

ФИНАЛНА ПРОГРАМА FINAL PROGRAMME



„ОТПОРНИ КОНСТРУКЦИИ“ “RESILIENT STRUCTURES”



ДГКМ
ДРУШТВО НА
ГРАДЕЖНИ
КОНСТРУКТОРИ НА
МАКЕДОНИЈА

MASE 20
МАКЕДОНСКА
АСОЦИЈАЦИЈА
КОНСТРУКТОРИ
НА СТРУКТУРНИ
Инженери

МЕЂУНАРОДЕН СИМПОЗИУМ
INTERNATIONAL SYMPOSIUM

СКОПЈЕ, С. МАКЕДОНИЈА
SKOPJE, N. MACEDONIA
28 - 29 септември 2023
September , 28th - 29th, 2023

Wednesday, September, 27th, 2023

19⁰⁰-21⁰⁰ Early registration of participants

Thursday, September, 28th, 2023

08⁰⁰-09⁰⁰ Registration of participants

09⁰⁰-09¹⁵ Press statement

Opening ceremony (Diamond Hall)

- 3D Mapping show “Resilient Structures”
- Intonation of National, student and UKIM anthem
- Darko Nakov, President of MASE, **Welcome and Opening speech, Celebrating 20 MASE Symposia and commemorating 60 years from Skopje earthquake**
- Goran Markovski, Dean of FCE, UKIM, **Celebrating 74 years from foundation of FCE, UKIM**

Salute speeches

- Biljana Angelova, Rector of UKIM
- Armen Grygorian, UNDP Resident representative
- Tina Vejrum, President of IABSE
- Zlatko Markovic, President of ASES
- Primoz Moze, President of SDGK
- Zoran Rakicevic, President of MAEE
- Rüdiger Höffer, Vice-dean of RUB, Germany
- Vladan Kuzmanovic, Dean of FCE, Belgrade, Serbia
- Marina Rakocevic, Dean of FCE, Podgorica, Montenegro
- Ana Baricevic, Vice-dean of FCE, Zagreb, Croatia
- Igor Pesko, Head of Department of CE, FTS, Novi Sad, Serbia
- Slavisa Trajkovic, Dean of FCEA, Nis, Serbia
- Vlatko Sheshov, Director of IZIIS, UKIM, Skopje, N. Macedonia
- Ognen Marina, Dean of AF, UKIM, Skopje, N. Macedonia

Patron speech

- Blagoj Bochvarski, Minister for Transport and communications
- **Granting of MASE Awards**
- **Granting of Honorary and Meritorious memberships of MASE**

11⁰⁰-11³⁰ Coffee break

Thursday, September, 28th, 2023

11³⁰-12⁰⁰

Invited speakers (Diamond Hall)

Chair: Darko NAKOV and Gjorgji GOSHEV

Tina VEJRUM

IP-10

RECORD LONG-SPAN BRIDGES – FROM GREAT BELT FIXED LINK TO STONECUTTERS AND 1915 ÇANAKKALE

12⁰⁰-13³⁰

MASE Awards (Diamond Hall)

Chair: Darko NAKOV and Gjorgji GOSHEV

Ivana DIMITROVA, Kristina MILADINOSKI

MA-1

CONSTRUCTION OF BRIDGE AT RIVER VARDAR, BOULEVARD ASNOM, BRIDGE MIHAJLO APOSTOLSKI

Cvetanka CHIFLIGANEĆ

MA-2

EXPERIMENTAL RESEARCH AND NUMERICAL ANALYSIS OF TIMBER-CONCRETE COMPOSITE SLABS AT AMBIENT TEMPERATURE AND IN FIRE

Kristina MILKOVA

MA-3

METHODOLOGY FOR DEVELOPMENT OF SEISMIC FRAGILITY CURVES FOR EXISTING UNREINFORCED MASONRY BUILDINGS

Nikola NAUMOVSKI

MA-4

INTEGRATED METODOLOGICAL APPROACH TO ANALYSIS OF RAILWAY TRAFFIC VIBRATION IMPACT ON PEOPLE AND FACILITIES

Sergey CHURILOV, Elena DUMOVA-JOVANOSKA, Maja GOSHEVA, Veronika SHENDOVA, Lidija KRSTEVSKA, Bojan DAMCHEVSKI, Dime JANCHEV

