



International Scientific
and Professional Conference

**Politehnika
2025**

AGENDA

28th November 2025

Sava Center | Belgrade, Serbia

Supported by

Ministry of Education

Ministry of Science, Technological Development and Innovation

Republic of Serbia – The Office for Dual Education and

The National Qualifications Framework

Directorate for Occupational Safety and Health

Chamber of Commerce of Belgrade

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Serbian Automotive Cluster – AC Serbia

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THE ACADEMY
OF APPLIED STUDIES
POLYTECHNIC

Organizer

Academy of Applied Studies Polytechnic

Katarine Ambrozić 3, Belgrade

www.politehnika.edu.rs



International Scientific
and Professional Conference

**Politehnika
2025**

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International Scientific and Professional Conference Politehnika 2025

28th November 2025

Sava Centar, 9 Milentija Popovića Street, Belgrade, Serbia



PROGRAMME

09:00 – Registration of participants

10:00 – 11:15 Official opening of the Conference – *Amphitheater hall*

Address by the organizers and representatives of institutions, official supporters of the International Scientific and Professional Conference **Politehnika 2025**

11:15 – 11:45 Coffee Break

11:45 – 14:15 Work in separate scopes

- Scope 1. Environment and Sustainable Development – *Room 23*
- Scope 2. Occupational Health and Safety and Fire Safety – *Room 22*
- Scope 3. Smart Management Systems – *Room 24*
- Scope 4. Graphic Engineering – *Room 27*
- Scope 5. Design – *Room 29*

Round Table: Human + Machine: Co-creating the Future of Design – How AI is Shaping Tomorrow's Creativity

- Scope 7. Biotechnology, Pharmacy and Healthcare – *Room 20*

Round Table 1: Food Safety Control – Remote Auditing

Round Table 2: Agriculture of the Republic of Serbia in the Context of Climate Change

- Scope 8. Mechanical Engineering – *Room 25*
- Scope 9. Ecotourism and Rural Development – *Room 26*
- Scope 10. Mechatronics – *Amphitheater hall*

12:45 – 14:15

Panel discussion: Robotics – To What Extent Will Robots Replace Humans?

12:00 – 12:35 Associated programme – *Amphitheater Hall*

Panel discussion:

AI Banking – The Future of Banking: Humans, AI or Neobanking?

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

14:45 – 17:00 Work in separate scopes

- Scope 3. Smart Management Systems – *Room 24*
- Scope 4. Graphic Engineering – *Room 27*
- Scope 5. Design – *Room 29*
- Scope 6. Traffic Engineering – *Room 26*
- Scope 7. Biotechnology, Pharmacy and Healthcare – *Room 20*
- Scope 8. Mechanical Engineering – *Room 25*
- Scope 9. Ecotourism and Rural Development – *Room 26*

17:00 – 17:15 Coffee Break

17:15 – 18:30 Work in separate scopes

- Scope 4. Graphic Engineering – *Room 27*
- Scope 5. Design – *Room 29*
- Scope 6. Traffic Engineering – *Room 26*
- Scope 7. Biotechnology, Pharmacy and Healthcare – *Room 20*
- Scope 10. Mechatronics – *Room 25*

17:45 – 18:30 Poster Presentations – live interaction with authors

All posters will be presented in digital format and accessed by scanning **QR codes** with mobile devices during the Conference, in the conference rooms corresponding to each scope.

18:30 Concluding remarks and official closing of the Conference – *Room 27*

19:00 Official Dinner – *Atrium Hall*



Conference Scopes

Environment and
Sustainable Development

Occupational Health
and Safety and Fire Safety

Smart Management Systems

Graphic Engineering

Design

Traffic Engineering

Biotechnology, Pharmacy
and Healthcare

Mechanical Engineering

Ecotourism and
Rural Development

Mechatronics

Associated programme

AI Banking

DETAILED PROGRAMME OF THE CONFERENCE

Scope 1. Environment and Sustainable Development

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

11:45 – 12:45 Invited Speakers' Presentation – Chair: Ana Popović

Srećko Stopić, Zixi Gao, Hanwen Chung, Bernd Friedrich, Mulbah Forkpayea, Duško Kostić, Nenad Nikolić, Vladimir Damjanović, Dragana Životić

The importance of using hydrometallurgical treatment of different raw materials at high pressures for environmental protection and sustainable development

12:15 – 14:15 Paper Presentations – Chair: Ivana Matić Bujagić

Nevena Purić, Marija Popović, Darko Đorđević, Maja Đolić

Biowaste as a resource: Challenges and opportunities for biowaste management and sustainable infrastructure in Serbia

