

THE INTERNATIONAL CONFERENCE  
SYNERGY OF ARCHITECTURE & CIVIL ENGINEERING  
SINARG 2023

# AGENDA



International Conference  
**Synergy of  
Architecture &  
Civil Engineering**

Niš (SERBIA) - Science & Technology Park Niš - September 14-15, 2023



SCIENCE  
TECHNOLOGY  
PARK  
NIS

**LEGEND OF THE LOCATIONS:**

- UNIVERSITY OF NIŠ, UNIVERZITETSKI TRG 2, NIŠ, SERBIA - MULTIMEDIAL HALL (NO. 8) – [UNI]
- FACULTY OF CIVIL ENGINEERING AND ARCHITECTURE, ALEKSANDRA MEDVEDEVA 14, NIŠ, SERBIA – CEREMONIAL HALL – [GAF]
- FACULTY OF CIVIL ENGINEERING AND ARCHITECTURE, ALEKSANDRA MEDVEDEVA 14, NIŠ, SERBIA – CLASSROOM 205 – [205]
- FACULTY OF CIVIL ENGINEERING AND ARCHITECTURE, ALEKSANDRA MEDVEDEVA 14, NIŠ, SERBIA – LABORATORY OF INFORMATICS – [LAB]
- SCIENCE TECHNOLOGY PARK NIS, ALEKSANDRA MEDVEDEVA 2A, NIŠ, SERBIA - CONFERENCE CENTER – [NTP]

THE ORGANISATION OF THE INTERNATIONAL CONFERENCE SYNERGY OF ARCHITECTURE AND CIVIL ENGINEERING - SINARG 2023 HAS BEEN SUPPORTED BY THE MINISTRY OF SCIENCE, TECHNOLOGICAL DEVELOPMENT AND INNOVATION, REPUBLIC OF SERBIA



Ministry of Science, Technological  
Development and Innovation  
of the Republic of Serbia

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## SINARG 2023 – AGENDA

SCHEDULE	WEDNESDAY 13 <sup>TH</sup> SEPTEMBER	LOCATION
18:00 – 20:00	LITERARY EVENING - ZORAN PREDIN	UNI
SCHEDULE	THURSDAY 14 <sup>TH</sup> SEPTEMBER	LOCATION
09:00 – 10:00	REGISTRATION OF CONFERENCE PARTICIPANTS	NTP
10:00 – 10:15	<p style="text-align: center;"><b>OPENING CEREMONY</b></p> <p><b>Professor Slaviša Trajković</b>, PhD, Dean, Faculty of Civil Engineering and Architecture, University of Niš, Serbia  <b>Associate Professor Vuk Milošević</b>, PhD, Faculty of Civil Engineering and Architecture, University of Niš, Serbia  <b>Milan Randelović</b>, PhD, CEO, Science Technology Park Niš, Serbia  <b>Academician Dušan Teodorović</b>, PhD, Serbian Academy of Sciences and Arts, Belgrade, Serbia</p>	NTP
10:15 – 11:15	<p style="text-align: center;"><b>INVITED LECTURES</b></p> <p>10:15 – 10:45 <b>Academician Dušan Teodorović</b>, PhD, Serbian Academy of Sciences and Arts, Belgrade, Serbia  URBAN TRAFFIC CONGESTION: CAUSES AND POSSIBLE SOLUTIONS</p> <p>10:45 – 11:15 <b>Senior Lecturer Milena Metalkova-Markova</b>, PhD, University of Portsmouth, Portsmouth, United Kingdom  THE WAY OF BEAUTY- ARCHITECTURE AS A QUASI-OBJECT BETWEEN CONSUMPTION AND SUSTAINABILITY</p>	NTP
11:15 – 12:00	<p style="text-align: center;"><b>SPONSOR PRESENTATIONS</b></p> <p><b>Platinum Plus Sponsor</b> / Put Inženjering Niš /  <b>Platinum Sponsors</b> / Građevinska direkcija Srbije Beograd /  / Project Biro UTIBER Novi Sad /  <b>Golden Sponsors</b> / Kapaprojekt Niš /  / Inženjerska komora Srbije /</p>	NTP
12:00 – 12:15	REFRESHMENT BREAK	NTP
12:15 – 13:45	<p style="text-align: center;"><b>INVITED LECTURES</b></p> <p>12:15 – 12:45 <b>Professor Hartmut Pasternak</b>, PhD, Brandenburg University of Technology, Cottbus, Germany  APPLICATION OF ADHESIVELY BONDED CFRP FOR REINFORCEMENT AND  REHABILITATION OF FATIGUE DAMAGED STEEL STRUCTURE - ONLY A NICE IDEA?</p> <p>12:45 – 13:15 <b>Professor Beatrice-Gabriela Jöger</b>, PhD, Ion Mincu University of Architecture and Urbanism, Bucharest, Romania  ARCHITECTURE AND TEXTILES - A MILLENNIAL STORY</p> <p>13:15 – 13:45 <b>Associate Professor Michael Tritthart</b>, PhD, University of Natural Resources and Life Sciences, Vienna, Austria  INTEGRATED RIVER RESTORATION DESIGN BASED ON HYDRODYNAMIC AND MORPHODYNAMIC CHARACTERISTICS</p>	NTP
13:45 – 14:15	MINI CONCERT - ZORAN PREDIN	NTP
14:15 – 15:00	<p style="text-align: center;"><b>SPONSOR PRESENTATIONS</b></p> <p><b>Silver Sponsors</b> / Arhibet Niš /  / Apokrifi Niš /  / Tončev Gradnja Surdulica /  / GEBERIT Beograd /  / Moravacem D.O.O. Popovac /</p>	NTP
15:00 – 16:00	LUNCH BREAK	NTP

