



UNIVERSITY OF NIŠ | FACULTY OF CIVIL ENGINEERING AND ARCHITECTURE
INTERNATIONAL SCIENTIFIC CONFERENCE | NIŠ, SERBIA

GREEN BUILDING | 2026

INNOVATIVE SOLUTIONS FOR A GREENER BUILT ENVIRONMENT

Conference Program

DAY 1 THURSDAY | 15 October 2026

9:00 – 10:00 Registration of participant Faculty Lobby

10:00 – 10:30 Conference opening and welcome address Amphitheatre A

10:30 – 12:00 INVITED LECTURES Amphitheatre A

Jasna Plavšić
RESILIENT WATERSHEDS FOR SUSTAINABLE SOCIETIES

Petar Vranić
WHO HAS ACCESS TO GREEN RELIEF? A COST-DISTANCE EQUITY INDEX FOR GREEN INFRASTRUCTURE PLANNING IN NIŠ

Domen Zupančič
A BACKCASTING APPROACH TO BUILDING RENOVATION OBLIGATIONS IN SLOVENIA AND SERBIA

12:00 – 12:30 Coffe break Faculty Lobby

12:30 – 14:00 SESSION 1 | Topic 01 Conference Room 1

Session chairs: Jelena Živković, Milena Dinić Branković

Nataša Petković, Vladana Petrović, Hristina Krstić
USER-DRIVEN URBAN GREENERY: INTEGRATED FAÇADE PLANTERS AS A BOTTOM-UP NATURE-BASED SOLUTION, PERSPECTIVE OF NIŠ

Hristina Krstić, Branislava Stojković, Nataša Petković
INTEGRATION OF GREENERY IN RESIDENTIAL ARCHITECTURE: A COMPARATIVE CASE STUDY OF SELECTED HOUSES

Ljiljana Vasilevska, Magdalena Slavković, Ivana Bogdanović Protić
IMPLEMENTATION PATHWAYS OF NATURE-BASED SOLUTIONS IN THE URBAN REGENERATION OF MULTIFAMILY HOUSING:
A COMPARATIVE STUDY OF TURIN AND ZAGREB

Jelena Živković, Tamara Mladenović
MULTIFUNCTIONAL SOLUTIONS FOR RECLAIMING PUBLIC OPEN SPACES IN MULTI-FAMILY HOUSING: GELLERUP NATURE PARK

Ivana Bajšanski
PARAMETRIC EVALUATION OF TREE LAYOUT FOR GROUND-LEVEL INSOLATION MITIGATION IN AN URBAN COURTYARD

Jelena Živković, Predrag Jovanović, Ivana Bogdanović Protić, Magdalena Slavković
CITIZEN ENGAGEMENT IN RECLAIMING PUBLIC OPEN SPACES IN MULTIFAMILY HOUSING: CASE OF BLOCK 37, NEW BELGRADE

Petar Vranić, Ivana Petkovski
A SCALABLE GIS-BASED APPROACH TO MAPPING ECOSYSTEM SERVICE CAPACITY USING CORINE LAND COVER DATA AND BURKHARD MATRIX: APPLICATION ON THE CITY OF NIŠ

Ljiljana Vasilevska, Petar Vranić, Tigran Haas
OPTIMIZING URBAN NATURE-BASED SOLUTIONS THROUGH ARTIFICIAL INTELLIGENCE: PROSPECTS FOR THE CITY OF NIŠ

12:30 – 14:00 SESSION 2 | Topic 05 | 06 | 07 | Conference Room 2

Session chairs: Žana Topalović, Milan Gocić

Jasna Plavšić, Ranko Pudar, Nikola Rosić, Andrijana Todorović, Filip Stanić, Laddaporn Ruangpan, Adam Mubeen, Jelena Kovačević Majkić, Vujica Šarenac
PERFORMANCE AND ECONOMIC VALUE OF NATURE-BASED SOLUTIONS FOR FLOOD RISK REDUCTION IN THE TAMNAVA RIVER BASIN

Nina Vidojković, Ilija Ilić, Aleksandra Ilić
NEAR-NATURAL RIVER ENGINEERING IN URBAN WATERCOURSES

Borislava Blagojević, Milan Gocić, Elefterija Zlatanović
GREEN MEASURES FOR CLIMATE ADAPTATION OF BUILDINGS AND INFRASTRUCTURE DURING DROUGHT PERIODS

Sonja Novak, Borislava Blagojević, Maja Nikolić
LOCAL AND NATIONAL RESPONSIBILITIES FOR CLIMATE CHANGE ADAPTATION MEASURES IN SERBIA'S PUBLIC HEALTH SECTOR

