

4th International Conference on Advances in Science and Technology

 4^{th} June to 7^{th} June 2025

Venue: Hunguest Hotel Sun Resort, Herceg Novi

CONFERENCE PROGRAM

Wednesday 4 th June 2025	
15:00 - 18:00	Registration
19:00 - 20:00	Opening of the Conference
20:00 - 21:00	Cocktail

Thursday, 5 th June 2025	
10:00 - 11:00	Plenary session (Main Hall)
	Moderator: Irena Petrušić, PhD
	Speakers Radmila Janičić, PhD Social marketing in raising awareness about formal and non-formal education in digital environment
	Maja Hmelak, PhD Social networks in the preschool age
11:00-11:30	Break

11:30-14:00	Work in session Session I: Main Hall Session II: Conference Room I Session III: Conference Room II (Main Hall, Conference room I, Conference room II)
14:00-15:00	Break
15:00-18:00	Work in session
	Session IV: Conference Room II
	(Main Hall, Conference room II)

Session I: Economy, management, tourism and hospitality
Main Hall

11:30-14:00	
15:00-18:00	Work in session

Moderators: Nikša Grgurević, PhD, Ivan Stevović, PhD, Esma Nur Cerinan Otović, MSc

IMPLICATIONS OF DEMOGRAPHIC TRANSITION ON ECONOMIC GROWTH IN THE REPUBLIC OF SERBIA

Edvard Jakopin

THE LEASING CONTRACT - THE NEW ALTERNATIVE FINANCING

Veselin Hristov

DIGITALIZAION OF BANKS AS A FACTOR IN CONSUMER EXPERIENCE

Dragana Nikolić Ristić, Tatjana Mamula Nikolić, Radomir Stojković

CLUSTER ANALYSIS OF EUROPEAN COUNTRIES BASED ON INNOVATION PERFORMANCE

Ivica Nikolić, Lidija Krstić, Anđelka Stojanović

CAPITAL INFLOW AS A FUNCTION OF FINANCIAL SYSTEM STABILITY

Ognjen Bakmaz, Dragan Vukasović, Aco Bobić

PERFORMANCE EVALUATION OF ISLAMIC BANKING AND PARTICIPATION FINANCE INSTITUTIONS IN TÜRKIYE WITH TOPSIS METHOD

Selcuk Kendirli, Fevzi Gul

AUTOMATION AND DIGITALIZATION OF HUMAN RESOURCE MANAGEMENT

Jovan Spaić, Dragan Popović

APPLICATION OF ARTIFICIAL INTELLIGENCE IN THE OPTIMIZATION OF MARKETING STRATEGIES IN THE CONTEXT OF PROJECT MANAGEMENT

Bojana Ostojić, Maja Cogoljević, Dragan Klarić, Slađana Vujičić, Milena Cvjetković, Jelena Ružić

REPETITION OF CRISES IN INTERNATIONAL ECONOMY

Nikša Grgurević, Mladen Ivić

FINANCIAL SUCCESS ANALYSIS OF COMPANIES OPERATING IN THE BIST HEALTH SECTOR USING THE TOPSIS METHOD

Selçuk KENDİRLİ, Zekeriya LEK

THE ROLE AND IMPORTANCE OF HRM IN MANAGING THE WORKFORCE SHORTAGE IN TOURISM ENTERPRISES IN MONTENEGRO

Jovan Spaić, Dragan Klarić

THE ROLE OF ADVANCED PERSONALIZATION TECHNOLOGIES IN DIGITAL MARKETING THROUGH PROJECT MANAGEMENT

Bojana Ostojić, Vladan Cogoljević, Milena Cvjetković, Esma Otović

QUALITY OF INSTITUTIONS AS A TOOL FOR UNLOCKING POTENTIAL OF TECHNOLOGICAL AND ECONOMIC DEVELOPMENT OF WESTERN BALKAN COUNTRIES