## SYNERGY OF ARCHITECTURE AND CIVIL ENGINEERING - SINARG 2023

SCHEDULE	THURSDAY 14 <sup>TH</sup> SEPTEMBER	LOCATION
<u>16:00 – 19:30</u>	<u>CONCURRENT SESSIONS</u>	<u>LAB / NTP / GAF</u>
<b>16:00 – 17:00</b>	<b>SPECIAL SESSION "WEF NEXUS CURRENT STATE AND FUTURE PERSPECTIVES" [COST ACTION CA20138]</b>	<b>LAB</b>
	<b>CHAIRS: MILAN GOCIĆ, GIANNIS ADAMOS</b>	
16:00 – 16:20	RE-SHAPING WATER-ENERGY-FOOD NEXUS APPROACHES FOR A LOW-CARBON ECONOMY IN EUROPE AND BEYOND: THE NEXUSNET COST ACTION <i>Giannis Adamos</i>	
16:20 – 16:40	THE IMPORTANCE OF THE NEXUS GOVERNANCE FOR ACHIEVING SDGS <i>Tamara Rađenović, Dejan Vasović, Žarko Vranjanac, Snežana Živković, Slobodan Milutinović</i>	
16:40 – 17:00	DEVELOPING THE DATABASE OF WEFE NEXUS PROJECTS AND CASE STUDIES <i>Žarko Vranjanac, Stefania Munaretto, Alexandra Spyropoulou, Tamara Radenović, Dejan Vasović, Snežana Živković</i>	
<b>16:00 – 18:00</b>	<b>CONCURRENT SESSION - ARCHITECTURE</b>	<b>NTP</b>
	<b>CHAIRS: MILENA DINIĆ BRANKOVIĆ, VIKTORIJA MANGAROSKI, EMINA HADŽIĆ</b>	
16:00 – 16:10	THERMAL VISION BASED EVALUATION OF TRADITIONAL ARCHITECTURE BUILDING'S ENERGY EFFICIENCY IN THE STARA PLANINA REGION <i>Jelena Stevanović, Ana Stanojević, Ljiljana Jevremović, Miomir Vasov, Branko Turnšek, Dragan Kostić</i>	
16:10 – 16:20	ANALYSIS OF THE CONCEPT OF BUILDING INTEGRATED PHOTOVOLTAICS WITH INTEGRATION TO THE ARCHITECTURAL DESIGN <i>Viktorija Mangaroska, Kosta Mangaroski</i>	
16:20 – 16:30	REUSE AND ENVIRONMENTAL IMPACTS OF TREATED DOMESTIC WASTEWATER <i>Muhammed Kamil Oden, Bilgehan Yabgu Horasan, Cemalettin Saricoban, Ali Ozdoner</i>	
16:30 – 16:40	BIOPHILIC DESIGN PRINCIPLES IN WORKPLACE <i>Stela Skrizhovska-Koleva</i>	
16:40 – 16:50	EVALUATING URBAN VOIDS IN URBAN VILLAGES: A STUDY OF URBAN VOIDS IN HUMAYUNPUR VILLAGE <i>Anupma Goel</i>	
<b>16:50 – 17:00</b>	<b>Discussion</b>	
17:00 – 17:10	NATURAL AND TECHNOLOGICAL HAZARDS – LIMITING FACTORS IN URBAN AND SPATIAL PLANNING <i>Milorad Jovanovski, Igor Peshevski, Lidija Trpenovska, Andrijana Andreeva, Julijana Stavrevski</i>	
17:10 – 17:20	PERSPECTIVES FOR THE RECONSTRUCTION OF THE SITE AND THE UNDERGROUNDS OF THE DIMITROV MAUSOLEUM <i>Alexandra Ivanova</i>	
17:20 – 17:30	IMPORTANCE OF INNOVATION COMPETENCE-BASED CURRICULA IN CLIMATE-SMART URBAN DEVELOPMENT BASED ON GREEN AND ENERGY EFFICIENCY FOR THE WESTERN BALKAN REGION <i>Emina Hadžić, Milan Gocić, Marja Jevrić</i>	
17:30 – 17:40	POSSIBILITIES OF ABSENTEE LEARNING IN ARCHITECTURAL DESIGN <i>Nikolay Istatkov</i>	
17:40 – 17:50	ACTIVE MOBILITY AS AN ALTERNATIVE FOR THE DAILY COMMUTE. ISSUES AND CHANCES FOR THE CITY OF VARNA <i>Peter Nikolov</i>	
<b>17:50 – 18:00</b>	<b>Discussion</b>	
<b>18:00 – 18:10</b>	<b>REFRESHMENT BREAK</b>	<b>NTP</b>
<b>18:10 – 19:20</b>	<b>CONCURRENT SESSION - ARCHITECTURE</b>	<b>NTP</b>
	<b>CHAIRS: BRANISLAVA STOJILJKOVIC, DIMITRIS GRIGORIOU</b>	
18:10 – 18:20	ARTS AND ARCHITECTURAL COLLABORATIONS IN ATHENS OF THE SIXTIES (60S) <i>Dimitris Grigoriou</i>	
18:20 – 18:30	ARCHITECTURE – THE MOST INFLUENTIAL ART <i>Dragan Žunić</i>	
18:30 – 18:40	ARCHITECTURAL GRAPHICS - ANCIENT ORIGINS <i>Vladan Nikolić, Olivera Nikolić, Jasmina Tamburić, Sanja Spasić Đorđević, Ana Momčilović Petronijević</i>	
18:40 – 18:50	THE COLORFUL FACADE DECORATIONS OF THE SECESSION STYLE IN SOFIA. SOFIA MINERAL BATHS AND THE RECOVERING OF MISSING ELEMENTS <i>Blagovesta Ivanova</i>	