MA-5

EXPERIMENTAL INVESTIGATION OF REPOINTING ON THE SEISMIC PERFORMANCE OF UNREINFORCED MASONRY STRUCTURES

Milos STOKUCA

MA-6

IMPROVEMENT OF STRENGTH AND DEFORMABILITY OF STEEL STRUCTURES WITH ROOF AND SANDWICH PANELS

13³⁰-14³⁰

Buffet lunch (Foyer in front of Platinum Halls)

14³⁰-15³⁰

Invited speakers (Diamond Hall)

Chair: Roberta APOSTOLSKA and Marko MARINKOVIĆ

Alper ILKI, Caglar GOKSU, Bilal SARI, Hasan Huseyin AYDOGDU, Cem DEMIR

IP-5

2023 KAHRAMANMARAŞ EARTHQUAKES AND LESSONS LEARNT TOWARDS BUILDING RESILIENT CITIES WITH A FOCUS ON ISTANBUL

IP-2

Svetlana BRZEV

SEISMIC RESILIENCE OF CONFINED MASONRY BUILDINGS

15³⁰-16³⁰

Presentation of sponsors (Diamond Hall)

Chair: Roberta APOSTOLSKA and Marko MARINKOVIĆ

PS-1

Platinum Sponsor: ADING

PS-2

Platinum Sponsor: BECHTEL & ENKA

Thursday, September, 28th, 2023

15³⁰-16³⁰

Presentation of sponsors (Diamond Hall)

Chair: Roberta APOSTOLSKA and Marko MARINKOVIĆ

PS-3 Platinum Sponsor: GOLDEN ART

PS-4 Platinum Sponsor: PENETRON & IZOTEHNA

16³⁰-16⁴⁵

Coffee break

16⁴⁵-17¹⁵

Invited speakers (Diamond Hall)

Chair: Koce TODOROV and Marta STOJMANOVSKA

IP-9 Vlatko SHESHOV

60 YEARS OF SKOPJE EARTHQUAKE – IZIIS FOR SKOPJE

17¹⁵-18⁴⁵

Session 1: Resilient Skopje (Diamond Hall)

Chair: Koce TODOROV and Marta STOJMANOVSKA

Elena DUMOVA-JOVANOSKA, Grozde ALEKSOVSKI, Liljana DENKOVSKA, Sergey CHURILOV, Kristina MILKOVA, Simona BOGOEVSKA
SEISMIC VULNERABILITY OF PRE-CODE MASONRY BUILDINGS, PROJECT SEISMOWALL

RDS-3 Roberta APOSTOLSKA, Veronika SHENDOVA, Goran JEKIC, Golubka NECEVSKA-CVETANOVSKA, Zivko BOZINOVSKI
IZIIS FOR SEISMIC RESILIENT SKOPJE

MRS-3 Shpresim IBRAIMI, Boris TANESKI, Miroslav NASTEV, Stanislav MILOVANOVIC
1963 SKOPJE EARTHQUAKE: OBSERVED DAMAGE TO BUILDINGS

RSC-11 Zoran MILUTINOVIC, Radmila SALIC MAKRESKA
UN ASSISTANCE AND CONTRIBUTION TO DEVELOPMENT OF EARTHQUAKE ENGINEERING – EUROPEAN AND WORLDWIDE

RSC-8 Milorad JOVANOVSKI, Igor PESHEVSKI, Jovan Br. PAPIC, Andrijana ANDREEVA, Lidija TRPENOVSKA, Julijana STAVREVSKI
GEOTECHNICAL ZONNING MAPS – PREREQUISITE FOR DESIGN OF RESILIENT STRUCTURES

NES-12 Goran MARKOVSKI, Meri CVETKOVSKA, Vukan NJAGULJ, Leonardo MANTA, Marija DOCEVSKA JOVANOVA
ANALYSIS OF THE FIRE EXPOSED BRIDGE “BELASICA” IN SKOPJE

18⁴⁵-19³⁰

Poster Session (Foyer in front of Platinum Halls)

