PARALLEL SESSIONS (May 25, 10:30-12:30)

CIVIL ENGINEERING 3 ASARS (Academy of Sciences and Arts of the Republic of Srpska) – great hall Moderator: Igor Jokanović

ULTIMATE STRENGTH OF COMPRESSED SLABS AND BOX GIRDERS, Dragan Milašinović, Dijana Majstorović, Radovan Vukomanović, Radomir Cvijić

SOME NUMERICAL ASPECTS OF A LINEAR STATIC ISOGEOMETRIC ANALYSIS OF AN ARBITRARILY CURVED PLANE BERNOULLI-EULER BEAM, Aleksandar Borković, Gligor Radenković, Snježana Milovanović, Dijana Majstorović

EMPIRICAL DETERMINATION OF THE FUNDAMENTAL PERIOD OF FREE VIBRATION OF RC BUILDINGS, Andrija Radović, Predrag Mitković

EXPERIMENTAL AND NUMERICAL ANALYSIS OF A SIMPLE FRAME STRUCTURAL MODEL WITH TUNED LIQUID DAMPER, Mladen Šiljegović, Marina Latinović, Ognjen Mijatović, Aleksandar Borković, Valentina Golubović-Bugarski

ASSESSMENT OF THE HUMAN EXPOSURE TO VIBRATION AND NOISE IN RESIDENTIAL BUILDINGS, Valentina Golubović-Bugarski, Mladen Todić

STUDY ON SEISMIC REINFORCEMENT MEASURES AND SCHEMES OF IRREGULAR FRAME STRUCTURES, Feng

PAVEMENT STRUCTURES AT THE INTERSECTION AREA, Dragana Zeljić, Igor Jokanovic, Žarko Grujić, Mila Svilar, Boiana Gruiić

ECOLOGICAL ASPECTS OF SNOW AND ICE CONTROL ON ROADS, Mila Svilar, Igor Jokanovic, Dragana Zeljić, Žarko Grujić, Bojana Grujić

GEODESY3 Banski Dvor Cultural Centre – red hall

Moderator: Miro Govedarica

NEW COMPETENCES IN ACADEMIC EDUCATION THROUGH REALISATION OF THE BESTSDI AND EO4GEO PROJECTS, Željko Bačić, Vesna Poslončec-Petrić, Dražen Tutić

INFRASTRUCTURE OF GEOSPATIAL DATA OF THE REPUBLIC OF SRPSKA - ADDRESS REGISTER AND REGISTER OF SPATIAL UNITS, Tatjana Sarajlić, Zoran Milovanović

THE APPLICATION OF THE WEB BASED SYSTEM BY INTEGRATING WEB GIS TOOLS AND THE SDI FOR THE REAL ESTATE MANAGING AND MAPPING, Tatjana Baroš, Tatjana Sarajlić

GEOPORTAL FOR SEARCHING AND VISUALIZATION OF CADASTRAL DATA, Mladen Đurić, Mladen Amović LAND USE / LAND COVER MAPPING FROM SENTINEL 2 DATA USING MACHINE LEARNING ALGORITHMS.), Gordana Jakovljević, Dragoljub Sekulović, Miro Govedarica

DIGITAL MODELING OF EARTH'S SURFACE RELIEF, Dejan Vasić, Slavko Vasiljević, Radenko I. Višnjić APPRAISAL OF RESIDENTIAL PROPERTIES, Dragana Skorup

ARCHITECTURE 3 ASARS (Academy of Sciences and Arts of the Republic of Srpska) – amphitheater Moderator: Nevena Novaković

COOPERATION BETWEEN ARCHITECTS AND STRUCTURAL ENGINEERS IN THE DESIGN OF COMPLEX REINFORCED CONCRETE ROOF STRUCTURES, Nađa Kurtović Folić, Radomir Folić IMPROVING DESIGN OF DAIRY COWS HOUSING IN BOSNIA AND HERZEGOVINA, Tanja Trkulja, Miljan Erbez ART OF JACKSON POLLOCK IN URBAN PLANNING AND DESIGN - NOTION OF "LIFE" IN CITY SPACE, Valentina Milovanović, Dubravko Aleksić

MODERN STRUCTURAL CONCEPTS FOR HIGH-RISE BUILDINGS, Ilda Kovačević, Sanin Džidić THE POSSIBILITY OF REVITALISATION AND PURPOSE ALTERATION OF SHOOLS IN CRNA TRAVA MUNICIPALITY, Ana Momčilović-Petronijević, Mila Cvetković, Aleksandra Ćurčić THE ARCHITECTURE OF SCHOOLS IN BANJA LUKA BUILT IN 1878-1918, Miroslav Malinović