## SYNERGY OF ARCHITECTURE AND CIVIL ENGINEERING - SINARG 2023

18:50 – 19:00	EXTENDING THE LIFE OF RESIDENTIAL BUILDINGS THROUGH ADAPTATION: A CASE STUDY OF NIŠ, SERBIA <i>Branislava Stojiljković, Hristina Krstić, Nataša Petković, Vladana Petrović</i>	
19:00 – 19:10	FUNCTIONAL ORGANIZATION OF MEDIUM-SIZED APARTMENTS IN NEW CONSTRUCTION IN SERBIA <i>Hristina Krstić, Branislava Stojiljković, Nataša Petković, Vladana Petrović</i>	
19:10 – 19:20	A COMPARATIVE STUDY ON ARCHITECTURAL EDUCATION IN THE REPUBLIC OF SERBIA <i>Olivera Dulić</i>	
<b>19:20 – 19:30</b>	<b>Discussion</b>	
<b>16:00 - 18:00</b>	<b>CONCURRENT SESSION - CIVIL ENGINEERING</b>	<b>GAF</b>
	<b>CHAIRS:</b> <i>ELEFTERIJA ZLATANOVIĆ, CHARALAMPOS SKOULIKARIS</i>	
16:00 – 16:10	GEOTECHNICAL CONDITIONS IN EXPERIMENTAL TESTING OF CLAYEY SOIL SUBJECTED TO CHEMICAL-ELECTROKINETIC TREATMENT <i>Zoran Bonić, Elefterija Zlatanović, Nemanja Marinković, Snežana Đorić-Veljković, Dragan Đorđević, Nikola Romić, Branimir Stanković</i>	
16:10 – 16:20	RIVER TRAINING WORKS WITH THE AIM OF FLUVIAL PROCESSES CONTROL THROUGH THE SEDIMENT TRANSPORT AND DEFORMATION OF THE RIVER BED ANALYSIS <i>Aleksandra Ilić, Ilija Ilić, Dragan Radivojević, Borko Radivojević</i>	
16:20 – 16:30	QUANTITATIVE CHARACTERISTICS OF HIGH INTENSITY RAINFALL IN THE VICINITY OF THE CITY OF NIŠ <i>Stevan Prohaska, Aleksandra Ilić, Ognjen Prohaska, Vladislava Bartoš Divac</i>	
16:30 – 16:40	FOSTERING FLOOD CONTROL POLICY MEASURES AT BASIN SCALE HYDROSYSTEMS WITH THE USE OF GEO-SPATIAL TECHNOLOGIES <i>Charalampos Skoulikaris, Eleni Tzanou</i>	
16:40 – 16:50	COMPARATIVE ANALYSIS OF ATTERBERG'S LIMITS OF FINE-GRAINED SOIL DETERMINED BY VARIOUS METHODS <i>Nemanja Marinković, Elefterija Zlatanović, Zoran Bonić, Nikola Romić, Dušan Cvetković, Lazar Živković</i>	
<b>16:50 – 17:00</b>	<b>Discussion</b>	
17:00 – 17:10	SIGNIFICANCE OF NUMERICAL SIMULATION OF SOIL MEDIA IN SSI ANALYSIS OF FRAMES <i>Kemal Edip, Vlatko Sheshov, Julijana Bojadjeva, Toni Kitanovski, Dejan Ivanovski</i>	