Miodrag Stanisavljević, Ana Stojković, Ivan Krstić

Comparative analysis of conventional and non-conventional systems for electroplating wastewater treatment

Jelena Andrić

Towards sustainable development in infrastructure projects

Bensedira Noureddine, Milles Abdessmad, Aggoune Mohammed-Salah

Photovoltaic supplied MHD desalination system for agricultural uses

Aleksandar Petković, Jovan Ilić

Numerical simulations of transient operation of SHPP with Pelton turbines and selection of protective measures. Case study of SHPP Velika Ploča

Radule Tošović

Managerial-economic aspects of the participation of environmental costs in the cost price of mineral raw materials in the mineral sector

Zorica Baroš, Olivera Jovanović

Monitoring ionizing radiation in the Republic of Serbia

Aleksandra Pavlović, Andrea Ivanišević

Is Serbia becoming a pollution haven? The impact of FDI on air pollution and public health

Miloš Tošović

Copenhagen school of security in the light of analysis of environmental security and environmental risk management

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

17:45 – 18:30 Poster Section

Đorđe Ogrizović, Milica Delić, Ivana Matić Bujagić, Maja Đolić
Adaptive water management and pathways toward urban resilience

Đorđe Ogrizović, Milica Delić, Maja Đolić, Ivana Matić Bujagić
Recent advances in removal of emerging contaminants from wastewaters

Natalija Nedić, Tamara Tadić, Sandra Bulatović, Aleksandra Nastasović, Bojana Marković
Efficient removal of aniline from aqueous solution using a hydroxyl methacrylate-based sorbent

Natalija Nedić, Tamara Tadić, Sandra Bulatović, Bojana Marković, Aleksandra Nastasović
Optimization of orange G sorption using gma-based polymer through response surface methodology and box-behnken design

Marija Tasić, Milica Petković, Sofija Miljković, Žarko Vranjanac
Application of the Serbian water quality index in the assessment of the Jerma, Gaberska River, and Great Timok (2019–2023)

Grozdana Bogdanović, Dragan Radulović, Dragana Marilović, Jovica Stojanović, Sanja Petrović, Vladimir Simić
From waste to resource: Leaching metals from flotation tailings at the "Rudnik" mine for sustainable development

Jelena Gligorijević Sokolović, Vesna Krstić, Ana Petrović, Zoran Štirbanović, Jovica Sokolović
The role of solid recovered fuel (SRF) in waste reduction, resource management and carbon footprint mitigation within the circular economy

Lea Komerički Kotnik, Katrin Školnik Škrabe, Anja Bubik
Erasmus+ projects as the opportunity to improve youth awareness on microplastics

Anja Bubik, Klara Hohkraut
From isolation to detection of microplastics in natural and industrially processed honey

Aleksandar Petković, Jovan Ilić
Numerical simulations of long-term annual energy generation of SHPP Kresaja

Nataša Palić, Marina Maletić, Ana Kalijadis, Anita Lazić, Katarina Trivunac, Marija Vukčević
Comparative analysis of chemically and thermally modified potato starch for the adsorption of brilliant green dye

Tijana Radojičić, Nataša Palić, Marina Maletić, Nataša Mladenović Nikolić, Daniela Popović, Marija Vukčević, Katarina Trivunac

Alkali-activated material: A sustainable approach for adsorbing heavy metals and rare earth elements from water

Tijana Spasojević, Marina Maletić, Ana Kalijadis, Nataša Mladenović, Katarina Trivunac, Marija Vukčević

Carbonization and activation of flax fibers for the removal of bromazepam from water

Tijana Spasojević, Marina Maletić, Dušan Trajković, Isabel Gria, Mirjana Čujić, Nevena Prlainović, Maja Đolić

Enhanced arsenic removal using an iron-modified sandy clay and biochar

Andrea Petanova, Marija Prosheva, Jadranka Blazhevska Gilev

Towards sustainable carbon nanomaterials: Pulsed laser-assisted synthesis approach

Marija Prosheva, Teodora Stojanovska, Andrea Petanova, Jadranka Blazhevska Gilev

Degradation behavior of lignin/TiO₂ waterborne polymers

Milica Vlahović, Miljan Vlahović, Nenad Vušović, Darja Žarković

Radium contamination of groundwater and remediation approaches

Vesna Alivojvodić, Niko Samec, Filip Kokalj

Standards-based value creation for modern waste-to-energy facilities

Vesna Alivojvodić, Aleksandra Vučinić, Nela Vujović

Bridging policy gaps through ISO 59000 standards in European waste management transitions

