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TABLE OF CONTENT

KEYNOTE PAPERS

Jelena Bošković, Vladica Ristić, Jelena Mladenović, Tanja Kvesić	
THE SPECIFIC IMPACT OF THE COVID-19 PANDEMIC ON AGRICULTURE AND NATURAL RESOURCES	10
Ernest Vlačić	
CHALLENGES IN STRATEGIC POSITIONING OF SMALL OPEN ECONOMIES TOWARDS THE 5th INDUSTRIAL REVOLUTION.....	11
Jamila Jaganjac	
THE ROLE OF HIGHER EDUCATION IN THE CREATION AND DEVELOPMENT OF THE KNOWLEDGE-BASED SOCIETY.....	12
Gordana Dražić, Nikola Dražić, Nikola Rakašćan, Ljubiša Živanović	
BIOGAS PRODUCTION SUSTAINABILITY CIRCLES.....	13
Vladica Ristić	
MUTUAL INTERDEPENDENCE BETWEEN ENVIRONMENT AND BUILDING SITES.....	14
Krešimir Buntak	
SMART MANAGEMENT CONCEPT AS A NEW MODEL OF SUSTAINABLE CITY GOVERNANCE	15
Slavko Vukša, Sergej Vukša	
THE IMPACT OF NEW TECHNOLOGIES ON THE DEVELOPMENT AND SECURITY OF COUNTRIES IN TRANSITION.....	16

A SCIENCE, TECHNOLOGY AND INNOVATION

Vlado Radić, Nikola Radić	
TRENDS AND PERSPECTIVES TOWARDS "LEAN INDUSTRY 4.0"	18
Radivoj Prodanović, Jovana Gardašević, Moamer Softić, Radovan Vladislavljević	
INNOVATION MANAGEMENT IN RURAL ENTERPRISES.....	19
Katerina Fotova Čiković	
EFFICIENCY EVALUATION OF BANKING SECTOR BY USING THE NON-PARAMETRIC DEA METHODOLOGY.....	20
Branka Stipanović	
THE IMPACT OF TECHNOLOGY IN CORPORATE FINANCE MANAGEMENT.....	21
Branko Richard Babić	
INVENTION DOES NOT EXIST.....	22



B EDUCATION AND KNOWLEDGE FOR 21 CENTURY

Ladin Gostimirović, Dragan Janjušić	
INNOVATION MANAGEMENT IN HIGHER EDUCATION.....	24
Vitaliia Klimenkova	
YOUNG TALENTS IN SCIENCE SYSTEM OF UKRAINE.....	25
Natalija Ćurković	
PROBLEM SOLVING AS A KEY COMPETENCE IN A MODERN WORLD: HOW TO TEACH IT AND HOW TO EVALUATE IT?.....	26
Enes Huseinagić	
HIGH SCHOOL EDUCATION AND UPBRINGING - REASONS FOR CHANGES AND HOW SHOULD BE REALIZED.....	27
Slobodanka Đolić	
ANGLICISMS AND THEIR ROLE IN THE SPREAD OF ENGLISH AS A GLOBAL LANGUAGE ON EARTH.....	28
Nataša Lukić	
THE IMPORTANCE OF TEACHING IDIOMS TO THE STUDENTS OF ECONOMICS AS A WAY OF ACHIEVING COMMUNICATIVE COMPETENCE IN BUSINESS ENGLISH.....	29
Biljana Savić	
MUSIC - A GUIDE TO THE IMAGE AND EMOTIONAL STIMULATION.....	30
Petra Ercegovac	
DEVELOPMENT AND IMPROVEMENT OF HUMAN RESOURCES.....	31

C PRESERVATION AND IMPROVEMENT OF ENVIRONMENT AND HUMAN HEALTH

Marija Šljivić-Ivanović, Ivana Jelić, Slavko Dimović	
THE IONIZING RADIATION AROUND US	33
Slavko Dimović; Ivana Jelić; Marija Šljivić-Ivanović	
INFLUENCE ANALYSIS OF CEMENT MATRIX CURING TIME ON THE Co^{2+} AND Cs^{+} LEACHING LEVEL IN STATIC CONDITION.....	34
Jelena Bošković, Jelena Mladenović, Vladica Ristić	
COMPARATIVE ANALYSIS OF METAL CONTENT IN PLANTS OF THE SPECIES PEUCEDANUM.....	35
Marina Nenković-Riznić, Mila Pucar, Borjan Brankov	
PROPOSAL OF THE NEW NOMENCLATURE IN PLANNING FOR ADAPTATION TO CLIMATE CHANGE AT THE LEVEL OF LOCAL SELF- GOVERNMENT UNITS (LSGU) IN SERBIA.....	36
Jelena Bošković, Vladica Ristić, Tanja Kvesić	
APPLICATION OF BIOTECHNOLOGY IN AGRICULTURE.....	37
Vaja Pavlović	
DOES A MORE GENEROUS QUARRY REHABILITATION YIELD RICHER BIODIVERSITY?.....	38