Maja Brborić, Branka Nakomčić Smaragdakis, Miljan Šunjević, Vladimir Rajs, Sonja Dmitrašinović
ADVANCING CLIMATE-ADAPTIVE URBAN INTELLIGENCE: MACHINE LEARNING PREDICTION OF PM2.5 DYNAMICS ACROSS THE BELGRADE METROPOLITAN AREA

Uroš Antić, Ana Stanojević Brankov, Isidora Đorđević, Ljiljana Jevremović, Aleksandar Milojković, Danijela Milanović
MITIGATING URBAN HEAT ISLANDS IN INHERITED INDUSTRIAL SPACES – CASE STUDY OF NIŠ, SERBIA

Sajad Akbar
THE ROLE OF INTEGRATED EXTERNAL DRAWINGS IN SUSTAINABLE GREEN CIVIL ENGINEERING INFRASTRUCTURE

14:00 – 15:00 Lunch break

15:00 – 16:30 SESSION 3 | Topic 01 | 04 |

Conference Room 1

Session chairs: Orlin Davchev, Ivana Bogdanović Protić

Ivana Bajšanski
PERFORMANCE-BASED DESIGN IN ARCHITECTURAL EDUCATION: CLIMATE-RESPONSIVE URBAN DESIGN THROUGH ENVIRONMENTAL SIMULATION

Tamara Mladenović
DESIGN FOR RESTORATION: COMPARATIVE ANALYSIS OF TWO OPEN PUBLIC SPACES IN BELGRADE

Vladica Nikolovska, Vaska Sandeva, Katerina Despot
ANALYSIS OF INCLUSIVENESS AND ACCESSIBILITY OF SCHOOLYARDS: A COMPARATIVE STUDY OF THREE SCHOOLS IN THE CITY OF STIP

Malina Čvoro, Andrej Simičević
ADAPTIVE REUSE OF ABANDONED BUILDINGS FOR RURAL REVITALIZATION: PRIJEDOR CASE STUDY

Petra Živadinović, Ljiljana Jevremović
WORKPLACE QUALITY IN INDUSTRIAL ARCHITECTURE: PRODUCTION VS. ADMINISTRATIVE WORKSPACES

Isidora Mitrović, Ana Momčilović Petronijević, Sonja Krasić, Jovana Tomić
ADAPTIVE REUSE OF TRADITIONAL ARCHITECTURE: A CASE STUDY OF AN OLD HOUSE IN THE RURAL SETTLEMENT OF MUŽINAC

15:00 – 16:30 SESSION 4 | Topic 02 | 03 |

Conference Room 2

Session chairs: Saša Čvoro, Miomir Vasov

Ana Mitrović
IMPROVING ENERGY EFFICIENCY AND REDUCING CO₂ EMISSIONS AT THE NIŠKA BANJA SITE

Lachezar Hrishev, Georgi Ivanov, Andrey Telbishi
TYPICAL THERMAL BRIDGES IN LARGE-PANEL PREFABRICATED RESIDENTIAL BUILDINGS OF THE OS-68-GL SYSTEM

Vesna Bulatović, Anka Starčev-Ćurčin
CONTRIBUTION OF BUILDING MATERIALS TO LEED, BREEAM, AND DGNB CERTIFICATION

Aleksandar Đorđević, Milan Gocić, Vuk Milošević, Milica Ćirić
PUBLIC-PRIVATE PARTNERSHIPS FOR GREEN INFRASTRUCTURE: THE ROLE OF RENEWABLE ENERGY

Maja Nikolić, Aleksandra Stanković, Sonja Novak, Nadežda Popović
IMPACT OF CLIMATE CHANGE ON INDOOR AIR QUALITY AT SCHOOL

Todorka Samardžioska, Milica Jovanoska Mitrevska, Meri Cvetkovska
RUBBERIZED CONCRETE AS A SUSTAINABLE AND GREEN BUILDING MATERIAL

Gordana Topličić Ćurčić, Nenad Ristić, Dušan Grdić, Zoran Grdić
CO₂ CARBONATION OF FLY ASH AND THE FORMATION OF GRANULATED CARBONATED PRODUCTS FOR CONCRETE APPLICATIONS

Lena Nurein Ahmed, Iva Nikolić, Kristina Novković, Gordana Topličić Ćurčić
CIGARETTE-BUTT-DERIVED FIRED CLAY BRICKS: PERFORMANCE, ENVIRONMENTAL SAFETY AND ARCHITECTURAL APPLICATIONS

16:30–17:30 POSTER SESSION

Faculty Lobby

Session chairs: Malina Čvoro, Snežana Đorić-Veljković

Vaska Sandeva, Katerina Despot
LEGAL RECOGNITION AND INSTITUTIONAL INTEGRATION OF LANDSCAPE ARCHITECTS IN NORTH MACEDONIA