Nataša Radić, Ana Popović, Vesna Alivojvodić

Practices and attitudes toward food waste in the Republic of Serbia – pilot survey

Nataša Radić, Andreja Stojić, Mirjana Perišić

Analysis of the effects of social and industrial changes on air quality during the Covid-19 pandemic in Belgrade

Ivana Rvović, Aleksandra Davidović

Forest fires in Serbia – spatial analysis of the impact of forest ownership and prevention measures

Darja Žarković, Ana Aleksić, Milica Vlahović, Nenad Vušović

Information technologies in municipal solid waste management – from public participation to powerful software tools

Darja Žarković, Milica Vlahović, Žaklina Todorović, Miljan Vlahović, Milica Prelić

Application of information systems in water resources monitoring and management

Nikola Stojković

Determination of heavy metal content in river fish

Nikola Stojković

Digital ecology and the environmental impact of digital platforms

Scope 2. Occupational Health and Safety and Fire Safety

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

11:45 – 14:15 Paper Presentations – Chair: Marta Trninić

Dragan Jovanović

The role of experts in court proceedings of the Republic of Serbia

**Marko Miletić, Aleksandar Pantović, Marko Milošević,
Marko Đapan, Ivan Mačužić**

The improvement of lockout/tagout compliance in manufacturing through digitalization

Maja Đikić

From paper to practice: How employees use personal protective equipment and perceive occupational health and safety training

Nebojša Čurčić, Novak Milošević

Real-time monitoring of workplace environmental factors using smart devices – an overview on vibration exposure evaluation

Daniela Ristić, Ognjen Ristić

The impact of work stress on employees' performance and job satisfaction

Nikola Tanasić, Radenko Rajić, Ivan Arandžević

A novel tabular method for estimation of heat extraction factor

Darko Marković, Nebojša Čurčić, Novak Milošević

Research on impact of cultural diversity on occupational safety and health culture in multinationals teams based on Hofstede's cultural dimensions theory

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

17:45 – 18:30 Poster Section

Snežana Knežević, Snežana Milanović, Marijana Jandrić Kočić, Tamara Gajić
Work-life balance among higher education employees

Ana Aleksić, Darja Žarković

Application of GIS technology in the education of engineers of fire protection

Milivoje Filipović, Marina Milovanović Arandžević

An extended tabular method for estimation of water flow rate at the hydrant nozzle

Barbara Vidaković Ristić

Understanding intentional fires: From 'how' to 'why' through an interdisciplinary lens

Barbara Vidaković Ristić

Fire risk management in nightclubs: Regulatory framework, practice and recommendations

Jelena Andrić, Xi'an Jiaotong

The analysis of occupational accidents on construction sites in Hong Kong

Scope 3. Smart Management Systems

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

11:45 – 14:15 Paper Presentations – Chair: Koviljka Banjević

Dragana Gardašević, Koviljka Banjević, Milanka Gardašević Filipović, Vladan Radivojević

AHP and PROMETHEE II methods in selecting candidates for the position of strategic planning manager

Goran Nestorović

Development of teaching staff through the introduction of professional doctoral studies

Predrag Janković, Dragan Miletić, Suzana Pavlović

The place and perspectives of the development of dual education in higher education in the Republic of Serbia

Ivan Mačužić

Demo-didactic systems for practical training in Industry 4.0

Dragana Rošulj, Aleksandra Nastasić, Dejan Petrović

The culture of knowledge management and its impact on the implementation of knowledge management processes

Aleksandra Nastasić, Dragana Rošulj, Aleksandra Božović

Influence of artificial intelligence on organisational culture

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

14:45 – 17:00 Paper Presentations – Chair: Aleksandra Nastasić

Đorđe Dihovični, Dragan Kreculj, Nada Ratković Kovačević, Goran Vorotović
XML approach to the creation of a database for the alumni project

Marko Pavlović, Dragana Đurić, Miloš Lučić
*The role of CRM systems in the revitalization of an artistic brand:
A study on consumer's perception of the NASLIKATI brand*

Đorđe Dihovični
Programs and their applications in web design and web management

Marija Simonović, Snežana Tadić, Mladen Krstić, Miloš Veljović
Space logistics: How to get into space?