BIM-1

Roberta APOSTOLSKA, Lars ABRAHAMCZYK, Ruediger HÖFFER, Davorin PENAVA, Nuno LOPES, Uwe KAHLER, Mahsa MIRBOLAND, Peshawa. L. HASAN, Filip MANOJLOVSKI
EDUCATIONAL NETWORK FOR VIRTUAL LABORATORY EXPERIMENTS IN STRUCTURAL ENGINEERING

BIM-4

Angel MAČEVSKI, Dušan ROŽIĆ, Milan KUHTA
PARAMETRIC BIM WORKFLOW FOR BRIDGE DESIGN

Thursday, September, 28th, 2023

18⁴⁵-19³⁰ Poster Session (Foyer in front of Platinum Halls)

BIM-6	Aleksandar PETROVSKI, Aleksandar ANDJELKOVIC, Roman RABENSEFIER, Norbert HARMATHY COMPARISON OF TOOLS FOR SUSTAINABLE BUILDINGS` DESIGN OPTIMIZATION
CM-1	Petar JANEV, Marko GJORGJIOSKI, Darko NAKOV, Toni ARANGELOVSKI COMPARISON OF DESIGN OF RECTANGULAR CROSS SECTIONS REINFORCED ONLY IN THE TENSION ZONE ACCORDING TO PBAB/87 AND EUROCODE 2
CM-2	Emil KOCHOVSKI SKI HUT "TRIFKOVA KOLIBA" MAVROVO – DESIGN OF STEEL FOR THE THIN MOUNTAIN AIR
CM-3	Marijana LAZAREVSKA, Vasko GACEVSKI DETERMINATION OF CRITICAL PATH IN FUZZY NETWORK DIAGRAMS
CM-4	Teodora MIHAJLOVSKA, Elena DUMOVA-JOVANOSKA, Ana TROMBEVA-GAVRILOSKA FORM-FINDING OF AN ENVELOPE OF A DOUBLE-LAYER SHELL SUBJECTED TO SEISMIC LOADING
CM-8	Nikola NISEV, Ana TROMBEVA GAVRILOSKA, Denis POPOVSKI LIFE CYCLE ASSESSMENT FOR CONSTRUCTION OF AN ENCLOSED SWIMMING POOL
CM-10	Marija PETKOVSKA, Zlatko ZAFIROVSKI PERFORMANCE EXPERIENCES FOR DIVERSION TUNNELS AT DAMS WITH ACCUMULATION
CM-11	Emilija RISTOVA, Darko NAKOV INFLUENCE OF SEISMIC HAZARD AND IMPORTANCE CLASS ON THE BEHAVIOR OF REINFORCED CONCRETE STRUCTURAL ELEMENTS
CM-12	Angelko STOJANOVSKI, Toni ARANGELOVSKI, Denis POPOVSKI, Darko NAKOV COMPARISON OF COMPLETELY AND PARTIALLY CONCRETED COMPOSITE COLUMNS ACCORDING TO EUROCODE 4
CM-13	Angelko STOJANOVSKI, Toni ARANGELOVSKI, Denis POPOVSKI, Darko NAKOV COMPARISON OF CODE FOR DESIGN AND ANALYSIS OF COMPOSITE COLUMNS Vesna BULATOVIĆ, Tiana MILOVIĆ, Anka STARČEV-ČURČIN
MMT-3	EVALUATION OF SULFATE RESISTANCE OF CONCRETE WITH RCA THROUGH LENGTH CHANGE AND THERMAL ANALYSIS
MMT-4	Radovan CVETKOVIĆ, Stefan CONIĆ, Dragoslav STOJIĆ, Nemanja MARKOVIĆ COMPOSITE STRUCTURES TYPE OF CROSS LAMINATED TIMBER AND CONCRETE
MMT-5	Ksenija JANKOVIĆ, Dragan BOJOVIĆ, Marko STOJANOVIĆ, Anja TERZIĆ, Srboljub STANKOVIĆ THE PROPERTIES OF HEAVYWEIGHT SELF-COMPACTING CONCRETE ON WATER PENETRATION UNDER PRESSURE
MMT-10	Mihail NAUMOVSKI, Marijana LAZAREVSKA ENVIRONMENT AS AN ASPECT OF LIFE CYCLE ASSESSMENT ANALYSIS TOWARDS SUSTAINABLE BUILDINGS