Natalija Ilić, Ana Momčilović Petronijević, Anđela Stevčić

NATURE-BASED SOLUTIONS AS A TOOL FOR THE REVITALIZATION OF ARCHITECTURAL HERITAGE BUILDINGS

Katerina Despot, Vaska Sandeva, Vladica Nikolovska

SUSTAINABLE URBAN DESIGN OF ISAR HILL (STIP, NORTH MACEDONIA): INTEGRATED APPROACH TO GIS AND LANDSCAPE URBANISM

Ivana Bogdanović Protić, Ljiljana Vasilevska, Jelena Živković, Magdalena Slavković

MULTIPLE BENEFITS OF COMMUNITY GARDENS IN MULTIFAMILY HOUSING AREAS: RODA-RODA-GASSE, VIENNA

Martina Stoyanova, Orlin Davchev

DIGITAL TRANSFORMATION OF THE ARCHITECTURAL SECTOR IN SOUTHEAST EUROPE: BENEFITS AND CHALLENGES

Mina Kostić, Jasmina Radosavljević, Ana Vukadinović

APPLICATION OF PHASE CHANGE MATERIALS IN PASSIVE SOLAR ARCHITECTURE

Aleksandra Cilić, Maša Randelović, Jelena Savić

OLD SHIPPING CONTAINERS AS A RESOURCE FOR SUSTAINABLE AND CIRCULAR CONSTRUCTION OF MULTI-STOREY BUILDINGS

Yang Haining

HUMANISTIC SCALE OF GREEN URBAN DESIGN

Diana Ivanova

STATICITY OR FLEXIBILITY OF THE GENERAL SPATIAL DEVELOPMENT PLAN: EXAMPLES FROM BULGARIA

Branislava Stoilković, Nataša Petković, Vladana Petrović

ENCLOSURE OF PRIVATE OPEN AREAS OF GROUND-FLOOR APARTMENTS IN MULTI-FAMILY RESIDENTIAL BUILDINGS

Anđela Stevčić, Ana Momčilović Petronijević, Natalija Ilić

THE IMPACT OF INDUSTRIAL HERITAGE PROTECTION ON NATURE-BASED SOLUTIONS IMPLEMENTATION

Milena Dinić Branković, Jelena Đekić, Milica Ljubenović, Milica Igić

NATURE-BASED SOLUTIONS IN LOCAL STRATEGIC AND PLANNING FRAMEWORKS: THE PERSPECTIVE OF THE CITY OF NIŠ, SERBIA

Vladana Petrović, Hristina Krstić, Branislava Stoilković

BUILDING TRANSFORMATION AS A RESPONSE TO SUSTAINABILITY CHALLENGES AND EMERGING HOUSING MODELS

Sérgio Lousada

HYDRAULIC RESILIENCE AS A GREEN BUILDING STRATEGY IN INSULAR URBAN TERRITORIES: MACHICO AND RIBEIRA BRAVA, MADEIRA ISLAND

Olivera Nikolić, Jasmina Tamburić, Vladan Nikolić, Sanja Spasić Đorđević

A COMPARATIVE CODING FRAMEWORK FOR ADAPTIVE REUSE OF HISTORIC HOSPITAL BUILDINGS AND COMPLEXES

Marija Stojković

HYBRIDIZATION OF PUBLIC SPACES AS A TOOL FOR ADAPTING CITIES TO CLIMATE CHANGE

Mila Mitrović, Boris Rančev, Danijela Milovanović Rodić

INTERPRETING VERNACULAR ARCHITECTURE THROUGH CONTEMPORARY TIMBER STRUCTURES: THE CASE OF THE NOVO SEOSKO ZBORIŠTE PAVILION IN POKREVENIK

Srđan Radanović, Darija Gajić, Milovan Kotur

SUSTAINABLE BUILDING ENVELOPE RENOVATION: INTEGRATION OF APV FACADE AND TIMBER ENERGY SYSTEMS (TES)

Viktorija Mangaroska

CIRCULAR ARCHITECTURAL INTERIOR SYSTEMS TRANSFORMATION: MODULARITY, DESIGN FOR DISASSEMBLY AND RECYCLABLE MATERIALS IN THE BUILT ENVIRONMENT

Jelena Đekić, Milica Ljubenović, Milena Dinić Branković, Milica Igić Blagojević

NEIGHBOURHOOD IMPROVEMENT DISTRICTS AS A GOVERNANCE MODEL FOR PUBLIC OPEN SPACES IN LARGE HOUSING ESTATES: LESSONS FROM HAMBURG AND OPPORTUNITIES FOR SERBIA

Žana Topalović

PREDICTION WITHOUT PRECISION - SENSITIVITY AND UNCERTAINTY PRACTICES IN BGI HYDROLOGICAL MODELING

Milica Živković, Boris Rančev, Slaviša Kondić, Katarina Medar, Nemanja Randelović

