Marković

Chemical hazards in horticulture from the aspect of occupational safety and health

Marijana Drakulić

Potentially explosive atmospheres in flour production

17:45 – 18:30 Poster Section

Jelena Tintor, Jasmina Rajić, Igor Babić

Researching the harmful effects of cooling liquid on employees

Jelena Tintor, Jasmina Rajić, Igor Babić

Employee safety during plastic deformation metal processing

SCOPE 3. Smart Management Systems
Conference room: Kalemegdan

The allocated time for Speakers is up to 10 minutes.

11:45 – 12:30 Paper Presentations – Chair: Koviljka Banjević, PhD

Radoslav Raković

Information security management standard and personal data protection – practical experiences

Dragana Gardašević, Dragana Rošulj, Mina Radišić, Koviljka Banjević

Application of the Pareto analysis in quality control

Aleksandra Pavlović, Aleksandra Nastasić, Andrea Ivanišević

QMS and EMS implementation in Serbian organizations – a driving factor for sustainable development

**Aleksandra Nastasić, Dragana Rošulj,
Koviljka Banjević, Aleksandra Pavlović**

The influence of digital transformation on customer perception

12:30 – 13:30 Paper Presentations – Chair: Aleksandra Nastasić, PhD

Marija Marčetić, Danijela Misoloska, Bojan Kocić

The threats and opportunities in modern forwarding business

Koviljka Banjević, Jovana Femić

Adult education in Serbia and countries in the region

Ana Đokić, Hana Stefanović

Analysis and visualization of Covid-19 data set in Python programming language

Marko Pavlović, Ana Petrović, Đorđe Pavlović

Study on the attitudes of electronic banking users in Serbia

13:30 – 14:15 Paper Presentations – Chair: Dragana Gardašević, PhD

Sanja Pavlović, Dejan Crnoglavac, Aleksandar Starčević

Examining the role of drones as educational tools: a practical teaching example in enhancing learning experiences in STEM education

Zorica Baroš

The impact of the Kelvin redefinition within the SI system on the improvement of temperature measurement technologies

Đorđe Dihovični, Dragan Kreculj, Nada Ratković Kovačević

Experiences in teaching and mastering materials

SCOPE 4. Graphic Engineering

Conference room: Studio 2

The allocated time for Invited Speakers presentations is up to 30 minutes.
The allocated time for Speakers is up to 15 minutes.

11:45 – 12:15 Invited Speakers Presentations – Chair: Nenad Đorđević, PhD

Aleksa Milovanović, Tomáš Babinský, Aleksandar Sedmak, Miloš Milošević

Printing parameter impact on PLA material fracture toughness results

Slađana Glišić, Predrag Živković, Aleksandra Janićijević

Examination of the possibility of dyeing printing papers with plant extracts

12:15 – 14:15 Company Presentations – Chair: Nenad Đorđević, PhD

Graphic industry companies presentations

14:45 – 17:00 Company Presentations – Chair: Nenad Đorđević, PhD

Graphic industry companies presentations

17:15 – 17:45 Company Presentations – Chair: Nenad Đorđević, PhD

Graphic industry companies presentations

SCOPE 5. Design

Conference room: Studio 1

The allocated time for Invited Speaker presentation is up to 20 minutes.
The allocated time for Speakers is up to 10 minutes.

11:45 – 12:15 Invited Speakers Presentations – Chair: Ana Cvijanović

Jelena Ristić Trajković, PhD
University of Belgrade, Faculty of Architecture, Serbia
Society, ecology and design education: transformative learning for future sustainable and healthy environments

12:15 – 14:15 Paper Presentations – Chair: Ana Cvijanović

Biljana Pejić, Bojana Škorc
Familiarity as aesthetic category in design

Biljana Pejić, Bojana Škorc
The effects of style on an aesthetic assessment of design

Katarina Nikolić, Danica Glođović, Aljoša Ninković
Design, ideology and propaganda

Dušanka Komnenić
Design as a form of communication, deconstructive approach to design

Dragica Nikodinović
Analogous principle as an added value in graphic design in the post-industrial era

Jelena Jocić, Maida Gruden
Design and education: traditional and online environment