Đorđe Kotarac, Simo Stevanović

EXPLORING THE NEXUS OF TOURISM AND FEMALE ENTREPRENEURSHIP IN MONTENEGRO: CHALLENGES AND OPPORTUNITIES FOR GROWTH

Ljiljana Rakočević, Aleksandra Vujko

THE IMPACT OF ADDITIONAL EDUCATION ON EMPLOYEE MOTIVATION

Dejana Crvenica Đurašković

FROM SCIENCE TO MARKET: CHALLENGES AND DEVELOPMENT OPPORTUNITIES OF ACADEMIC SPIN-OFF COMPANIES IN SERBIA

Nikola Radosavljević, Gordana Rendulić Davidović, Cariša Bešić

THE CORRELATION OF EMPLOYEE DEVELOPMENT AND JOB SATISFACTION: EVIDENCE FROM THE INSURANCE INDUSTRY

Aleksandar Glišić

THE EVOLUTION AND GROWTH OF SMALL ENTERPRISES IN THE UNITED STATES

Bogdan Vukolić

Session II: Engineering, technology and materials

Conference Room I

11:30-14:00 Work in session

Moderators: Jovana Jovanović, PhD, Ivana Savić, MSc

ON TOTAL INTEGRABILITY IN R²

Branko Sarić

APPLICATION OF 3D SCANNING AND 3D PRINTING IN THE PRESERVATION OF CULTURAL HERITAGE

Anđelko Obradović, Matija Miljanić, Mihailo Jovanović, Milena Đukanović

SUSTAINABLE DEVELOPMENT AND CIRCULAR ECONOMY SUPPORTED BY ARTIFICIAL INTELLIGENCE TOOLS

Ivan Stevović, Jovana Jovanović, Mihailo Jovanović

CRUDE OIL FIRST PURCHASE PRICE FORECAST BASED ON THE MONTE CARLO METHOD

Adrijana Jevtić, Miša Tomić, Dejan Riznić

AN INNOVATIVE APPROACH TO THE GRADED DURÁN-TYPE MESH

Mirjana Brdar, Goran Radojev, Ljiljana Teofanov

THERMAL IMAGING SPECTROMETRY AND THERMOGRAPHIC SNAPSHOTS FOR THREE BUILDING BLOCKS OF DIFFERENT AGES

Jovana Jovanović, Ivan Stevović, Milena Đukanović

APPLICATION OF OPTIMIZATION ALGORITHMS IN FIRE PROTECTION SYSTEMS

Goran Bošković, Marko Todorović, Marina Bošković, Bojana Zoraja, Zoran Čepić

MULTI-CRITERIA APPROACH TO THE SELECTION OF ELECTRIC DELIVERY VEHICLES USING THE AHP-ELECTRE METHODS

Jelena Mihajlović, Goran Petrović, Aleksandar Stanković

IMPACT OF REVOLUTION 4.0 ON BURNOUT OF EMPLOYEES IN IT SECTOR AND MAPPING OF KEY FACTORS

Katarina Karić, Miloš Papić, Dušan Garabinović

Session III: Sustainable development, ecology, energy efficiency and renewable energy sources

Conference room II

11:30-14:00 Work in session

Moderator: Bojana Ostojić PhD

ADVANCED 3D PRINTING TECHNOLOGIES IN WIND TURBINE DESIGN FOR SUSTAINABLE FUTURE

Nikola Jovović, Mihailo Jovanović, Milena Đukanović, Luka Jovović

THE ROLE OF PSYCHOLOGICAL FACTORS IN THE FUNCTION OF DIGITAL PROMOTION OF SUSTAINABLE BEHAVIOR

Dragana Nikolić Ristić, Tatjana Mamula Nikolić, Radomir Stojković

THE APPLICATION OF ARTIFICIAL INTELLIGENCE IN ENVIRONMENTAL PROTECTION

Anđela Vasović, Nebojša Denić

APPLICATION OF NITRIC ACID-MODIFIED HYDROCHAR FOR THE CEPHALEXIN AND BEZAFIBRATE REMOVAL FROM WATER

Marija Šobić, Mirjana Petronijević, Sanja Panić, Igor Antić, Jelena Živančev, Nataša Đurišić-Mladenović

14:00-15:00	Break
15:00-17:00	Work in session

Session IV: Computer science and information technology Conference Room II

Moderators: Danijela Milošević, PhD, Slobodan Slavić, MSc

15:00-18:00 Work in session

LLM CODE GENERATION: THE CHALLENGE OF ACCURATE SCORING

Lazar Krstic, Marija Jolovic, Branko Arsic

BIMODAL SPEECH RECOGNITION BASED ON CLASSICAL MEL AND WAVELET MEL CEPSTRAL COEFFICIENTS

Branko Marković, Gordana Marković

ETHICAL AND METHODOLOGICAL ISSUES IN AI-BASED DECISION SUPPORT SYSTEMS FOR MENTAL HEALTH

Dubravka Živković, Lazar Krstić, Milena Živković, Dragana Krstić

THE ROLE OF FUZZY MATHEMATICS IN DATA SEGMENTATION AND ANALYSIS

Nataša Milosavljević, Julija Ščekić, Irma Ibrišimović, Nebojša Ralević, Damir Bajrić

SHALLOW GEOTHERMAL POTENTIAL IN THE DANUBE REGION – CAN CHATBOTS HELP PLAN THE WAY FORWARD?