Slobodan Milić	ENVIRONMENTAL RISKS OF MODERN SOCIETY.....	39
Marina Guzovski	THE ROLE OF CORPORATE SOCIAL RESPONSIBILITY IN DEVELOPING ENVIRONMENTAL AWARENESS AND CHANGING CONSUMER BEHAVIOR.....	40
Boris Dorbić, Marija Tarle, Željko Španjol	PERCEPTIONS AND ATTITUDES ON ORNAMENTAL FEATURES AND THE USE OF SELECTED ROSE CULTIVARS.....	41
Aleksandra Kovačević	DECISION-MAKING ANALYSIS IN FORMING AN INVESTMENT PLAN FROM THE ASPECT OF WORKER AND POPULATION HEALTH SAFETY.....	42
Vanda Božić, Dragan Bataveljić	WATER PROTECTION AS A CONDITION FOR PRESERVATION AND IMPROVEMENT OF THE ENVIRONMENT AND POPULATION HEALTH	43

D GOVERNANCE AND SUSTAINABLE TERRITORIAL DEVELOPMENT

Marija Maksin, Vladica Ristić	PLANNING SYSTEM FOR SUSTAINABLE TERRITORIAL DEVELOPMENT IN SERBIA.....	45
Slavka Zeković	THE REGIONAL INDUSTRIAL POLICY AND TERRITORIAL DEVELOPMENT	46
Mila Pucar, Sanja Simonović-Alfirević, Marina Nenković-Riznić, Snežana Petrović	NEW METHODOLOGY IN GREEN CITY PLANNING - THE WAY TOWARDS SUSTAINABLE URBAN DEVELOPMENT.....	47
Igor Jokanović, Milica Pavić	INTEGRATION OF THE CONCEPT OF SUSTAINABILITY IN THE ANALYSIS OF ENVIRONMENTAL IMPACTS AND PROJECT PREPARATION FOR TRANSPORT INFRASTRUCTURE.....	48
Peter Nikolov, Boryana Nozharova	SPATIAL AND TRANSPORTATION DEVELOPMENT OF BIG BULGARIAN CITIES. THE CASE OF PLOVDIV AND VARNA.....	49



E NATIONAL SECURITY AND PROTECTION

Mirko Smoljić

LEGAL, ECONOMIC AND SECURITY ASPECTS OF THE
EUROPEAN UNION IMMIGRATION POLICY.....51

Mina Zirojević, Dragan Paunović

THE PROBLEMS OF NATIONAL SECURITY AND
GLOBALIZATION - VIEW FROM SERBIA.....52

Olgica Vulević

TERRORISM AS A GLOBAL PHENOMENON AND ITS
FINANCING.....53

Tajana Petrović

TAX AND ACCOUNTING CHALLENGES OF
VIRTUAL CURRENCY REGULATION.....54

Nenad Bingulac

JUVENILE OFFENDERS FROM THE PERSPECTIVE OF
CRIMINAL LAW AND CRIMINOLOGY..... 55

Ana Globočnik Žunac, Mirko Smoljić, Petra Ercegovac

OBLIGATION OF DATA MANAGEMENT WITHIN HUMAN
RESOURCES MANAGEMENT IN CROATIA.....56



NEW METHODOLOGY IN GREEN CITY PLANNING - THE WAY TOWARDS SUSTAINABLE URBAN DEVELOPMENT

*Mila Pucar*⁶⁰; *Sanja Simonović-Alfirević*⁶¹, *Marina Nenković-Riznić*⁶²; *Snežana Petrović*⁶³

Abstract

The city of Belgrade in 2018 has signed Covenant of Mayors on climate and energy in order to reduce carbon dioxide (CO₂) emissions by at least 40% and to increase the city's resilience to the effects of climate change by 2030. In order to implement these goals, a team (authors of this paper) was formed to develop a Sustainable Energy and Climate Action Plan (SECAP) based on the results of the Baseline Emission Inventory (BEI) and Vulnerability and Risk Assessment (VRA). VRA has involved determining CO₂ emissions using a series of activity-based approach and reducing GHG emissions. The impact of the given measures on climate change mitigation, was assessed on the basis of a hypothetical baseline scenario (increase in demand in the BEI sectors and socio-economic parameters). In order to achieve that, it is necessary to implement projects in the field of energy efficiency, expand district heating, introduce renewable energy sources in the energy potential of the city, rationalize public lighting and traffic, and continue with intensive greening of the city.

Key words: *Integrated baseline emission inventory (BEI); vulnerability and risk assessment (VRA); climate change mitigation and adaptation; energy and energy efficiency.*

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