Željko Zdravković
Bioart and our creative biotechnological future

14:45 – 17:00 Round Table

Biodesign

Moderator

Biljana Jović, PhD, University of Belgrade, Faculty of Forestry

Panelists

Milivoj Miško Pavlović, PhD, University of Arts in Belgrade, Faculty of Fine Arts
Željko Zdravković, PhD, The Academy of Applied Technical Studies Belgrade
Biljana Jović, PhD, University of Belgrade, Faculty of Forestry

17:15 – 17:45 Paper Presentations – Chair: Ana Cvijanović

Jelica Živković

Use of gold color in interior design

Sara Todorović

Use of copper color in interior design

17:45 – 18:30 Poster Section

Duško Trifunović, Anamarija Vartabedijan

Graphic design by Miodrag Vartabedijan Varta, Varta's graphic mark in Yugoslavian and world design

SCOPE 6. Traffic Engineering *Conference room: Kalemegdan*

The allocated time for Speakers is up to 10 minutes.

14:45 – 17:00 Paper Presentations –

Chair: Biljana Ranković Plazinić, PhD and Željko Ranković, PhD

Dejan Jovanov, Daniel Pavleski, Kosta Jovanov

Road safety management capacity review – use of Tailor-made checklists

Željko Ranković, Nemanja Deretić, Aleksandra Obradović

Consequences of traffic accidents in the Republic of Serbia in the period from 2013 to 2022 with proposed measures to reduce fatal consequences

Aleksandra Obradović, Dalibor Pešić, Željko Ranković

Statistical analysis of traffic accidents on state roads in the work zone on the territory of the Republic of Serbia for the period from 2014 to 2021

Lazar Kocić, Aleksandra Obradović

Analysis of safety of cyclists in traffic in the city of Smederevo from 2018 to 2022

Biljana Ranković Plazinić, Aleksandra Obradović

The length of dilemma zone at signalized intersections

Kristina Milić

Role of the rescue coordination centre in land in case of aircraft accidents

Dejan V. Kožović, Dragan Ž. Đurđević

Trends of artificial intelligence in aviation: cyber security of ADS-B system

Saša Marković, Svetozar Sofijanić

The importance of low-cost and differentiation strategies for the business of traffic companies

Svetlana Živanović

Analysis of the competitiveness of logistics providers in the area of the Western Balkan countries

Svetlana Živanović, Gordana Radivojević, Milorad Kilibarda

Selection of logistics provider in the field of e-commerce

17:00 – 17:45 Paper Presentations –

Chair: Biljana Ranković Plazinić, PhD and Željko Ranković, PhD

Michele Minenna, Nataša Gojković Bukvić

Market research aimed towards the analysis of the possibility of launching an operational start up in the field of LCL (Less Than Container Load) transport at the ports of Bari and/or Taranto (Italy)

Miloš Nikolić, Ivana Jovanović, Milica Šelmić

A survey on the vehicle routing problem with occasional drivers and its variants

Marina Milovanović Arandelović

Application of probability and stochastic analysis to traffic improvement

Jelena Vajović, Marina Stevanović

Improvement of traffic safety on the chosen intersection in the town of Pančevo

SCOPE 7. Biotechnology and Healthcare

Conference room: Kopaonik

11:45 – 13:00 Round Table

Food Safety and Quality Control – Official Controls

Moderator

Zlata Živković, PhD, The Academy of Applied Technical Studies Belgrade

Panelists

Nenad Vujović, Assistant Minister of Agriculture, Forestry and Water Management and Head of the Agricultural Inspection, Ministry of Agriculture, Forestry and Water Management

Tamara Bošković, DVM, Head of Department of Veterinary Public Healthcare, Veterinary Directorate, Ministry of Agriculture, Forestry and Water Management

Snežana Savčić-Petrić, Head of the Group for International Cooperation and risk analysis in the field of food and feed safety (food of plant and mixed origin and feed of plant origin), Plant Protection Directorate, Ministry of Agriculture, Forestry and Water Management

Marko Jauković, PhD, Senior Lecturer and Quality Control Manager of Laboratory "POLIHEM", The Academy of Applied Technical Studies Belgrade

The allocated time for Invited Speakers presentations is up to 20 minutes.
The allocated time for Speakers is up to 10 minutes.