Filip Nastić, Davor Končalović, Dubravka Živković, Dušan Gordić, Vladimir Vukašinović, Mladen Josijević

Friday, 6 th June 2025	
09:30-11:30	Poster session I
10:00-13:00	Work in session (Main Hall)
13:00-14:30	Break
14.30-17:00	Work in session (Main Hall)
15:30-17:30h	Poster session II

20:30-00:00	Gala dinner

Session V: Erasmus + Projects and IPA Projects Panel

Main Hall

10:00-13:00

Moderators: Milena Đukanović, PhD, Irena Petrušić, PhD

Presentation of Erasmus+ Project GEAR

Jovana Jovanović, Irena Petrušić, Tomaž Bratina, Maja Hmelak, Ivana Savić

Presentation of Erasmus+ Project SMART

Milena Đukanović, Bojana Mališić, Marija Vuković

Presentation of A4SUSTINNO Project

Bojana Mališić

Session VI: Humanities: philosophy, philology, history, theology

Session VII: Education, online education, e-Learning

Session VIII: Legal and political sciences, sociology, psychology

Main Hall

14:30-17:00

Work in session

Moderators: Irena Petrušić, PhD, Esma Nur Cerinan Otović, MSc Bojana Ostojić, PhD, Ivana Savić, MSc

AUDEN AND TECHNOLOGY

Tomislav Pavlović

REVIVING THE INTANGIBLE: THE ROLE OF ARTIFICIAL INTELLIGENCE IN SUSTAINING CULTURAL TRADITIONS OF BOKA KOTORSKA

Irena Petrušić, Ivana Savić

A STUDY ON IMPACT OF DIGITAL MARKETING STRATEGIES ON EDUCATION SECTOR: THE IMPACT OF DIGITAL MARKETING ON STUDENTAND EDUCATOR BEHAVIOUR

Esma Nur Cerinan Otovic, Bojana Ostojic

BREAKING STEREOTYPES: ADDRESSING GENDER DISPARITIES IN STEM EDUCATION AND CAREERS

Tomaž Bratina, Nika Golob, Eva Kranjec, Irena Petrušić, Maja Hmelak

THE BENEFITS OF ORGANIZING COURT EXPERTS INTO CHAMBERS IN ORDER TO IMPROVE THEIR WORK AND THE SYSTEM OF COURT EXPERTISE

Konstantin Bitrakov, Viktor Kamnar, Ana Pavlovska-Daneva

MONTENEGRO AND THE AI ACT: CHALLENGES OF REGULATORY TRANSITION, GEOPOLITICAL AND ECONOMIC IMPLICATIONS

Nina Vuksanović

VIOLATION OF PROPERTY RIGHTS – YES/NO IN EXECUTION PROCEEDINGS

Jasmina Tahirović, Adis Mehić

Poster Session - Friday, 6th June 2025

09:30-11:30

Poster session I

ASSESSMENT OF THE VALIDITY AND RELIABILITY OF THE VIGILANT LEADERSHIP SCALE ON A SAMPLE OF TEACHERS IN SERBIA

Stefan Ninković, Olivera Knežević Florić, Tamara Dragojević

HIGH SCHOOL STUDENTS' PERCEPTIONS AND EXPERIENCES WITH AI CHATBOTS IN EDUCATION

Stanislava Olić Ninković, Jasna Adamov, Tihomir Lazarević

FOOD ADDITIVES

Gordana Jovanovic, Ana Vasic, Bojan Damnjanovic

ASSESSMENT OF THE CONDITION OF THE SOIL ON THE SOUTHWESTERN SLOPES OF MOUNT BJELASICA (MONTENEGRO) IN RELATION TO THE TESTED METALS

Vlatko Kastratovic, Bojana Knezevic

THE SPHERICAL FUZZY AHP METHOD FOR DEVELOPING SUCCESSFUL E-COMMERCE PLATFORM DESIGNS

Mimica Milošević, Dušan Milošević and Miloš Nikolić

INFORMATION SYSTEMS DEVELOPMENT IN THE INDUSTRY 5.0 ERA

Olga Dukić, Miloš Papić

NEW RUTHENIUM (II) POLYPIRIDYL COMPLEXES; INTERACTIONS WITH BIOMOLECULES

Milica Medjedović Stefanović, Ana Rilak Simović, Biljana Petrović

BIOMOLECULAR INTERACTIONS OF NOVEL RUTHENIUM(II) HALF-SANDWICH COMPLEXES

Ana Rilak Simović, Nenad Janković, Lazar Milović, Milica Međedović

DYNAMIC SIMULATION OF WIND TURBINE SYSTEMS

Snežana Dragićević, Milan Marjanović

BIOINDICATION OF AIR QUALITY IN THE BANJSKA USING LICHENS AS BIOINDICATORS

Gordana R. Aleksić, Tatjana R. Jakšić, Predrag S. Vasić, Slavica S. Ćirić , Teodora N. Aleksić, Mila Z. Jakšić, Gordana Subakov – Simić