17:10 – 17:20	ON ROTATIONAL INVARIANCE OF HIGHER-ORDER MOMENTS OF REGULAR POLYHEDRA <i>Márton Módis, Flórián Kovács</i>	
17:20 – 17:30	RAILWAY VIADUCTS – RE-USING TRANSPORT INFRASTRUCTURES IN EUROPEAN CITIES <i>Iulia Gabriela Drăghici</i>	
17:30 – 17:40	STRENGTHENING OF REINFORCED CONCRETE BEAM ELEMENTS USING ROD-FORM COMPOSITE MATERIALS <i>Slobodan Ranković, Radomir Folić, Marina Mijalković, Žarko Petrović</i>	
17:40 – 17:50	COMPARATION OF LABORATORY AND IN-SITU TEST RESULTS OF MECHANICAL AND DURABILITY CONCRETE PROPERTIES FOR STADIUM STRUCTURE <i>Marko Čeček, Merima Šahinagić-Isović, Mili Selimotić</i>	
<b>17:50 – 18:00</b>	<b>Discussion</b>	
<b>18:00 – 18:10</b>	<b>REFRESHMENT BREAK</b>	<b>GAF</b>
<b>18:10 – 19:10</b>	<b>CONCURRENT SESSION - CIVIL ENGINEERING</b>	<b>GAF</b>
	<b>CHAIRS:</b> <i>RADOMIR FOLIĆ, ZORAN GRDIĆ</i>	
18:10 – 18:20	HIGH STRENGTH CONCRETES BASED ON THE CHOICE OF THE BEST PARTICLE SIZE DISTRIBUTION IN AGGREGATE <i>Zoran Grdić, Nenad Ristić, Dušan Grdić, Gordana Topličić-Ćurčić, Dejan Krstić, Jelena Bijelić</i>	
18:20 – 18:30	LABORATORY TESTS OF CONCRETE CYLINDERS CONFINED WITH INOVATIVE MATERIALS <i>Artur Roshj, Golubka Nechevska-Cvetanovska, Julijana Bojadjeva, Jordan Bojadjev</i>	
18:30 – 18:40	SEISMIC PERFORMANCE OF RC BUILDING COLUMNS CONFINED WITH CFRP <i>Artur Roshj, Golubka Nechevska-Cvetanovska, Julijana Bojadjeva, Jordan Bojadjev</i>	
18:40 – 18:50	SULFATE RESISTANCE OF GEOPOLYMER CONCRETE PRODUCED WITH HAZARDOUS WASTE VITREOUS ENAMEL GENERATED IN THE PRODUCTION PROCESS OF HEATING DEVICES <i>Nenad Ristić, Jelena Bijelić, Dušan Grdić, Gordana Topličić-Ćurčić, Zoran Grdić</i>	
18:50 – 19:00	STABILITY OF COMPRESSED CHORD OF HALF-THROUGH TRUSS GIRDERS IN BRIDGE CONSTRUCTION ACCORDING TO EUROCODE WITH CASE STUDY <i>Aleksandar Stojanović, Jovan Anđelković</i>	
<b>19:00 – 19:10</b>	<b>Discussion</b>	
<b>20:00</b>	<b>CONFERENCE DINNER - RESTAURANT "ŠVAJCARIJA", VIZANTIJSKI BULEVAR 17</b>	