17:45 – 18:30 Poster Section

Dušan Trajković, Nevena Purić, Aleksandar Kojović, Dragana Živojinović
Global market and standardization in biofuel industry

Saša Marković, Marko Pavlović
*Possibilities of improving business processes and business efficiency
in the automotive industry*

Goran Vojnović
Augmented reality in academic libraries: Implementing affordable tools

Marija Mićanović
The analysis of writing style and the application of tools for academic writing

Saša Marković, Marko Pavlović
Strategic forms of business internationalization

Jasmina Đurašković, Ana Slavković, Brankica Pažun
*Web transparency of CSR activities in Belgrade municipalities:
A content analysis of official websites*

Aleksandra Pavlović
Economic growth in Serbia – does inflation matter?

Srđan Barzut, Dragana Sajfert, Ana Bašić, Milica Jevremović
The main cyber treats in modern e-bussiness

Lav Leskur
*Is personality the missing key for boosting sales? A fresh perspective for
marketing strategists on Serbian consumer's organic food attitudes*

Scope 4. Graphic Engineering

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

11:45 – 14:15 Companies' Presentations

Newsmax Balkans

Creativity, media, and artificial intelligence – a new synergy of education and practice

Smurfit Westrock

Advanced multipack solutions for a sustainable future

Conatus

ESKO CDI crystal quartz edition

Print Clone

Omni projekt

How Industry 4.0 is transforming the packaging process – from machine design and customization to production optimization and increased efficiency

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

14:45 – 17:00 Companies' Presentations

Popular

The use of artificial intelligence in design and marketing

Aran

The use of traditional media in design and marketing

Papirprint

Positive changes in Papirprint

Publikum

Presentation of the Publikum printing house

Triopack

Presentation of the company Triopack

Pulsec

Cybersecurity in production systems: How cyberattacks can halt the packaging supply chain – and how to prevent it

Bluestormai

AI agents as a strategic advantage for graphic enterprises: More precise communication, faster responses, greater capacity

17:15 – 18:30 Companies' Presentations

Reputeo

Connecting consumers and brands through visual elements that 'speak' using AI-generated content

MM Board and Paper

Presentation of new types of board

FireBird

From idea to interaction – how campaigns become experiences

17:45 – 18:30 Poster Section

Andrijana Đorđević, Danijela Kovačević, Nenad Đorđević, Aleksandra Krstić

An investigation into the mechanical properties of corrugated fiberboard packaging boxes

Dejan Miljković, Danijela Kovačević, Andrijana Đorđević,

Nenad Đorđević, Aleksandra Krstić

Comparative analysis of transport packaging manufactured using flat and rotary die-cutting tools

Scope 5. Design

11:45 – 13:45 Round Table

Human + Machine: Co-creating the Future of Design – How AI is Shaping Tomorrow's Creativity

Moderator:

Željko Zdravković

Academy of Applied Studies Polytechnic

Panelists:

Ljubiša Bojić

Senior Research Fellow, Institute for Artificial Intelligence Research and Development of Serbia, Institute for Philosophy and Social Theory, University of Belgrade

Branko Lukić

Logitech's first AI Fellow and co-founder of their Creative & Design AI Lab, Silicon Valley, California, USA

Dušanka Komnenić

Professor of Applied Studies, Academy of Applied Studies Polytechnic

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

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

14:45 – 17:00 Paper Presentations – Chair: Željko Zdravković

El Hadj Mimoune Arezki, Khattabi Lahcene, Berkani Dalila

Eternal geometry: Zellij as a bridge between islamic heritage and modern design

Katarina Nikolić

Oblique strategies and projector cards – fostering creativity in design through randomness and material engagement

Ivan Erkić

The power of the new 3D material in visual merchandising

Dejan Vračarević

The future of 3D additive technologies in an artificial intelligence environment for industrial designers and artists

Jelena Ivanović Vojvodić, Goran Vojvodić

*Reconstruction of the Building Palace of Science in Belgrade –
The Miodrag Kostić Foundation Endowment*

Duško Radaković, Nebojša Andrijević, Dragana Gardašević, Nenad Živanović

An assessment of diverse generative AI applications

Duško Radaković, Danijela Živojinović

Implicit modeling and the future of next gen CAD

Fedor Rakić

Will artificial intelligence ever replace the UX designer?