13:00 – 14:15 Paper Presentations – Chair: Zlata Živković, PhD

Marko Jauković, Tatjana Marinković, Aleksandar Stevanović, Svetozar Sofijanić
Food labelling – monitoring of allergen info in bakery retail stores

Danka Mitrović, Nikolina Živković, Jelena Pavlović, Marko Jauković
Occurrence of ochratoxin a in wine in Serbia in 2022

14:45 – 17:00 Paper Presentations – Chair: Marko Jauković, PhD

Maja Nujkić, Žaklina Tasić, Sonja Stanković, Dragana Medić, Snežana Milić, Vladan Nedelkovski
Potential application of mullein leaf as biosorbent for efficient biosorption of Cu(II) ions from synthetic solutions

Miloš Purić, Aleksandra Stojićević
Utilization of apple pomace to obtain functional bakery and confectionery products

Aleksandar Stevanović, Goran Nestorović, Vera Popović
Information systems in organic agriculture

Vuk Aleksić, Radmila Aleksić
Sport related injuries in Brazilian jiu jitsu

17:45 – 18:30 Poster Section

Zlata Živković
Varroa destructor, the parasitic mite of Apis mellifera: a review

Darko Stojićević, Markola Saulić
Basic concepts of ANN model and its application in agricultural research

Milica Blažić, Markola Saulić, Vladanka Stupar
Precision agriculture technologies and methodologies used to crop yield prediction – a review

Vladanka Stupar, Darko Stojićević, Aleksandar Stevanović, Milan Vasić
Implementation of robotic technologies on apple pruning: a review

Milica Jevtić, Goran Nestorović, Milan Vasić, Darko Stojićević
The agricultural smart systems

Dubravka Mandušić, Lucija Blašković
Deep learning in fruit detection

**Dobriła Randelović, Svetlana Bogdanović,
Ivana Zlatković, Dragana Stanisavljević**
Chemical properties and microbiological quality control of frozen plum fruit

**Aleksandra Stojićević, Tatjana Marinković,
Aleksandar Stevanović, Miloš Purić**
Application of medicinal herbs and spices as a food additive –
challenges and limitations

**Milica Sentić, Ivana Trajković, Ivana Deršek-Timotić, Slobodan Cvetković,
Zoran Stojanović, Antonije Onjia**
Polycyclic aromatic hydrocarbons in medicinal herbs:
analytical method development

Jana Klopcevska, Zoran Kavrakovski, Marija Srbinska, Vesna Rafajlovska
Nanoemulsions of pumpkin seed oil with turmeric extract

Jana Klopcevska, Zoran Kavrakovski, Marija Srbinska, Vesna Rafajlovska
Formulations of carboxymethyl cellulose-based emulgels with turmeric extract

Višnja Sikimić, Slavica Čabrilo
Possibilities of production of a new functional product –
mayonnaise with reduced fat content

Slavica Čabrilo, Višnja Sikimić, Miloš Purić
Alternative packaging in wine packaging technology

Jasmina Rajić, Tanja Petrović, Dragana Mihajlović
Potential migration of phthalates from different polymers into food

**Veroslava Kocić, Dušica Ćirković, Dragana Stanisavljević, Dobriła Randelović,
Milica Stojanović, Jelica Lazić Saković, Aleksandar Veličković**
The influence of raw materials and the production process
on the quality of rosé wine

**Milica Lučić, Ivana Sredović Ignjatović, Steva Lević,
Jelena Lukić, Antonije Onjia**
Exposure to potentially toxic elements due to consumption of *Capsicum annum*
in different parts of Serbia

Milica Ivanović, Gordana Stefanović, Aleksandra Janković, Sandra Stanković
Identification of the optimal co-substrate for co-composting with grape pomace by using multiple criteria analysis

Aleksandra Vračarić, Željko Karganović, Slavka Mitričević, Ivanka Đuričić
Complications of pertussis infection in neonate: a case report

SCOPE 8. Mechanical Engineering | SCOPE 9. Mechatronics
Conference room: Crystal Hall (until 16:00 h) | Budva (from 16:00 h)

11:45 – 13:00 Round Table

Training in CNC Programming – Analysis of Needs and Possibilities

Moderators

Andrijana Đurđević, PhD, The Academy of Applied Technical Studies Belgrade
Predrag Drobnjak, PhD, The Academy of Applied Technical Studies Belgrade

Panelists

Branko M. Kokotović, PhD, Assistant Professor, Production Engineering Department, Faculty of Mechanical Engineering, University of Belgrade
Marko Gojković, MSc, Sales Manager at DMG MORI Balkan GmbH Belgrade
Milorad Antonić, Director at UNITEC CNC d.o.o. Belgrade
Milan Mišćević, MSc, Sales Manager at Teximp d.o.o. Belgrade

The allocated time for Invited Speakers presentations is up to 15 minutes.
The allocated time for Speakers is up to 10 minutes.

