



# YOURS 2020

## ABSTRACT PROCEEDINGS

YOUNg ResearcherS Conference 2020

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Ministry of Education, Science and Technological Development

Editorial Board of Journal of Applied Engineering Science

UKAS - Association for Quality, Accreditation and Standardization

Faculty of Mechanical Engineering, University of Belgrade

# **YOURS 2020**

## **YOUnG ResearcherS Conference 2020**

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**TABLE OF CONTENT****YOUNG RESEARCHERS CONFERENCE 2020**

Djordje Jovanović, Branislav Milenković, Mladen Krstić APPLICATION OF GRASSHOPPER OPTIMIZATION ALGORITHM IN MECHANICAL ENGINEERING	8
Dragan Pavlović, Tomislav Šekara, Jovan Cvetic AN IMPROVED LAPLACE TRANSFORM METHOD FOR THE CALCULATION OF THE LIGHTNING CHANNEL RETURN STROKE PARAMETERS	9
Tijana Djukic, Igor Saveljic, Gualtiero Pelosi, Oberdan Parodi, Nenad Filipovic IMPROVED NUMERICAL MODEL OF THE ARTERIAL WALL APPLIED FOR SIMULATIONS OF STENT DEPLOYMENT WITHIN PATIENT-SPECIFIC CORONARY ARTERIES	10
Nemanja Šurbatović, Milan Kalajdžić DESIGNING A SHIP'S HULL FORM WITH MINIMUM RESISTANCE	11
Miloš Đorđević, Vesna Paunović, Danijel Danković, Branislav Jovičić SMART AUTONOMOUS AGRICULTURAL SYSTEM FOR IMPROVING YIELDS IN GREENHOUSE BASED ON SENSOR AND IoT TECHNOLOGY	12
Lazar Ignjatović, Milan Stojković, Nikola Milivojević RESILIENCE AS A MEASURE FOR RISK ASSESSMENT OF THE WATER SYSTEMS: REVIEW OF EXISTING CONCEPTS	13
Kristina Milišić, Milan Ugrinović, Bogoljub Zečević, Jelena Damnjanović, Slađan Adžić, Zdenka Girek ENRICHED ZEOLITES FOR VEGETABLE SEEDLING PRODUCTION	14
Nikola Andrijević, Višnja Simić, Miloš Ivanović EFFICIENT LARGE-SCALE OPTIMIZATION IN THE CONTAINERIZED ENVIRONMENT	15
Lazar Krstić, Boban Stojanović, Miloš Ivanović GENETIC ALGORITHM OPTIMIZATION OF THE ARTIFICIAL NEURAL NETWORK ENSEMBLES	16
Danica Prodanovic, Boban Stojanovic, Momcilo Prodanovic, Srboljub M. Mijailovich MULTI-SCALE FINITE ELEMENT SOLUTION FOR CARDIAC MUSCLE CONTRACTION	17
Nikola Mitrović, Danijel Danković, Zoran Prijjić, Ninoslav Stojadinović MODELING OF NBTI DEGRADATION IN P-CHANNEL VDMOSFETS	18
Vladimir M. Milenković, Vojkan D. Jovanović, Branimir Č. Stanić PROBABILITY OF HAZARD INITIATION IN INCIDENT SITUATIONS WITH VEHICLES TRANSPORTING DANGEROUS GOODS BY ROAD – CASE STUDY: CITY OF BELGRADE	19
Goran R. Petrović, Milan R. Ristanović, Goran Memon, Dragan V. Lazić, Radoslav D. Radulović EXPERIMENT PLANNING FOR PRELIMINARY ASSESSMENT OF THE MATHEMATICAL MODEL OF AN UNPOWERED AIR GLIDER BOMB	20
Ivana Mikavica, Dragana Ranđelović, Vladan Đorđević, Gordana Gajić, Jelena Mutić ORCHID SPECIES ANACAMPTIS MORIO AS A POTENTIAL BIOREMEDIATOR OF AS, CD AND PB	21
Ana Vranić, Marija Mitrović Dankulov THE INFLUENCE OF LONG-RANGE CORRELATED GROWTH SIGNALSON THE EVOLVING COMPLEX NETWORK STRUCTURES	22