Jasna Jelić Obradović

The influence of art theory in the field of design

Predrag Maksić

*Foundations and principles of interdisciplinary design:
Towards a holistic approach to creative practice*

17:45 – 18:30 Poster Section

Dušanka Komnenić

AI and the aesthetic of imperfection: Defining the visual signature of machine-made art

Maja Milinić Bogdanović

How additive manufacturing can enhance contemporary fashion and footwear design

Željko Zdravković

Designing the future: How AI platforms are transforming industrial design in our world today

Fedor Rakić

Real vs. synthetic users: The future of UX testing

Jelena Jocić, Maja Milinić Bogdanović

Contemporary creative approaches and technological tendencies in graphic art and fashion design communication

Milica Matović

*Digital aesthetics and contemporary painting:
The transformations of visual form in post-media art*

Duško Trifunović

Werner Jeker — photography, typography, and grid in poster design

Natalija Gaković

Selection of contemporary synthetic polymeric organic materials for application in sustainable interior design

Scope 6. Traffic Engineering

The allocated time for Speakers' presentations is up to 12 minutes.

15:15 – 16:15 Paper Presentations – Chair: Željko Ranković

Biljana Ranković Plazinić, Željko Ranković, Nemanja Deretić

A methodology to determine parking zone boundaries

Dejan Jovanov, Daniel Pavleski, Kosta Jovanov

Road safety action plan: data driven decision making approach

Željko Ranković, Biljana Ranković Plazinić, Nemanja Deretić

Comparison of road safety level on the "Miloš Veliki" motorway and two-lane state road IB no. 22 following the construction of the "Miloš Veliki" motorway

David Rilak, Boris Antić, Nenad Marković, Emir Smailović

Identification of characteristic road problems and deficiencies at locations, sections and streets of increased pedestrian risk in the territory of the Belgrade police department through the application of independent assessment

16:15 – 17:45 Paper Presentations – Chair: Biljana Ranković Plazinić

Aleksandra Obradović, Biljana Ranković Plazinić

The impact of signalization of pedestrian crossings on pedestrian safety

Dragana Velimirović, Milan Marković, Milan Velimirović
Novelties in automotive industry sector in European countries

Dobrivoje Čatić, Vladimir Čatić
Analysis of brake drum damage in motor vehicle braking systems

Filip Marković, Miroљub Nikolić, Maja Stošković
Financial aspects of supply chain optimization in freight forwarding

17:45 – 18:30 Poster Section

**Nebojša Andrijević, Zoran Lovreković, Bojan Jovanović,
Vlada Jevtić, Branko Petrović**
IOT architecture for a small modular traffic intersection control with real-time multi-sensor adaptation

Denis Lukač, Mirsad Velju, Jasmin Hodžić
Analysis of traffic safety at level crossings in Montenegro

Danijela Miloradović, Jasna Glišović, Jovanka Lukić
Measuring instruments for vehicle technical inspection in technical regulations – a review

Nemanja Deretić, Saša Kukolj
Human resource management and digital transformation in transport companies

Scope 7. Biotechnology, Pharmacy and Healthcare

11:45 – 12:30 Round Table

Food Safety Control – Remote Auditing

Moderator:
Marko Jauković
Academy of Applied Studies Polytechnic

Panelists:
Nenad Vujović
Head of Department, Ministry of Agriculture, Forestry and Water Management

Miroslav Cvetković
Sanitary Inspector, Ministry of Health

Aleksandra Janković
Sanitary Inspector, Ministry of Health

Nevena Milovanović
Quality Control Manager, YUQS (IQNET member)

Velibor Rakić

Expert Associate, SGS Serbia

Marina Vuković

Head of Quality Control Department, Retail chain IDEA (Mercator Serbia)

Nevena Ranđelović Dimić

*Quality Assurance Supervisor, Confectionary company Bambi
(Coca-Cola HBC Group)*

13:00 – 14:15 Round Table

Agriculture of the Republic of Serbia in the Context of Climate Change

Moderator:

Markola Saulić

Academy of Applied Studies Polytechnic

Panelists:

Rastislav Stojsavljević

Associate Professor, Faculty of Sciences, University of Novi Sad

Ivica Đalović

*Principal Research Fellow, Advisor of Science, Institute of Field and Vegetable
Crops Novi Sad, National Institute of the Republic of Serbia*

Bojan Stević

Director of Agricultural Advisory and Expert Service, Požarevac

Marko Kovačević

Agricultural farm Kovačević

Aleksandar Stevanović

Lecturer, Academy of Applied studies Polytechnic

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

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

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

14:45 – 15:15 Invited Speakers' Presentation – Chair: Marko Jauković

**Dragana Ilić Udovičić, Jelena Đuričić Milanković, Aleksandra Vasić Popović,
Ivana Jevtić, Jelena Makević**

*Allergens as a parameter of food quality and safety control:
Attitudes and awareness of medical school students*