## SYNERGY OF ARCHITECTURE AND CIVIL ENGINEERING - SINARG 2023

SCHEDULE	FRIDAY 15TH SEPTEMBER	LOCATION
<b>09:00 – 10:45</b> INTER-PROJECT COACHING EVENT ( <b>HORIZON, COST, ERASMUS+, SERBIAN SCIENCE FUND, ...</b> ) CCWATER DIGIWATER INNOWAT WATERLINE ElectroSoil Substrate SMART4ENV SMARTWB DGTRANS SEACWater	THE EVENT WILL BE ORGANIZED IN HYBRID MODE. <b>CHAIRS:</b> <i>HARSHA RATNAWEERA, MILAN GOCIĆ</i> <b>Harsha Ratnaweera</b> , Norwegian University of Life Sciences <b>Harsha Ratnaweera</b> , Norwegian University of Life Sciences <b>Milan Gocić</b> , University of Niš <b>Vuk Milošević</b> , University of Niš <b>Elefterija Zlatanović</b> , University of Niš <b>Radovan Cvetković</b> , University of Niš <b>Zakhar Maletskyi</b> , Norwegian University of Life Sciences <b>Marija Jevrić</b> , University of Montenegro <b>Milan Protić</b> , University of Niš <b>Wang Xiaodong</b> , Qingdao University of Technology	<b>LAB</b>
<b>11:00 – 12:00</b>	<b>TRIBUTE SESSION</b> <b>MODERATOR:</b> ANDRIJA ZORIĆ <b>Speakers:</b> Predrag Petronijević Darko Živković Andrija Zorić	<b>205</b>
<b>09:00 – 12:30</b>	<b>CONCURRENT SESSIONS + POSTER SESSION</b>	<b>NTP + GAF</b>
<b>09:00 – 10:30</b>	<b>CONCURRENT SESSION - ARCHITECTURE</b> <b>CHAIRS:</b> <i>ANA MOMČILOVIĆ PETRONIJEVIĆ, VLADAN NIKOLIĆ</i>	<b>NTP</b>
09:00 – 09:10	21 <sup>ST</sup> CENTURY ARCHITECTURE TRENDS - NEW CLOCKWORK ORANGE CHALLENGE <i>Dejan Vlaškalić</i>	
09:10 – 09:20	THE INFLUENCE OF GENERATIVE DESIGN ON THE PROCESS OF ARCHITECTURAL SPACE PLANNING <i>Jovana Tomić, Sonja Krasić, Nastasija Kocić</i>	
09:20 – 09:30	MERSI – FROM BASIC NEEDS TO INCLUSIVE DESIGN FOR ROMANIAN SPECIAL SCHOOLS <i>Oana Mihăescu, Alexandra Vișan, Silvia Păduraru, Ioana Șerbănescu</i>	
09:30 – 09:40	INTEGRATING SUSTAINABILITY ASSESSMENT INTO ARCHITECTURAL EDUCATION. CASE STUDY FOR THE 5TH YEAR STUDENTS, FACULTY OF ARCHITECTURE, BUCHAREST, ROMANIA <i>Oana Mihăescu, Radu Pană, Andreea Prelipean, Alexandra Vișan</i>	
09:40 – 09:50	APPLICATION OF THE CONCEPT OF BIOCLIMATIC DESIGN AND PLANNING OF FACILITIES IN CITIES TO PREVENT POLLUTANTS EMISSIONS <i>Marija Mihajlović, Miomir Vasov, Tamara Janković, Natalija Mratinković</i>	
09:50 – 10:00	<b>Discussion</b>	
10:00 – 10:10	DEVELOPMENT OF THE REVITALIZATION MODEL OF DEPOPULATED VILLAGES ON THE EXAMPLE OF THE MUNICIPALITY OF CRNA TRAVA – PART I <i>Ana Momčilović Petronijević, Olivera Nikolić, Mirko Stanimirović, Marko Joksimović, Vladan Nikolić</i>	
10:10 – 10:20	DEVELOPMENT OF THE REVITALIZATION MODEL OF DEPOPULATED VILLAGES ON THE EXAMPLE OF THE MUNICIPALITY OF CRNA TRAVA – PART II <i>Ana Momčilović Petronijević, Olivera Nikolić, Mirko Stanimirović, Marko Joksimović, Vladan Nikolić</i>	
10:20 – 10:35	<b>Discussion</b>	
<b>10:35 – 11:00</b>	<b>REFRESHMENT BREAK</b>	<b>NTP</b>
<b>11:00 – 12:20</b>	<b>CONCURRENT SESSION - ARCHITECTURE</b> <b>CHAIRS:</b> <i>MIOMIR VASOV, NADJA KURTOVIĆ FOLIĆ</i>	<b>NTP</b>
11:00 – 11:10	EXPERIMENTAL DETERMINATION OF DYNAMIC PARAMETERS OF HEAT PASSAGE THROUGH THE FACADE WALL OF A WEEKEND COTTAGE ON MOUNTAIN KOPAONIK, SERBIA <i>Stefan Novčić, Diana Vranešević, Aleksandra Parezanović, Ivana Medarević, Radovan Gospavić, Goran Todorović</i>	
11:10 – 11:20	INVESTIGATION OF THE POSSIBILITIES OF USING "BUZZI-SPACE" APPLICATION IN ORDER TO PREDICT REVERBERATION TIME <i>Predrag Radomirović</i>	
11:20 – 11:30	TOWARDS NUMERICAL ARCHITECTURAL ORDER IDENTIFICATION: EXPRESSING CAPITAL MORPHOLOGY BY USING DYNAMICS OF ITS PARAMETERS <i>Đorđe Mitrović, Đorđe Đorđević, Mirjana Devetaković, Gordana Đukanović</i>	