Scopus<sup>®</sup>Scopus<sup>®</sup>Scopus<sup>®</sup>Scopus<sup>®</sup>

Anja Antanasković, Maja Bulatović, Marica Rakin, Zorica Lopičić, Tatjana Šoštarić, Marko Rakin	23	Scopus <sup>®</sup>
EFFECT OF CORN STRAW PRETREATMENT ON EFFICIENCY OF BIOGAS PRODUCTION PROCESS - COMPUTER SIMULATION		
Nela Petronijević, Vesna Alivojvodić, Miroslav Sokić, Branislav Marković, Srđan Stanković, Dragana Radovanović	24	Scopus <sup>®</sup>
SUSTAINABLE MINING TOWARDS ACCOPLISHING CIRCULAR ECONOMY PRINCIPLES		
Marina S. Blagojev, Rudolf A. Tomanec, Slavica R. Mihajlović, Miroslav D. Sokić, Slavomír Hredzák	25	
TOPSIS MULTI-CRITERIA DECISION MAKING METHOD FOR PELLETIZED FLY ASH PARAMETERS SELECTION		
Aleksandra Korićanac, Milan Lukić, Boris Rilak, Branko Popović, Olga Mitrović, Slađana Marić	26	
EVALUATION OF FRUIT QUALITY OF TWO AUTOCHTHONOUS APPLE CULTIVARS SUITABLE FOR WIDESPREAD PRODUCTION		
Anđela Blagojević, Tijana Šušteršič, Nenad Filipović	27	
AUTOMATIC SEGMENTATION OF LUNGS WITH PNEUMONIA IN X-RAY IMAGES OF PATIENTS WITH COVID-19		
Mladen Bugarčić, Dragana Milošević, Milica Spasojević, Dunja Marunkić, Jovanka Kovačina, Milan Milivojević <sup>4</sup>	28	
ADJUSTING PH PZC VALUE DURING AND AFTER ADSORBENT PREPARATION		
Miloš Maljković, Branko Miličić, Milena Žunjić, Ivan Blagojević	29	
METHOD FOR ACQUISITION AND ANALYSIS OF OPERATING PARAMETERS OF A SUPERCAPACITOR ELECTRIC BUS		
Branislav Đorđević, Saša Mitić	30	
AN OVERVIEW OF NATIONAL AND INTERNATIONAL STANDARDS FOR EVENT DATA RECORDERS (EDRs) ON MOTOR VEHICLES		
Aleksandra Vulović, Nenad Filipović	31	
EFFECT OF PATIENT SPECIFIC YOUNG'S MODULUS ON MECHANICAL BEHAVIOUR OF CORTICAL FEMORAL BONE – A FINITE ELEMENT STUDY		
Zoran Brljak, Jelena Ješić, Zlatica Miladinov	32	
DIGITAL AGRICULTURE AS A FACTOR OF ENERGY EFFICIENCY AND ENVIRONMENTAL PROTECTION		
Tatjana Taušanović, Marijana Apić, Nataša Stojić, Mira Pucarević	33	
COMPARISON OF STANDARD, SLIM AND ROLL-YOUR-OWN CIGARETTES BY MEASURING LEVELS OF POLYCYCLIC AROMATIC HYDROCARBONS (PAHs) IN MAINSTREAM CIGARETTE SMOKE WITH GAS CHROMATOGRAPHY–MASS SPECTROMETRY		