15:15 – 17:00 Paper Presentations – Chair: Marko Jauković

**Snežana Knežević, Aleksandar Stevanović, Snežana Milanović,
Slavica Đorđević**

Climate change impacts on bacterial foodborne infections and food safety

Miloš Purić

Apricot kernel oil as a new edible product processed from biowaste

Milica Jevtić, Goran Nestorović, Darko Stojićević

The rise of data-driven agriculture: Transforming farming through digital intelligence

Milica Ivanović, Predrag Rajković, Aleksandra Janković, Sandra Stanković

Optimization of the mixture composition and initial process parameters for composting grape pomace and co-substrates: Selection of an appropriate method

**Nebojša Andrijević, Zoran Lovreković, Vladan Radivojević,
Mihajlo Manojlović, Milica Velkovski**

Implementation of IOT systems in modern agriculture: Optimization and automation of smart greenhouse functionality

Maja Antanasković

Treatment and management of medical waste in the Health Center Prokuplje

17:15 – 17:30 Student Paper Presentation – Chair: Marko Jauković

Tijana Pavlović, Aleksandra Stojićević, Marko Jauković

Influence of the storage conditions on the chemical composition and shelf life of potato tuber

17:45 – 18:30 Poster Section

Dubravka Mandušić

Artificial intelligence in the animal world

Tatjana Marinković, Dragan Marinković, Jovana Pavlović

Physical activity and microbiota: An overlooked link to health

**Snežana Knežević, Snežana Milanović, Slavica Đorđević,
Marijana Jandrić Kočić**

Preventive medicine and healthy aging: Addressing population frailty prevention

Tanja Krunić

Reusing and improving food industry waste

Višnja Sikimić, Slavica Čabrilo, Nada Jelić

Formulations of gluten free biscuits with improved nutritional and functional properties

**Marina Ivanović, Jasmina Bašić, Mila Filipović,
Dragana Dragaš Milovanović, Bojana Luković**

Utilization of lactic acid bacteria in food technology from bioprotection to sensory quality enhancement

**Dragana Dragaš Milovanović, Jasmina Bašić, Mila Filipović,
Marina Ivanović, Bojana Luković**

Dose-response relationship between chronic exposure to trihalomethanes and haloacetic acids and adverse health outcomes

Dragana Dragaš Milovanović, Jasmina Bašić, Danijela Pecarski
Current pharmacogenetics trends in depression treatment

**Eleonora Gvozdić, Danijela Prokić, Marija Bajović,
Svetlana Grujić, Tatjana Đurkić**

Fungicide residues in apples: Analysis and health risk assessment

Marija Bajović, Eleonora Gvozdić, Tatjana Đurkić

Validation of a GC-MS/MS method for determining 200 pesticides in herbal tea infusions

Vladanka Stupar, Milica Jevtić

Sustainable innovation in plant production

**Melita Zec Vojinović, Kristijan Jurišić, Slavica Dudaš,
Martina Peršić, Marin Tomičić**

*The inhibitory potential of thyme essential oil (*Thymus vulgaris* L.) against the phytopathogenic fungus *colletotrichum acutatum**

Milica Lučić, Andrijana Miletić, Jelena Vesković, Antonije Onjia
LC-MS/MS analysis of Imazalil in lemons

Ana-Marija Valland, Tatjana Golubović

Exposure to antineoplastic pharmaceuticals and associated health effects

Tatjana Sekulić, Vladanka Stupar, Zlata Živković, Milica Blažić
Microbial bioremediation strategies of environmental pollutants

Slavica Čabrilo, Višnja Sikimić, Nada Jelić

The role of antimicrobial packaging in the protection of cheese

Markola Saulić, Aleksandar Stevanović, Marko Kovačević, Snežana Knežević
Integrated digital systems in pesticide control for safe food and agroecosystem conservation

Tanja Krunić

Impact of carrier composition and gastrointestinal digestion on the hydrogel sphericity and diameter

Danijela Pecarski, Dragana Dragaš Milovanović, Jasmina Bašić

Mycotoxin contamination in Serbia: Health implications and food safety challenges

Jasmina Rajić, Tanja Petrović, Aleksandra Stojićević, Dragana Mihajlović

Functional food: Concept, regulation, and public health significance

Jasna Savić, Aleksandra Božić, Dominik Brkić, Biljana Simić Polić

HDL functionality as a biomarker and therapeutic target in the era of new dyslipidemic drugs – a biochemical perspective

Jasmina Rajić, Tanja Petrović, Aleksandra Stojićević, Dragana Mihajlović

Technological challenges and innovations in the formulation of functional food products

Aleksandra Stojićević, Ana Alimpić Aradski, Smiljana Janković, Jasmina Rajić, Marko Jauković, Aleksandar Stevanović, Milica Blažić

*The essential oil of *Satureja* species as a promising food ingredient*

Scope 8. Mechanical Engineering

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

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

11:45 – 12:25 Invited Speakers' Presentations – Chair: Andrijana Đurđević

Kuznetsov Yu.A., Yakovlev D.D., Dobychin A.V., Gribakin A.A., Pichev V.S., Kravchenko I.N., Kalashnikova L.V.