CONTEMPORARY THEORY AND PRACTICE IN CONSTRUCTION XIII SCIENTIFIC CONFERENCE WITH INTERNATIONAL PARTICIPATION Banja Luka, May, 24-25, 2018

САВРЕМЕНА ТЕОРИЈА И ПРАКСА У ГРАДИТЕЉСТВУ XIII НАУЧНИ СКУП СА МЕЂУНАРОДНИМ УЧЕШЋЕМ Бања Лика. 24-2

Бања Лука, 24-25.05. 2018

CONFERENCE PROGRAMME

Day 1 May 24

8:30-9:30 Registration Banski Dvor Cultural Centre - reception hall

9:30-10:00 Opening ceremony Banski Dvor Cultural Centre - concert hall

Address by the organisers and co-organisers and RS Government representatives

10:00-11:15 Plenary speakers Banski Dvor Cultural Centre - concert hall

Moderators: Biljana Antunović, Dragan Milašinović, Brankica Milojević, Miro Govedarica Hugo Hens - ENERGY EFFICIENCY IN RESIDENTIAL BUILDINGS, LESS STRAIGHT FORWARD THEN PRESUMED

Igor Emri - PRESSURE OPTIMISED VISCOELASTIC VIBRATION- AND IMPACT- INSULATION

11:15-11:45 Coffee break Banski Dvor Cultural Centre - reception hall

11:45-13:00 Plenary speakers Banski Dvor Cultural Centre - concert hall

Moderators: Dragan Milašinović, Brankica Milojević, Biljana Antunović, Miro Govedarica Tillmann Klein - AN APPROACH TO CIRCULAR BUILDING RENOVATION USING PRODUCT SERVICE CONCEPTS Karel Janečka - 3D CADASTRE - A MOTIVATION AND RECENT DEVELOPMENTS OF TECHNICAL ASPECTS

13:00-13:30 Sponsor presentations _Banski Dvor Cultural Centre - concert hall

GP Krajina - Katarina Prodanović

Delta Real Estate - Marko Kecman

Knauf insulation - Dario Henezi

13:30-14:30 Lunch break _Banski Dvor Cultural Centre - exhibition hall

14:30-16:30 Parallel sessions

CIVIL ENGINEERING 1 _ASARS (Academy of Sciences and Arts of the Republic of Srpska) – great hall GEODESY 1 Banski Dvor Cultural Centre – red hall

ARCHITECTURE 1 ASARS (Academy of Sciences and Arts of the Republic of Srpska) – amphitheater

16:30-17:00 Coffee break Banski Dvor Cultural Centre - reception hall

17:00-18:30 Parallel sessions

CIVIL ENGINEERING 2 ASARS (Academy of Sciences and Arts of the Republic of Srpska) – great hall GEODESY 2 _Banski Dvor Cultural Centre – red hall

ARCHITECTURE 2 ASARS (Academy of Sciences and Arts of the Republic of Srpska) – amphitheater 20:00-00:00 Formal dinner Hotel Jelena

Day 2 May 25

10:00-10:30 ERASMUS+ project presentations _ Banski Dvor Cultural Centre or ASARS

KLABS - The new study programme of the Architecture and Urban Design master studies (60 ECTS)

- Nevena Novaković

K-FORCE - The new master programme of the Civil Engineering study programme - Disaster Risk Management - Gordana Broćeta

BESTSDI - Modernizing the study programme of Geodesy: Western Balkans Academic Education Evolution and Professional's Sustainable Training for Spatial Data Infrastructures - Mladen Amović

10:30-12:30 Parallel sessions and round table discussion

CIVIL ENGINEERING 3 ASARS (Academy of Sciences and Arts of the Republic of Srpska) – great hall GEODESY 3 Banski Dvor Cultural Centre – red hall

ARCHITECTURE 3 ASARS (Academy of Sciences and Arts of the Republic of Srpska) – amphitheater Round table discussion on the topic - EUROPEAN STANDARDS IN STRUCTURAL ENGINEERING

ASARS (Academy of Sciences and Arts of the Republic of Srpska) – small hall

12:30-13:30 Cocktails with refreshments Banski Dvor Cultural Centre - exhibition hall

PARALLEL SESSIONS (May 24, 14:30-16:30)