Thursday, September, 28th, 2023

18⁴⁵-19³⁰ Poster Session (Foyer in front of Platinum Halls)

Marija PETROVA

MMT-11 REVIVING VERTICAL LIVING: DEVELOPMENT OF RESIDENTIAL TOWERS IN MACEDONIAN CITIES

RDS-1 Kenneth C. CRAWFORD

RC BRIDGE FAILURES IN EARTHQUAKES

RDS-2

Sofija DUSHANOVSKA, Aleksandar BOGOEVSKI, Dragan DIMITRIEVSki, Katerina VELESKA
INFLUENCE OF THE ENVIRONMENT ON THE CONCRETE COVER

MMT-12

Goce PRANGOVSKI, Suzana ARANGJELOVSKA, Nikola TRPESKI,
Marija MENCHEVSKA, Gjorgji GOSHEV
INFLUENCE OF WASTE ASH FROM COMBUSTED WOOD BIOMASS ON THE PHYSICAL AND MECHANICAL CHARACTERISTICS OF CONCRETE

MMT-13

Adriana SALLES, Rand ASKAR, Camila CERVANTES, Luis BRAGANÇA, Meri CVETKOVSKA
CREATING A ROADMAP TOWARDS CIRCULARITY IN THE BUILT ENVIRONMENT

MMT-14

Todorka SAMARDZIOSKA, Andrea VELKOVA, Ivan NAUMOVSKI
THERMAL PROPERTIES OF SUSTAINABLE CEMENTITIOUS COMPOSITES WITH STRAW

MMT-15

Dragana STANOJEVIĆ, Vladimir MUČENSKI, Milena SENJAK PEJIĆ,
Mirjana TERZIĆ, Panta KRSTIĆ
ANALYSIS OF CARBON FOOTPRINT IN CERTAIN PHASES OF THE CONSTRUCTION PROJECT

MMT-18

Marko STOJANOVIC, Lana ANTIĆ ARANĐELOVIĆ, Dragan BOJOVIĆ,
Ksenija JANKOVIĆ
THE INFLUENCE OF STEEL FIBERS OBTAINED BY RECYCLING WASTE TIRES ON THE PROPERTIES OF CONCRETE

MMT-20

Slobodan ŠUPIĆ, Gordana BROĆETA, Mirjana MALEŠEV, Anđelko CUMBO,
Vladan PANTIĆ, Ivan LUKIĆ, Marina LATINOVIĆ
DEVELOPMENT OF ENVIRONMENTALLY FRIENDLY CORN COB ASH BLENDED CEMENT MORTAR

MMT-22

Anja TERZIĆ, Ksenija JANKOVIĆ
THE DESIGN OF CEMENTITIOUS COMPOSITES WITH ADVANCED THERMAL PROPERTIES

MRS-1

Festim ADEMI, Elena DUMOVA-JOVANOSKA, Sergey CHURILOV, Enis JAKUPI
SEISMIC RETROFIT OF MASONRY WALLS USING REPOINTING

MRS-2

Ana BARIČEVIĆ, Antonija OCELIĆ, Zvjezdana MATUZIĆ, Miljenko VUČIĆ
SULPHATE RESISTANCE OF WOOD-BIOMASS-ASH INJECTION GROUT

MRS-4

Emil KOCHOVSKI
ALL ALONG THE WATCHTOWER

MRS-6

Vladan PANTIĆ, Vlastimir RADONJANIN, Mirjana MALEŠEV, Slobodan ŠUPIĆ,
Ivan LUKIĆ, Zoran BRUJIĆ
THE ASSESSMENT OF THE LOAD-BEARING STRUCTURE OF STADIUM "RFC NOVI SAD"

MRS-9

Borče VELjANOVSKI, Jovan Br. PAPIĆ, Andrea TANEVSKI
REGENERATING THE SKOPJE AQUEDUCT

Thursday, September, 28th, 2023

18⁴⁵-19³⁰ Poster Session (Foyer in front of Platinum Halls)