Formation of protective coatings by high-velocity oxygen-fuel spraying

Milica Timotijević, Olivera Erić Cekić, Petar Janjatović, Stojko Biočanin, Dragan Rajnović

Quantification of niobium-rich and chromium-rich carbides in HP40Nb alloy after overheating

12:25 – 14:15 Paper Presentations – Chair: Andrijana Đurđević

Bojan Ivljanin, Uroš Kovačević, Vladeta Milenković

Comparative analysis of new systems for determining ratio and phase displacement errors on high-voltage current transformers without power interruption

Marko Milošević, Dragan Džunić, Živana Jovanović Pešić, Marko Miletić, Vladimir Kočović, Slobodan Mitrović

Tribo-mechanical characterization of epoxy-based composites reinforced with abaca fibers: A scratch test study

Miloš Milovančević, Marija Stevanović

ANFIS - based prediction of surface roughness and material removal rate in plasma arc cutting of Quard-400

Manuel Vite-Torres, Juan R. Laguna-Camacho, Ezequiel A. Gallardo-Hernández, Javier A. Frias-Flores

The contribution on solid particle erosion (SPE) of two tribology labs in Mexico

Marija Stevanović, Miloš Milovančević

Identification of key influential parameters for economic optimization of wastewater treatment systems using ANFIS

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

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

Nada Ratković Kovačević, Miloš Jakovljević, Đorđe Dihovični, Milica Ivanović, Petar Jakovljević

Project based learning – building a scaled operating CNC mill model using 3D printed parts

Milan Milutinović, Nikola Matić, Uroš Ugrinić

Tool life of CBN cutting inserts during hard turning of 60WCrV7 steel

Marko Tasić, Žarko Mišković, Radivoje Mitrović

Appliance of the polymer material for construction of the conveyor belt carrying idler's shell

Đorđe Karić, Mirko Komatina, Goran Vorotović

Machine learning methods for predicting energy savings in building retrofits

Predrag Drobñjak, Đorđe Đurđević, Andrijana Đurđević

Analysis of the problem of deformation of the guides and rearing of the guide console from the wall of the passenger lift drive shaft

Milan Mišić, Nikolaj Velikinac, Strahinja Đurović, Dragan Lazarević, Bojan Stojčetoć, Martina Petković, Aleksandra Kokić Arsić

Influence of feed rate on surface roughness of 3D printed PLA parts after milling process

Nebojša Petrović, Goran Vorotović, Aleksandar Bengin, Miloš Januzović, Jela Burazer, Dejan Blagojević

High-resolution UAV analysis of urban heat islands

Milica Timotijević, Stojko Biočanin, Željko Bulatović

Reliability model of the CNC hydraulic press DAGGT

17:45 – 18:30 Poster Section

Đorđe Đurđević, Nikola Tanasić, Andrijana Đurđević, Nina Anđelić

Static calculation of smoke exhaust duct construction in fire conditions using FEM

Do Duc Trung, Hoang Tien Dung, Siniša Škrbić, Aleksandar Ašonja

Applying the depart method for material selection in mechanical engineering

Milanka Plavšić

Design of polymeric materials in function of unit (technological) operations for new industrial production methods

Andrijana Đurđević, Đorđe Đurđević

Static calculation of the tank wall

Aleksandar Cvetković, Žaklina Tasić, Marija Petrović Mihajlović, Milan Radovanović, Ana Simonović, Milan Antonijević, Snežana Milić

Carbon paste electrodes and ZnO/CPE sensors: A short review

Milan Vasić, Mirko Blagojević, Milan Banić, Miloš Josimović, Goran Nestorović

Investigation of the influence of lubricant type on the efficiency of a cycloidal reducer

Obrad Aničić

Integration of modern technologies and artificial intelligence into CNC manufacturing systems: From 3D modeling to the application of neural networks

Milanka Plavšić

Some applications of polymer system scaling theory in design of processing industrial equipment

Milan Travica, Danilo Miljković, Nenad Mitrović

Application of a mobile digital image correlation system for on-site structural integrity assessment

Scope 9. Ecotourism and Rural Development

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

11:45 – 14:15 Invited Speakers' Presentations – Chair: Tatjana Sekulić

**Jelena Anđelković Grašar, Roksana Chowanec, Emilija Nikolić,
Marija Jović, Ljubomir Jevtović, Stefan Stančić**

Green heritage-archaeological parks as living labs for achieving sustainability

Slobodanka Stankov, Radomir Stojanović, Branko Radeljić

*Digitalisation of cultural heritage and its impact on tourism development
in Serbia*

Radomir Stojanović

Tourism destination management in Serbia-selecting new management model

Marko Perić

Virtual or real? Does virtual reality have a chance in tourism?