ITERATIVE DETECTION OF CHANGE IN MEDICAL IMAGES USING BEE COLONY OPTIMIZATION AND BLOCK DIVISION

Nataša Milosavljević, Nebojša Ralević, Dejan Ćebić, Dušan Denčić, Vladimir Ilić

DYNAMIC ANALYSIS OF A REINFORCED CONCRETE FRAME WITH MASONRY INFILL

Timur Curić, Demir Vatić, Nebojša Ralević, Anka Starčević-Ćurčin, Igor Džolev

SEISMIC PERFORMANCE OF IRREGULAR REINFORCED CONCRETE STRUCTURES

Timur Curić, Anka Starčev-Ćurčin, Igor Džolev

THE IMPORTANCE OF A STRATEGIC PROCESS IN IMPROVING THE COMPANY'S PERFORMANCE

Neda Nikolić, Bojana Đalović, Jasmina Ćurčić, Miodrag Zečević, Milan Vesković

DESIGNING THE PRODUCTION PROCESS USING DIAGRAMS IN THE "ATTRIUM HOME CENTER" BUSINESS SYSTEM

Jasmina Ćurčić, Zoran Nešić, Neda Nikolić, Milan Vesković, Nebojša Denić

ARTIFICIAL INTELLIGENCE FOR AGRICULTURE DIGITALIZATION: A REVIEW

Marija Blagojević, Danijela Milošević, Marko Petković

DATA STRUCTURE FOR MODELING INTELLIGENT AGENTS IN THE EVACUATION SIMULATION

Srdjan Popov, Tanja Vranic, Jovana Simic, Djordje Cosic, Suzana Draganic, Milena Zeljkovic

CURRICULUM REFORM IN WEB PROGRAMMING TEACHING: IMPLEMENTING THE

PYTHON/DJANGO PLATFORM IN THE "INTERACTIVE WEB APPLICATIONS" COURSE

Srdjan Popov, Nikolet Gleser, Vladan Rankov, Aleksandra Rankov, Tanja Vranić, Margarita Khazhoyan

TRADITION OF INTANGIBLE CULTURAL HERITAGE: THE INFLUENCE OF THE MEDIA ON THE PROMOTION OF FOLK CREATIVITY INSPIRED BY THE GRAPE HARVEST

Branislav Sančanin, Aleksandra Penjišević, Ognjen Bakmaz

MULTI-CRITERIA DECISION-MAKING APPROACH FOR SELECTING RAW MATERIALS IN BIODIESEL PRODUCTION IN SERBIA

Aleksandar Stanković, Goran Petrović, Jelena Mihajlović, Milica Stanković

THE FUTURE OF E-PHARMACY TO PHARMA 5.0

Tatjana Stojadinovic, Marija Brankovic, Ilija Antovic, Lara Stojadinovic

THE ROLE OF ARTIFICIAL INTELLIGENCE IN OPTIMIZING MARKETING STRATEGY

Jelena Jevtić, Mira Vidaković, Tamara Jevtić

15:30-17:30 Poster session II

BLOG IN BIOLOGY TEACHING AND STUDENTS' ATTITUDES TOWARDS THE USE OF THIS WEB TOOL IN EDUCATION

Tihomir Lazarević, Vera Županec, Jelena Lazarević

THE IMAGE AND THE KERNEL OF A LINEAR COMBINATION OF TWO {K,s+1}-POTENT MATRICES

Marina Tošić

EXAMINATION THE ANTIOXIDANT ACTIVITY OF RED WINES FROM ŠUMADIJA REGION

Danijela Stojković, Edina Avdović, Dušica Simijonović, Sandra Jovičić Milić, Marko Antonijević, Zoran Marković, Dušan Dimić