NES-1	Aleksandra CHUBRINOVSKA, Denis POPOVSKI, Mile PARTIKOV ANALYSIS OF FRAMING SYSTEMS FOR BOX SECTIONS WITH DISTORTION EFFECTS
NES-7	Konstantin KAZAKOV, Lena MIHOVA, Doncho PARTOV INTERPRETATION OF BURIED ARCH BRIDGE RESPONSE TO SEISMIC IMPACT
NES-9	Ivan LUKAČEVIĆ, Ivan ĆURKOVIĆ, Andrea RAJIĆ, Vlaho ŽUVELEK BENDING RESISTANCE OF COMPOSITE STEEL-CONCRETE FLOOR SYSTEM MADE OF BUILT-UP COLD-FORMED STEEL ELEMENTS
NES-10	Filip MANOJLOVSKI, Zoran RAKICEVIC, Aleksandra BOGDANOVIC, Antonio SHOKLAROVSKI, Angela POPOSKA REPAIR OF REINFORCED CONCRETE COLUMN HINGES BY POLYURETHANE JACKETING
NES-14	Mladen MUHADINović, Duško LUČIĆ PREVIOUS AND FURTHER RESEARCH OF BEAM COLUMN JOINT IN ALUMINIUM STRUCTURES – COLUMN WEB RESISTANCE IN TRANSVERSE COMPRESSION
NES-21	Pavle RISTESKI, Denis POPOVSKI, Nikola NISEV, Antonio TOMESKI EXPERIMENTAL AND ANALYTICAL RESEARCH OF THE BEHAVIOUR OF CHEMICAL ANCHORS AS SHEAR CONNECTORS
NES-22	Jelena RISTIC, Zijadin GURI, Danilo RISTIC TESTING AND MODELING OF GFRP AND STEEL REINFORCED COLUMNS UNDER CYCLIC BENDING AND VARYING AXIAL LOADS
NES-23	Antonio SHOKLAROVSKI, Aleksandra BOGDANOVIC, Zoran RAKICEVIC, Angela POPOSKA, Filip MANOJLOVSKI EXPERIMENTAL TESTS OF BRIDGE STRUCTURES
NES-24	Nikola SIMOV, Denis POPOVSKI, Nikola NISEV, Antonio TOMESKI EXPERIMENTAL AND ANALITICAL RESEARCH OF THE BEHAVIOR OF MECHANICAL ANCHORS AS SHEAR CONNECTORS
NES-25	Angelko STOJANOVSKI, Dragan DUGANOV, Cvetan ZAFIROV, Filip NANEVSKI, Nikola MITOVSKI, Maja BUNDEVSKA, Iva LAZAREVSKA, Tamara GEORGIEVSKA DYNAMIC LOADING OF REINFORCED CONCRETE PILES ON VIADUCT OF JABUCHKI DOL AND BRIDGE ON THE RIVER BLIDESH
NES-31	Antonio TOMESKI, Marko GJORGJIOSKI, Petar JANEV, Sead ABAZI STATIC AND DYNAMIC ANALYSIS OF A SPREAD FOUNDATION ACCORDING TO EUROCODE
NES-32	Zlatko ZAFIROVSKI, Vasko GACEVSKI, Ivona NEDEVSKA, Riste RISTOV, Slobodan OGNJENOVIKJ, Bojan SUSINOV, Sead ABAZI NUMERICAL ANALYSIS OF A HYDROTECHNICAL TUNNEL IN THE TORANICA MINE ASSEMBLY
RDS-7	Kaltrina SPAHIU CLAY IN BUILDING FACADES
RSC-1	Maja ANACKOVA, Simona DOMAZETOVSKA, Viktor GAVRILOSKI, Zlatko PETRESKI ANALYSIS OF THE EFFECTIVENESS OF SOUND BARRIERS FOR TRAFFIC NOISE CONTROL IN THE CITY OF SKOPJE

Thursday, September, 28th, 2023

18⁴⁵-19³⁰ Poster Session (Foyer in front of Platinum Halls)

Sanja AVRAMOSKA

RSC-3 DESIGNING RESILIENT URBAN RIVER CORRIDORS: TRENDS IN RIVER REDEVELOPMENT PROJECTS IN THE LAST TWO DECADES

RSC-4 Željka BELJKAŠ, Nikola KNEŽEVIĆ, Jasmina ĆETKOVIĆ, Bojan ADŽIĆ
FACILITY FOR THE STRAY DOGS POPULATION IN VARDAR PLANNING REGION