## SYNERGY OF ARCHITECTURE AND CIVIL ENGINEERING - SINARG 2023

11:30 – 11:40	COOPERATION BETWEEN ARCHITECTS AND STRUCTURAL ENGINEERS IN THE DESIGN OF COMPLEX STRUCTURES – THE REVIEW <i>Miloš Čokić, Ružica Kovačević, Radomir Folić, Nađa Kurtović Folić</i>	
11:40 – 11:50	THE USE OF “GEOTEXTILES” FOR THE PROTECTION OF ARCHAEOLOGICAL SITES WITH MOSAICS <i>Elena Vasić Petrović</i>	
11:50 – 12:00	REFURBISHING INNOVATIVE STRUCTURES: THE CASE OF ROMANIAN SPORTS HALLS <i>Ruxandra Balcanu</i>	
12:00 – 12:10	SOME SIGNIFICANT ACHIEVEMENTS OF CONCRETE STRUCTURES <i>Nađa Kurtović Folić, Radomir Folić, Miloš Čokić</i>	
<b>12:10 – 12:20</b>	<b>Discussion</b>	
<b>09:00 – 10:45</b>	<b>CONCURRENT SESSION - CIVIL ENGINEERING</b>	<b>GAF</b>
	<b>CHAIRS: MILAN STOJKOVIĆ, VUK MILOŠEVIĆ, DUŠAN RANĐELOVIĆ</b>	
09:00 – 09:10	BIAS CORRECTION OF CLIMATE DATA BY THE QUANTILE MAPPING FOR TWO RIVER CATCHMENTS IN THE JUŽNA MORAVA RIVER BASIN <i>Nikola Đokić, Borislava Blagojević</i>	
09:10 – 09:20	BIAS CORRECTION AND WEIGHTING METHODS TO SHAPE PRECIPITATION UNDER THE CLIMATE CHANGE OPTIONS <i>Luka Vinokić, Milan Stojković, Srđan Kolaković</i>	
09:20 – 09:30	COMPARISON OF DAILY AND MONTHLY REFERENCE EVAPOTRANSPIRATION IN AN URBAN AREA <i>Mladen Milanović, Slaviša Trajković, Milan Gocić, Martina Zelenakova, Hany F. Abd-Elhamid</i>	
09:30 – 09:40	ENSURING OF THE FINANCIAL RISKS IN BUILDING OF A CONSTRUCTION PROJECT <i>Tatjana Ackovska</i>	
09:40 – 09:50	DAMAGE FORMS OF STEEL CONSTRUCTIONS <i>Marko Milošević, Dragoslav Stojić, Srđan Živković</i>	
09:50 – 10:00	<b>Discussion</b>	
10:00 – 10:10	DEFLECTIONS OF BARREL VAULT SHAPED MEMBRANE MODEL UNDER EXTERNAL LOADS <i>Vuk Milošević, Dragan Kostić, Miomir Vasov, Dušan Ranđelović, Janusz Marchwiński</i>	
10:10 – 10:20	DETERMINATION OF THE BOLT YIELD MOMENT FOR STEEL-TIMBER COMPOSITE CONNECTIONS <i>Miloš Milić, Todor Vacev, Ivan Nešović, Predrag Petronijević, Andrija Zorić</i>	