VALORIZATION OF MIXTURES OF STARCH-CONTAINING FOOD WASTE FROM STUDENT RESTAURANTS FOR BIOETHANOL PRODUCTION

Vesna Vučurović, Jelena Filipović, Bojana Bajić, Damjan Vučurović, Siniša Dodić

JARAM PEAT BOG (MT.KOPAONIK, SERBIA) AS A BIODIVERSITY HOTSPOT – INSIGHTS INTO ALGAE, PLANTS AND INVERTEBRATES

Sanja Šovran, Katarina Stojanović, Eva Kabaš, Dalibor Stojanović, Vukašin Gojšina, Ivana Živić, Miroslav Živić, Ana Knežević, Predrag Lazarević

ADVANCES AND CHALLENGES IN BIOTECHNOLOGICAL UTILIZATION OF EFFLUENTS FROM COLD-PRESSED OILS PRODUCTION

Zorana Trivunović, Ida Zahović, Marko Zeljko, Jelena Dodić

ASSESSING THE CHEMISTRY EDUCATIONAL OUTCOMES USING DIGITAL ESCAPE ROOM.

ANALYSIS OF GRAMMAR SCHOOL STUDENTS' ACHIEVEMENTS

Filip Stašević, Milica Tasić, Jelena Đurđević Nikolić, Aleksandra Marković

CHEMICAL TREATMENT STRATEGIES FOR MYCOTOXIN REMOVAL: EFFICIENCY, MECHANISMS, AND APPLICATIONS

Ivana Jevtć, Sandra Jakšić, Mirjana Antonijević Nikolić, Kosana Popović

THE IMPACT OF ARTIFICIAL INTELLIGENCE ON SCIENTIFIC RESEARCH: ADVANTAGES, CHALLENGES, AND ETHICAL DILEMMAS

Milica Vulević

LICHENS COMMUNITY STRUCTURE ON THE ROCKS OF THE BEČIĆI BEACH, MONTENEGRO

Gordana R. Aleksić, Tatjana R. Jakšić, Predrag S. Vasić, Slavica S. Ćirić, Gordana Subakov-Simić

INNOVATION SUPPORT IN SERBIA: MAPPING THE INSTITUTIONAL AND FINANCIAL INFRASTRUCTURE OF THE STARTUP ECOSYSTEM

Nikola Radosavljević, Gordana Rendulić Davidović, Cariša Bešić, Snežana Dragićević

STRATEGIC MANAGEMENT OF SALES TEAMS AS A GUARANTOR OF SALES SUSTAINABILITY

Zvonimir Filipovic, Natko Klanac, Sinisa Bilic

SIMULATION OF A LATHE MACHINE SERVICING USING A ROBOT

Vojislav Vujičić, Nenad Mijajlović, Nedeljko Ducic, Veljko Aleksic, Ivan Milicevic

ANTI-INFLAMMATORY PROPERTIES OF CABERNET SAUVIGNON GRAPE-SKIN EXTRACT

Danijela Stojković, Edina Avdović, Dušica Simijonović, Sandra Jovičić Milić, Dejan Milenković, Zoran Marković, Dušan Dimić

MALONDIALDEHYDE AS A BIOMARKER OF HEAT STRESS TOLERANCE IN WHEAT CULTIVARS Stefan Marković, Đorđe Minić, Katarina Marković, Nevena Djukić

CRITICISM OF THE EDUCATIONAL SYSTEM AND PEDAGOGICAL PARADIGMS THROUGHOUT HISTORY

Muzafer Bibić

STRUCTURE-BASED DESIGN OF HYBRID INHIBITORS OF ACETYLCHOLINESTERASE AND BETA-SECRETASE 1 AS POTENTIAL BIFUNCTIONAL AGENTS FOR ALZHEIMER'S DISEASE THERAPY

Žiko Milanović, Kristina Milisavljević

PERFORMANCE ANALYSIS OF SPECTRAL BANDS AND INDICES IN SEMANTIC SEGMENTATION OF SENTINEL-2 IMAGERY USING ATTENTION U-NET ARCHITECTURE

Jelena Mitić, Milan Grujev

PATIENT-SPECIFIC INTERNAL FIXATION PLATES FOR MANDIBULAR SYMPHYSIS RECONSTRUCTION: A DIGITAL DESIGN APPROACH

Jelena Mitić, Zoran Stamenković, Marta Petrović, Filip Petrović

ANALYSIS OF THERMAL CHARACTERISTICS OF AIR RIFLE BARRELS AFTER MULTIPLE FIRINGS

Darko Janković, Ljubiša Tomić, Marina Simović Pavlović, Martin Ochsenhofer, Darko Vasiljević

20:30-00:00
Gala Dinner

Saturday, 7 th June 2025	
	City tour
10:30-13:00h	Faculty of Management organizes walking city tour with the guide.
	The tour includes visits to the visit of old town Herceg Novi and its fortresses Kanli Kula and Forte Mare.