

## 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 ISOGOMETRIC 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 Ziyu  
PAVEMENT STRUCTURES AT THE INTERSECTION AREA, Dragana Zeljić, Igor Jokanovic, Žarko Grujić, Mila Svilar, Bojana Grujić  
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 SCHOOLS IN CRNA TRAVA MUNICIPALITY, Ana Momčilović-Petronijević, Mila Cvetković, Aleksandra Čurčić  
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 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)

**CIVIL ENGINEERING 1** \_ASARS (Academy of Sciences and Arts of the Republic of Srpska) – great hall

Moderator: Dragica Jevtić

PHENOMENA OF INSTABILITY IN NON-CONSERVATIVE DYNAMICAL SYSTEMS, Dragan Milašinić  
APPLICATION OF THE FEMA310 DOCUMENT FOR SEISMIC EVALUATION OF MASONRY EXISTING BUILDINGS, Marina Latinović, Žarko Lazić, Gordana Bročeta  
THE INFLUENCE OF CONCRETE VISCOUS DEFORMATIONS IN THE CALCULATION OF THE HIGH-RISE BUILDINGS BEHAVIOR OVER TIME, Anđelko Čumbo  
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 APPLICATION ON THE CHLORIDE ION CONTENT IN SELF-COMPACTING CONCRETE, Gordana Bročeta, 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 Gužijan, 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 Bročeta

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 HYDRO POWER PLANT'S CONSTRUCTION ON RIVER VRBAS, Slađana Janković, Ena Hadžić, Goran Janjić

**GEODESY 2** \_Banski Dvor Cultural Centre – red hall

Moderator: Miodrag Regodić

GEODETTIC 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 GEODETTIC NETWORK ADJUSTMENT IN OPEN-SOURCE ENVIRONMENT, Zoran Kokeza, Miroslav Vujasinović  
GEODETTIC MONITORING OF STABILITY OF THE CONSTRUCTION PIT DIAPHRAGM OF THE OBJECT, Kornelija Ristić, Sanja Jaćimović, Branko Božić, Nenad Gligorić, Dejan Četojević  
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 GEODETTIC 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