10:20 – 10:30	SHEAR STRENGTH OF SELF-COMPACTING STEEL FIBER REINFORCED CONCRETE PUSH-OFF SPECIMENS <i>Aleksandar Šutanovac, Predrag Blagojević, Denis Milenović, Darko Živković</i>	
10:30 – 10:45	<b>Discussion</b>	
<b>10:45 – 11:00</b>	<b>REFRESHMENT BREAK</b>	<b>GAF</b>
<b>11:00 – 12:00</b>	<b>CONCURRENT SESSION - CIVIL ENGINEERING</b>	<b>GAF</b>
	<b>CHAIRS: ZLATKO ZAFIROVSKI, NENAD STOJKOVIĆ</b>	
11:00 – 11:10	DEFINING SEISMIC PARAMETERS FOR AN ESSENTIAL ELECTRIC POWER FACILITY <i>Kitanovski Toni, Dojcinovski Dragi, Sheshov Vlatko, Stojmanovska Marta, Bojadzieva Julijana, Edip Kemal, Ivanovski Dejan</i>	
11:10 – 11:20	UNFAVOURABLE GEOLOGICAL CONDITIONS AND ASSOCIATED RISKS IN TUNNELLING <i>Andrija Vlašković, Elefterija Zlatanović, Nemanja Marinković, Zoran Bonić, Nikola Romić</i>	
11:20 – 11:30	GEOGRID-REINFORCED FLEXIBLE PAVEMENT ON CORRIDOR X IN SERBIA <i>Milan Draganović, Dragana Turnić, Biljana Mladenović, Srđan Živković, Marija Spasojević-Šurdilović</i>	
11:30 – 11:40	EVALUATION OF BRIDGE TRAFFIC LOAD MODEL USING B-WIM MEASUREMENTS IN SERBIA <i>Goran Milutinović, Rade Hajdin</i>	
11:40 – 11:50	FATIGUE LIFE PREDICTION OF ADHESIVELY BONDED JOINTS BASED ON STIFFNESS DEGRADATION <i>Nenad Stojković, Petar Knežević, Nikola Velimirović, Nemanja Marković</i>	
11:50 – 12:00	CLASSIFICATION OF RAILWAY SUPERSTRUCTURE RECONSTRUCTION METHODS <i>Jelena Dimitrijević, Zlatko Zafirovski</i>	
<b>12:00 – 12:10</b>	<b>Discussion</b>	

## SYNERGY OF ARCHITECTURE AND CIVIL ENGINEERING - SINARG 2023

11:00 – 12:30

POSTER SESSION

NTP

"ERASING" THE BOUNDARY BETWEEN INTERNAL AND EXTERNAL SPACES IN PRESCHOOL FACILITIES

*Aleksandra Rančić, Danica Stanković, Aleksandra Cvetanović*

A CASE STUDY OF RECONSTRUCTION OF A RESIDENTIAL MASONRY BUILDING: DOES UPGRADING A BUILDING ADVERSELY AFFECTS ITS EARTHQUAKE PERFORMANCE?