**TABLE OF CONTENT****YOUNG RESEARCHERS CONFERENCE 2020**

Katarina Pavlović PREDICTING THE TYPE OF PHYSICAL ACTIVITY FROM TRI-AXIAL SMARTPHONE ACCELEROMETER DATA	34
Nikola Đokić, Borislava Blagojević, Vladislava Mihailović MISSING DATA REPRESENTATION BY PERCEPTION THRESHOLDS IN FLOOD FLOW FREQUENCY ASSESSMENT	35
Nenad Šurjanac, Natalija Momirović, Sanja Jovanović, Branka Spasojević, Ljubinko Rakonjac, Aleksandar Lučić, Marija Milosavljević APPLICATION OF UAS IN LAND COVER DETECTION AND CLASSIFICATION IN RURAL AREAS	36
Aleksandra Arsić, Nenad Zrnić, Vlada Gašić SOME ASPECTS ON THE DESIGN APPROACHES FOR BOLTED MOMENT CONNECTIONS IN FRAMES	37
Lidija Jelić, Nikola Jović, Vladimir Milovanović, Miroslav Živković, Jelena Živković REVIEW, SYSTEMATIZATION AND APPLICATION OF THE STANDARDS FOR ASSESSMENT OF STATIC AND FATIGUE STRENGTH OF METAL CRANE STRUCTURES	38
Nikola Jović, Lidija Jelić, Miroslav Živković, Vladimir Milovanović, Aleksandar Disić USING DIFFERENT TYPES OF FINITE ELEMENTS FOR NUMERICAL SIMULATIONS OF BUFFING IMPACT TESTS OF FREIGHT WAGONS	39
Tamara Matić, Maja Ležaja Zebić, Vesna Miletić, Rada Petrović, Đorđe Janačković, Đorđe Veljović BONDING ABILITY OF MAGNESIUM DOPED HYDROXYAPATITE BASED INSERT WITH CLEARFIL DENTAL ADHESIVE	40
Daniel M. Mijailović, Uroš Č. Lačnjevac, Vladimir D. Jović, Dušica B. Stojanović, Vuk V. Radmilović, Velimir R. Radmilović, Petar S. Uskoković COMPLEX CORE-SHELL STRUCTURED CARBON FIBERS@Co <sub>2</sub> MnO <sub>4</sub> COMPOSITE AS SUPERCAPACITOR ELECTRODE	41
Marija Milivojević, Željko Radovanović, Rada Petrović, Đorđe Janačković DIP-COATING OF THE BIOACTIVE GLASS AND HYDROXYAPATITE ON 3D PRINTED Ti6Al4V SCAFFOLD FOR BONE TISSUE ENGINEERING	42

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## SUSTAINABLE MINING TOWARDS ACCOPLISHING CIRCULAR ECONOMY PRINCIPLES

Nela Petronijević<sup>1</sup>, Vesna Alivojvodić<sup>2</sup>, Miroslav Sokić<sup>1</sup>, Branislav Marković<sup>1</sup>, Srđan Stanković<sup>3</sup>, Dragana Radovanović<sup>4</sup>

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**Summary:** Today human society is already witnessing rapid depletion of non-renewable ore resources. As the distribution of raw material resources globally is very off-balance, and pressure on environment as the consequence of ore exploitation is not negligible, re-utilization and recycling of industrial side-streams gaining on importance. Finding new potentially anthropogenic resources of material (at first place critical raw materials) are inline with sustainable waste management goals, and in correlation with boundaries given by the circular economy principles. Side-streams from mines can become source for recovery of these materials. The aim of this paper was to analyze position of mining waste in correlation with circular economy principles, as well potential for implementation of them within extraction industry in the Republic of Serbia.

**Keywords:** mine waste, raw materials, circular economy





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The background features a vibrant, abstract composition. At the top, there are several overlapping circles in shades of green, yellow, and orange. These circles contain various icons: a dollar sign, a brain, a microscope, a gear, and an upward-pointing arrow. A large, dark blue circle with a white arrow pointing up and to the right is also present. Below these elements, there are silhouettes of human heads in profile, facing each other, set against a light blue background with soft, white clouds. The overall aesthetic is modern and professional, suggesting themes of technology, innovation, and human collaboration.

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