 $\textbf{CIVIL ENGINEERING 1}_\textit{ASARS (Academy of Sciences and Arts of the Republic of Srpska)} - \textit{great hall} \\ \textbf{Moderator: Dragica Jevtić}$

PHENOMENA OF INSTABILITY IN NON-CONSERVATIVE DYNAMICAL SYSTEMS, Dragan Milašinović APPLICATION OF THE FEMA310 DOCUMENT FOR SEISMIC EVALUATION OF MASONRY EXISTING BUILDINGS, Marina Latinović, Žarko Lazić, Gordana Broćeta

THE INFLUENCE OF CONCRETE VISCOUS DEFORMATIONS IN THE CALCULATION OF THE HIGH-RISE BUILDINGS BEHAVIOR OVER TIME, Andelko Cumbo

TECHNO-ECONOMIC ANALYSIS OF CASTELLATED AND SOLID "I" STEEL BEAMS IN TERMS OF LOAD CAPACITY AND SERVICEABILITY, Srđan Pavlović, Mladen Slijepčević

COMPARISON OF FIRE RESISTANCE OF REINFORCED CONCRETE SLABS ACCORDING TO EC2 AND BRANZ Tr8, Sanin Džidić

INFLUENCE OF FINE RECYCLED CONCRETE AGGREGATE ON THE PROPERTIES OF ASPHALT MIXTURES Aleksandar Radević, Goran Mladenović, Dragica Jevtić, Dimitrije Zakić, Marina Askrabić

THE INFLUENCE OF COMPONENT MATERIALS TYPES AND APLICATION ON THE CHLORIDE ION CONTENT IN SELF-COMPACTING CONCRETE, Gordana Broćeta, Mirjana Malešev, Vlastimir Radonjanin, Žarko Lazić, Marina Latinović

MODELING THE RHEOLOGICAL PROPERTIES OF FRESH CONCRETE USING A 3D FINITE ELEMENT MODEL, Dragan Nikolić, Goran Ćirović, Snežana Mitrović

GEODESY 1_Banski Dvor Cultural Centre – red hall

Moderator: Dragan Macanović

ANALYSIS OF POSITIONING RESULTS OBTAINED BY A SINGLE BASE RTK WITH AUTONOMOUS BASE START AND TILT OPTION, Danijel Šugar, Luka Zalović, Željko Bačić

3D MODELS OF OBJECTS IN PROCESS OF RECONSTRUCTION, Jovana Radović, Dragana Popović, Dušan Jovanović, Vladimir Pajić

USE OF OPEN DATA AND APPLICATIONS IN THE EDUCATION PROCESS, Dušan Jovanović, Bojan Popović, Miro Govedarica

THE ROLE OF STAKEHOLDERS IN MODERNIZING EDUCATION CURRICULA IN THE FIELD OF GEODESY, Branko Božić, Željko Cvijetinović, Nenad Brodić

COMPARISON OF PERFORMANCE OF ENGINEERING STUDENTS IN DESCRIPTIVE GEOMETRY IN RELATION TO THEIR STUDY PROGRAM, Sandra Kosić-Jeremić, Maja Ilić

ARCHITECTURE 1_ASARS (Academy of Sciences and Arts of the Republic of Srpska) – amphitheater Moderator: Malina Čvoro

SPACE, CONSTRUCTION AND PLANNING. AN OVERVIEW OF THE CURRENT URBAN CONDITION OF SURROUNDINGS IN POST-SOCIALIST CITIES IN THE SEE REGION, Dobrivoje Tošković, Igor Kuvač THE ROLE OF INDUSTRIAL HERITAGE IN PRESERVING THE IDENTITY OF A CITY. CASE STUDY SMEDEREVO, Aleksandra Đukić, Ana Špirić, Branislav Antonić, Milica Ristović

BUILDING HERITAGE AS AN IMPORTANT FACTOR OF PLACE BRANDING, Jasna Guzijan, Siniša Cvijić INTEGRATED URBAN PLANNING IN THEORY AND PRACTICE, Brankica Milojević

URBAN FACILITIES FOR A THOUSAND THINGS. COLLECTIVE FORM PROJECTS IN THE SOUTH OF GRANADA, Juan Luis Rivas Navarro, Belén Bravo Rodríguez

INTEGRATED URBAN PLANNING OF BANJA LUKA - POSSIBILITIES AND CHALLENGES OF NEW URBAN PLAN, Brankica Milojević, Igor Kuvač