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

14:45 – 15:15 Paper Presentations – Chair: Tatjana Sekulić

Valentina Radoičić, Ivo Županović

Assessment of sustainable tourism development in Durmitor National Park

Biljana Ranković Plazinić, Svetlana Lekić

Transport accessibility as a driver of rural development

17:45 – 18:30 Poster Section

Marko Pavlović, Dragana Đurić, Saša Marković, Marija Perić, Ben Mladenović

Belgrade as a tourist brand – opportunities and development strategies

Scope 10. Mechatronics

12:45 – 14:15 Panel discussion – *Amphitheater Hall*

Robotics – To What Extent Will Robots Replace Humans?

Moderator:

Nikola Slavković

Academy of Applied Studies Polytechnic

Panelists:

Radoslav Veselinović

The owner of Galeb Company

Dragan Šešlija

Full Professor, University of Novi Sad

Stefan Simić

Chief Technology Officer, Voxellab, Belgrade

Snežana Obradović

Chief Executive Officer, Aledjo, Belgrade

Ivan Mačužić

Full Professor, University of Kragujevac

Aleksandar Momčilović

General Manager Sales & Service, DAIKIN, Belgrade

Milan Miščević

Sales Engineer, Teximp, Belgrade

Goran Kovačević

IT Engineer, Sky Express Belgrade

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

17:00 – 18:30 Paper Presentations – Chair: Nikola Slavković

Goran Zajić, Milan Pavlović, Marija Zajeganović

Case study on generating configuration parameters for network devices and computers using generative AI agents

Đorđe Lazarević, Jovan Ćirić

Multisensor IoT system for detection and measurement of physical parameters of the work environment

Nastasija Nikolić, Marko Đapan, Ivan Mačužić, Carlo Caiazzo, Petar Todorović, Arso Vukićević

Identification of parameters affecting the implementation of robotic solutions in lean industrial systems

Nada Ratković Kovačević, Goran Vojnović, Đorđe Dihovični, Dragan Kreculj, Petar Jakovljević

Programming arduino to drive a stepper motor for positioning a scanner in a library automation system

**Đorđe Dihovični, Aleksandra Mitrović, Nada Ratković Kovačević,
Dragan Kreculj**

Advances in 3D printing of electronics

**Dragan Kreculj, Đorđe Dihovični, Aleksandra Mitrović,
Nada Ratković Kovačević, Miloš Vorkapić**

Artificial intelligence in digital twins

Alper Şanlı, Alim Rüstem Aslan, Tuncay Yunus Erkeç, Musa Şen

Misalignment effects on optical payload performance for small satellites

17:45 – 18:30 Poster Section

Nikola Slavković, Mirjana Tomić, Dejan Đukić, Goran Zajić

*Human – machine interrelationship: Automatic sentence generation
by rule-based systems*

**Nebojša Andrijević, Zoran Lovreković, Vladan Radivojević,
Milan Milanović, Milica Stojičević**

*Cost-efficient smart building IoT architecture: Integration of arduino mega,
ESP32 and real-time web control*

Aleksa Turudić, Siniša Škrbić, Uroš Ilić

*Impact of small distributed energy resources on voltage profiles
and power flow in distribution networks*

Nela Vujović, Jelena Zarić Kovačević, Vesna Alivojvodić

AI-driven resource efficiency balancing opportunities and constraints in mining

Associated Programme

12:00 – 12:35 Panel discussion – Amphitheater Hall

AI Banking – The Future of Banking: Humans, AI or Neobanking?

Moderator:

Mirjana Tomić

Zemun Gymnasium

Panelists:

Joko-Lola Tomić

Executive Director, Raiffeisen Bank, Belgrade

Rade Bjelobaba

Managing Director (CEO), Raiffeisen INVEST, Belgrade

Aleksandar Smiljković

Chief Innovation Officer, Raiffeisen Bank, Belgrade

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