ADAPTIVE SPATIAL POTENTIAL OF STARA PLANINA VERNACULAR HOUSING: PRINCIPLES FOR SUSTAINABLE RURAL REVITALIZATION

Mladen Milanović, Slaviša Trajković, Dragan Milićević, Milica Marković

URBAN LANDSCAPE EVAPOTRANSPIRATION IN THE CITY OF NIŠ

Jelena Savić, Aleksandra Cilić, Danijela Milanović, Danijela Đurić Mijović

RETROFITTING EXISTING MASONRY BUILDINGS TO PASSIVE HOUSE STANDARDS: CHALLENGES AND TECHNICAL SOLUTIONS

Milica Marković, Jelena Marković Branković, Mladen Milanović

RESERVOIR SEDIMENTATION AS A GREEN-DAM PERFORMANCE INDICATOR: BOVAN CASE STUDY

Emina Hadžić, Ajla Mulaomerović Šeta, Nerma Lazović, Hata Milišić, Borislava Blagojević

TOWARDS A SMART CITY: A FRAMEWORK FOR SMART FLOOD MANAGEMENT IN SARAJEVO

Snežana Đorić-Veljkić, Jelena Stevanović, Dragan Kostić, Miomir Vasov, Milan Gocić, Vuk Milošević

AN APPROACH TO SMART DAYLIGHT CONTROL IN MEMBRANE-COVERED SPORTS FACILITIES

Ivan Nešović, Svetlana Nešović, Kristina Filipović, Miloš Milić, Dragana Kerkez

LIFE CYCLE ASSESSMENT OF CONSTRUCTION MATERIALS: A REVIEW OF ENVIRONMENTAL PERFORMANCE AND FUTURE DIRECTIONS

Dragana Kerkez, Svetlana Nešović, Ivan Nešović, Jovana Krstić

APPLICATION OF DIGITAL TECHNOLOGIES IN THE DEVELOPMENT OF GREEN BUILDINGS: EXPERIENCES FROM SOUTH KOREA

Ivanka Marinova

PASSIVE CLIMATE-ADAPTIVE PRINCIPLES FROM TRADITIONAL ARCHITECTURE FOR SUSTAINABLE DESIGN

Gordana Topličić Ćurčić, Nenad Ristić, Dušan Grdić, Zoran Grdić

INNOVATIVE NANOMATERIALS AND BUILDING ENERGY EFFICIENCY

19:00 Conference dinner

DAY 2 FRIDAY | 16 October 2026

10:00 – 12:00 SESSION 5 | PHD Student presentations

Conference Room 1

Session Chairs: Darija Gajić, Milica Ljubenić, Danijela Đurić Mijović

Svetlana Momčilović

TEMPORAL LANDSCAPE OBSERVATION WITHIN RESEARCH-BY-DESIGN

Maša Randelović, Natalija Ilić

SOCIAL BENEFITS OF URBAN AGRICULTURE IN PUBLIC OPEN SPACES: EXPERIENCES FROM GERMANY

Marko Jeremić, Jana Lambić

APPLICATION OF ATRIUMS AS BIOPHILIC AND BIOCLIMATIC ELEMENTS IN THE DESIGN OF CONTEMPORARY PUBLIC BUILDINGS

Marislav Stanojković

ANALYSIS OF INSULATION AND ORIENTATION IMPACT ON ENERGY CONSUMPTION IN DETACHED HOUSES

Jana Lambić, Marko Jeremić, Gordana Kozić

GREEN ROOFS AND GREEN FACADES AS COMPLEMENTARY NATURE-BASED SOLUTIONS FOR URBAN HEAT ISLAND MITIGATION

Tijana Živković

ENERGY PERFORMANCE ANALYSIS OF A BUILDING USING OPENSTUDIO AND ENERGYPLUS

Aleksandra Tomić

PERFORMANCE-BASED DESIGN OF MODULAR SHADING CONFIGURATIONS FOR OUTDOOR THERMAL COMFORT

Marko Jeremić

PRINCIPLES OF BIOCLIMATIC ARCHITECTURE APPLIED TO A FAMILY RESIDENTIAL BUILDING PROJECT ON A SLOPE – A CASE STUDY OF THE LOCATION OF KRAŠIĆI, MONTENEGRO

Ilija Ilić, Rastislav Trajković, Nikola Đokić

TECHNICAL CRITERIA FOR LOW IMPACT DEVELOPMENT RETROFIT OF SPORTS GROUNDS IN THE CITY MUNICIPALITY OF MEDIJANA, NIŠ

Nikola Đokić

MAPPING HISTORICAL CHANGES IN CURVE NUMBER VALUES IN THE TOPLICA BASIN USING SCS-CN BUILDER

12:00 – 12:15 Break

12:15 – 13:00 Green Agenda Dialogue Session

Conference Room 1

13:00 – 13:15 Conference closing ceremony

Conference Room 1

13:30 City tour