13:00 – 14:00 Invited Speakers Presentations – Chair: Marta Trninić, PhD

Tamara Bajc, PhD. Mech. Eng., Associate professor,
Faculty of Mechanical engineering University of Belgrade
Energy savings and CO2 emission reduction potential through the existing building renovation

Marko S. Jarić, PhD. Mech. Eng., Innovation Centre of the
Faculty of Mechanical engineering University of Belgrade
Analysis of remediation of horizontal cylindrical tank for oil storage

Andrea Matta, Mohsen Jafari
Towards a theory of digital twins: fundamental definitions

14:00 – 14:15 Paper Presentations – Chair: Marta Trninić, PhD

Aggoune Mohammed-Salah, Bensedira Noureddine, Milles Abdessmad
Effect of the voltage and the magnetic field variations on the velocity field in a MHD pump – simulation and experimental analysis

14:45 – 17:00 Paper Presentations – Chair: Nikola Tanasić, PhD

Aleksa Maljević, Milan Ignjatović
Influence of laminate stacking and fiber volume fraction on natural frequencies of composite keular 49 aramid – 3501 – 6 epoxy plates

Milan Travica, Nenad Mitrović, Aleksandar Petrović
Strain behavior analysis of steel S235JRH ring specimens

**Bojan Ivljanin, Andrijana Đurđević,
Đorđe Đurđević, Nada Ratković Kovačević**
The phenomena of rigid and reverse waterhammer and their influence on maintenance of hydropower plants with kaplan turbines

Aleksandar Petković, Jovan Ilić, Ivan Božić
Headwater level governing at small hydropower plants with open channel conveying system

Đorđe Dihovični, Nada Ratković Kovačević, Andrijana Đurđević
Application of smart production systems in vocational education

Žarko Mišković, Zoran Stameniće, Jovana Antić, Radivoje Mitrović
The latest standards of rolling bearing testing

Goran Nestorović, Dragan Kreculj, Milan Vasić
Large-scale three-dimensional printers in industry 4.0

Miloš Mihailović, Miloš Božić, Tomislav Simonović, Aleksandra Božović
The influence of insulation thickness on investment and operational costs in heating systems with a heat pump in Serbia

Neda M. Sokolović, Ivana Gavrilović-Grmuša, Nenad Šekularac
Panel shear properties of carbon fiber reinforced LVL board

**Tamara Tešić, Milica Rančić,
Danica Bajuk Bogdanović, Ivana Gavrilović Grmuša**
Effect of tannin on increasing UF adhesive performance

17:15 – 18:30 Paper Presentations – Chair: Goran Zajić, PhD

Murat Ispir, Ilker Goktepel, Muharrem H. Aksoy

Solar-powered farming: evaluating the viability of PV water pumping in Turkish agriculture

Srdan Barzut

The post-quantum cryptography and challenges in network security and industry 4.0

Đorđe Dihovični

An analysis of a process of decentralized control of a robot powered by a direct current motor

Milan Vasić, Mirko Blagojević, Goran Nestorović

Primary criteria for selecting gearboxes for axes of 6-axis industrial robots

Dragan Kreculj, Đorđe Dihovični,

Nada Ratković Kovačević, Siniša Minić, Sanja Jevtić

MQTT protocol in the IoT

17:45 – 18:30 Poster Section

Yurij Kuznetsov, A. V. Kolomeichenko, V. N. Logachev, I. N. Kravchenko,

L. V. Kalashnikova, A. V. Dobychin, D. D. Yakovlev, A. A. Gribakin

Study of porosity and oil capacity of coatings formed by electric arc metallization method

Đorđe Đurđević, Andrijana Đurđević, Nina Anđelić, Katarina Antić

Dynamic calculation of friction stir welding tools using the finite element method

Dragana Velimirović, Milan Marković, Milan Velimirović

Critical review on the safety barriers from the structural and deformation parameters aspects

Andrijana Đurđević, Ljubiša Bučanović, Đorđe Đurđević, Aleksandar

Živković, Aleksandar Sedmak, Đorđe Dihovični

Production of a lap joint using friction stir welding and microhardness measurement using the Leeb method