THE STUDY OF PARTICULARITY OF BANJA LUKA WATERFRONT IN VIEW OF DEFINING THE COURSE OF ITS FUTURE DEVELOPMENT, Malina Čvoro

DESIGN PARTICIPATION: FROM RHETORIC TO PRACTICE (AND BACK?), Radojka Jandrić, Dragana Konstantinović

PARALLEL SESSIONS (May 24, 17:00-18:30)

CIVIL ENGINEERING 2 _ ASARS (Academy of Sciences and Arts of the Republic of Srpska) – great hall Moderator: Gordana Broćeta

CONSOLIDATION WITH VERTICAL DRAINS, Dragan Lukić, Elefterija Zlatanović, Aleksandar Prokić RELIABILITY OF THE RESULTS OF THE CALCULATIONS IN THE FUNCTION OF THE SELECTED SOIL MODEL, Mato Uljarević, Ljubomir Palikuća, Dajana Biorac

WATER PERMEABILITY OF ROCK MASS, Marin Zelenika, Mato Uljarević, Ljubomir Palikuća FLOOD FREQUENCY ESTIMATION UNCERTAINTY IN PRACTICE: CASE STUDY OF SREMSKA MITROVICA, SAVA RIVER, Nina Kondić, Žana Topalović

SYSTEM IRRIGATION OF RASPBERRY ON THE TERRITORY OF BRATUNAC MUNICIPALITY, Risto Stjepanović ANALYSIS AND LOCATION'S SELECTION FOR MINI HIDRO POWER PLANT'S CONSTRUCTION ON RIVER VRBAS, Slađana Janković, Ena Hadžić, Goran Janjić

GEODESY2 Banski Dvor Cultural Centre – red hall

Moderator: Miodrag Regodić

GEODETIC DETERMINATION OF VERTICAL DISPLACEMENT OF BUILDINGS DURING CONSTRUCTION, Slavko Vasiljević, Zagorka Gospavić, Mladen Amović

3D LASER SCANNING AND IMAGING LASER SCANNING IN STORAGE TANKS METROLOGY CONTROL PROCESS, Ankica Milinković, Sanja Tucikesić, Kornelija Ristić

DEVELOPMENT OF SOFTWARE FOR GEODETIC NETWORK ADJUSTMENT IN OPEN-SOURCE ENVIRONMENT, Zoran Kokeza, Miroslav Vujasinović

GEODETIC MONITORING OF STABILITY OF THE CONSTRUCTION PIT DIAPHRAGM OF THE OBJECT, Kornelija Ristić, Sanja Jaćimović, Branko Božić, Nenad Gligorić, Dejan Ćetojević

PHOTOGRAMMETRIC SURVEY OF OPEN PIT MINE, Miodrag Regodić, Dragan Macanović, Mladen Đurić, Nemanja Abadžić

ON THE POSSIBILITY OF GEOMETRIC CHANGES OF LARGE DAMS DETERMINATION BY GEODETIC METHODS, Žarko Nestorović, Milan Trifković, Tihomir Milutinović, Goran Pejičić

ARCHITECTURE 2_ASARS (Academy of Sciences and Arts of the Republic of Srpska) – amphitheater Moderator: Darija Gajić

COMPARISON OF THREE CALCULATION METHODS OF ENERGY PERFORMANCE CERTIFICATES IN SLOVENIA, Wadie Kidess, Marko Pinterić

ENERGY PERFORMANCE OF THE EDUCATIONAL BUILDING ENVELOPE ACCORDING TO A PASSIVE AND LOW-ENERGY STANDARD, Slobodan Peulić, Aleksandar Janković, Darija Gajić, Saša Čvoro, Biljana Antunović ANALYSIS OF A LINEAR THERMAL TRANSMITTANCE OF A SIMPLE BALCONY THERMAL BRIDGE, Anita Prapotnik Brdnik, Marko Pinterić, Martin Horvat

METHODOLOGY DEVELOPMENT FOR CREATION OF SCHOOL BUILDINGS TYPOLOGY IN SERBIA, Milica Jovanović Popović, Dušan Ignjatović, Bojana Stanković

ARCHITECTURAL MEASURES FOR FACILITATION OF INDOOR AIR QUALITY IN BUILDINGS, Saša Čvoro EFFICIENCY ANALYSIS OF THE REFRIGERATION SYSTEM IN FRATELLO TRADE AD BANJA LUKA, Gordana Tica, Petar Gvero, Danijela Kardaš

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.