*Dušan Turina, Bojan Milošević, Aleksandar Kostić, Davorin Penava, Žarko Petrović*

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*Dimitris Grigoriou*

**12.30**

**CLOSING THE CONFERENCE**

**NTP**

**13:00 – 15:00**

**EXCURSION (FORTRESS, SYNAGOGUE, BUBANJ MEMORIAL PARK, MONUMENT “ČEGAR”)**



**SYNERGY OF ARCHITECTURE AND CIVIL ENGINEERING - SINARG 2023**

**SINARG 2023 – ACCOMPANYING PROGRAMS**

**INTERNATIONAL STUDENT HACKATHON**

SCIENCE TECHNOLOGY PARK NIS, ALEKSANDRA MEDVEDEVA 2A, NIŠ, SERBIA - **NTP - MOTOROLA HALL**

**SCHEDULE**

**WEDNESDAY 13<sup>TH</sup> SEPTEMBER**

**15:00** Arrival of hackathon participants. Accommodation in the Rile Men hotel (111 Vojvode Mišića st.).

**19:00 – 20:00** Preparatory meeting at the Faculty of Civil Engineering and Architecture (GAF)

**20:00** **Welcome party (Gama club - GAF, 14 Aleksandra Medvedeva st.)**

**THURSDAY 14<sup>TH</sup> SEPTEMBER**

**16:00 – 19:00** Lectures for hackathon participants

**20:00** **Formal Dinner**

**FRIDAY 15<sup>TH</sup> SEPTEMBER**

**09:00 – 14:00** Competition

**14:30 – 15:00** Awards ceremony

**15:00 - 16:00** Lunch – catering

**20:00** **Formal Dinner**



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## SYNERGY OF ARCHITECTURE AND CIVIL ENGINEERING - SINARG 2023

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SCIENCE TECHNOLOGY PARK NIS, ALEKSANDRA MEDVEDEVA 2A, NIŠ, SERBIA - **NTP - MOTOROLA HALL**

SCHEDULE	THURSDAY 14 <sup>TH</sup> SEPTEMBER
<b>12:15 – 12:30</b>	<b>OPENING CEREMONY</b>
	<i>Ivana Lukić, CEO, GreenBuild Cluster, Niš, Serbia</i>
	<i>Professor Miomir Vasov, PhD, Faculty of Civil Engineering and Architecture, University of Niš, Serbia</i>
<b>12:30 – 13:30</b>	<b>INVITED LECTURES</b>
12:30 – 12:50	<b>Associate Professor Ljiljana Đukanović, PhD, Faculty of Architecture, University of Belgrade, Serbia</b> <i>Assessment of the quality of housing stock in Belgrade according to energy consumption</i> <i>Ocena kvaliteta stambenog fonda Beograda sa stanovišta potrošnje energije</i>
12:50 – 13:10	<b>Associate Professor Aleksandar Rajčić, PhD, Faculty of Architecture, University of Belgrade, Serbia</b> <i>Energy efficiency of buildings in Serbia-some personal experiences from the process of design and realization</i> <i>Energetska efikasnost zgrada u Srbiji – neka lična iskustva iz procesa projektovanja i realizacije</i>
13:10 – 13:30	<b>Assistant Professor Andrej Josifovski, PhD, Faculty of Architecture, University of Belgrade, Serbia</b> <i>Re-VILLAGE ECOlogical experiments in architecture</i> <i>Re-SELO EKološki eksperimenti u arhitekturi</i>
13:30 – 13:50	<b>Professor Miomir Vasov, PhD, Faculty of Civil Engineering and Architecture, University of Niš, Serbia</b> <i>Bioclimatism as a tipping point</i> <i>Bioklimatizam kao ishodište</i>
13:50 – 14:10	<b>Associate Professor Goran Vučković, PhD, Faculty of Mechanical Engineering, University of Niš, Serbia</b> <i>Heat pumps in the function of sustainable construction in the building sector</i> <i>Toplotne pumpe u funkciji održive gradnje u sektoru zgradarstva</i>
<b>14:10 – 14:30</b>	<b>SPONSOR PRESENTATIONS</b>
14:10 - 14:30	<b>Aleksandar Nedeljković, Sika Srbija</b> <i>Sika green building concepts</i> <i>Sika koncepti zelene gradnje</i>
<b>14:30 – 15:00</b>	<b>Discussion</b>
<b>15:00 – 16:00</b>	<b>LUNCH BREAK</b>



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