Danijela Živojinović, Aleksandra Božović

Comparative analysis of the manufacturing time of a part on a CNC lathe obtained by calculation and simulation of machining using the CAD/CAM software system

Aleksandra Mitrović, Ivan Banjac

Optimization of FGD process in TPP Kostolac 'B'

Milan Marković, Dragana Velimirović, Andrijana Đurđević

Mathematical model of car rotating during overtaking in a left roadway curve

Nenad Mitrović, Zorana Golubović, Aleksandra Mitrović,

Milan Travica, Isaak Trajković, Miloš Milošević, Aleksandar Petrović

Application of 2D digital image correlation method on three-point bending in material testing

Ana Maksimović, Bojana Zečević, Ljubica Milović, Vujadin Aleksić

Experimental investigation on the use of J1c for a HSLA Steel Welded Joint

Dragan Šaler, Milan Grujić

Landing optimization of a small sounding rocket

Milivoje Filipović, Ivan Arandelović

Fire resistance of boiler room the bulding structure

Nataša Trišović, Wei Li, Marko Gavrilović, Corneliu Banesa Birtok,

Ognjen Ristić, Milica Milić, Radoslav Radulović,

Zaga Trišović, Ana Virginia Socalici

Effects of changing design parameters

Ivana Jevtić, Obrad Drakulović, Goran Mladenović, Miloš Milošević

Types of bee drinkers

Nebojša Andrijević, Vladan Radivojević, Duško Radaković,

Dragan Milovanović, Suad Suljović

Conceptual model of a system for optimizing the temperature and humidity of honeybee hives using artificial intelligence

Goran Nestorović, Vladimir Petrović, Nebojša Andrijević,

Nenad Petrović, Suad Suljović

The channel capacity of wireless communication system with L-branch SC combining in rayleight short term fading and co-channel interference

Dragan Milovanović, Srđan Đorđević, Đorđe Miladinović,

Nenad Petrović, Radiša Stefanović, Suad Suljović

The outage probability in system limited by nakagami fading and co-channel interference for classification-based QoS estimation

Dragoslav Perić, Slobodan Obradović, Mirjana Nešić, Dragana Đurić

Computer devices and the Serbian language – interface and application

SCOPE 10. Ecotourism and Rural Development

Conference room: Budva

11:45 – 13:00 Round Table

Potentials for The Development of Specific Forms and Trends of Tourism In Serbia

Moderator

Tatjana Sekulić, PhD, The Academy of Applied Technical Studies Belgrade

Panelists

Iskra Maksimović, PhD, Director of fortress Golubac City

Vladimir Živanović, Director of Tourist organization Zlatibor

Nevena Majstorović, MSc, Analyst of Tourist organization Zlatibor

Radomir Stojanović, PhD, Western Serbia Academy of Applied Studies, Department Užice

Marija Vlajović, Assistant to the Mayor of Požarevac for the Field of Tourism, City of Požarevac

Snežana Štetić, PhD, Professor at the University of Novi Sad, Faculty of Sciences

Jelena Anđelković Grašar, PhD, Deputy Director, Institute of Archaeology

The allocated time for Invited Speakers is estimated to up to 15 minutes.
The allocated time for Speakers presentations is up to 10 minutes.

13:00 – 14:15 Invited Speakers Presentations – Chair: Tatjana Sekulić, PhD

Radomir Stojanović

Education as a pillar of sustainable agritourism in Serbia

Jelena Premović

Cultural heritage as a generator of sustainable development of tourism in local communities in the countries

Snežana Štetić

Selective forms of tourism and sustainable development of rural tourist destinations

Vladimir Živanović, Nevena Majstorović

Analysis of the real number of tourist overnights based on the estimation of water consumption in Zlatibor

14:45 – 16:00 Paper Presentations – Chair: Marko Pavlović

Slobodanka Stankov, Branko Radeljić

Guided tour as a type of animation in cultural tourism

Jasmina Đurašković, Miloš Spasojević, Marija Popović

Incentives for agriculture in the City of Belgrade

Marija Perić, Ben Mladenović

Protection, development and management in a protected natural asset – analysis of the Petnička cave

Sara Ilanković

Cultural heritage of Italy

Sara Ilanković

Italian cinematography

17:45 – 18:30 Poster Section

Marija Perkunić, Tatjana Sekulić, Markola Saulić, Vladanka Stupar

The faunal diversity of memorial park Čačalica

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