Dejan JANEV, Darko NAKOV, Toni ARANGJELOVSKI

RSC-7 CONCRETE FOR RESILIENT INFRASTRUCTURE: REVIEW OF BENEFITS, CHALLENGES AND SOLUTIONS

RSC-9 Goran MICKOVSKI, Ana IVANOVSKA DESKOVA, Jovan IVANOVSKI

OLD BUILDINGS NEW POSSIBILITIES, CASE STUDY OF INDUSTRIAL BUILDINGS IN SKOPJE

RSC-10 Goran MICKOVSKI, Slobodan VELEVSKI, Aleksandar RADEVSKI, Dimitar KRSTESKI
PERSPECTIVES FOR INDUSTRY DEVELOPMENT IN SKOPJE

Vasil PENCHEV, Doncho PARTOV

RSC-14 BRIEF CRITICAL ANALYSIS OF THE NORMATIVE SEISMIC INSURANCE OF BUILDINGS IN THE REPUBLIC OF BULGARIA

Borjan PETRESKI, Igor GJORGJIEV, Aleksandar ZHUVOVSKI

RSC-15 THE INFLUENCE OF THE RATIO OF SECTION SIDES OF A RECTANGULAR COLUMN ON SEISMIC RESPONSE OF A RC BUILDING

RSC-16 Irina POSTOLOVA, Zlatko ZAFIROVSKI, Meri CVETKOVSKA, Milosh KNEZHEVIJK
FIRE PROTECTION MEASURES IN TUNNELS

Zlatko SRBINOSKI, Zlatko BOGDANOVSKI, Filip KASAPOVSKI, Tome GEGOVSKI, Filip PETROVSKI
RSC-18 DEFINING REGIONAL GEODYNAMIC PHENOMENA BASED ON MEASUREMENTS IN ACTIVE REFERENCE NETWORKS

Goce TASESKI, Nikola KRSTOVSKI

RSC-19 INCREASING CITIES RESILIENCE THROUGH IMPROVED STORM WATER MANAGEMENT

SHM-1 Hassan AWADAT SALEM

A COMPARATIVE STUDY ON THE METHODS OF MIXING THE MODIFIED ASPHALT

SHM-2 Shpresim IBRAIMI, Stanislav MILOVANOVIC, Grozde ALEKSOVSKI, Boris TANESKI, Zoran ALТИPARMAKOV
RECONSTRUCTION OF THE XI CENTURY CATHEDRAL CHURCH AT KALE FORTRESS BITOLA

Liljana DIMEVSKA SOFRONIEVSKA, Ana TROMBEVA GAVRILOSKA, Meri CVETKOVSKA, Bojan KARANAKOV, Dobre NIKOLOVSKI
BIM-3

THE IMPORTANCE OF COMPUTER SOFTWARE IN BUILDINGS' ENERGY PERFORMANCE ANALYSIS

NES-17 Angela POPOSKA, Zoran RAKICEVIC, Aleksandra BOGDANOVIC, Antonio SHOKLAROVSKI, Filip MANOJLOVSKI
NUMERICAL MODELLING OF SELF-CENTERING CONCENTRICALLY BRACED STEEL FRAMES

MASE Gala Dinner (Diamond Hall)

Music: Petar Rendzov band

Dress code: Elegant

Included: Dinner and unlimited selected drinks

21⁰⁰-01⁰⁰

Friday, September, 29th, 2023

08³⁰-09³⁰

Invited speakers (Diamond Hall)

Chair: Toni ARANGJELOVSKI and Ivan IGNJATOVIC

Gerard J. O'REILLY

IP-8

EUROPEAN RESEARCH SYNERGIES TOWARDS LOSS AND RISK-DRIVEN MITIGATION APPROACHES

IP-1

Josip ATALIĆ, Mario UROŠ, Marta ŠAVOR NOVAK, Marija DEMŠIĆ, Maja BANIČEK, Alen KADIĆ, Nika RAKAS, Ivan KOSALEC, Maja MRKONJIĆ
2020 EARTHQUAKES IN CROATIA: FROM DAMAGE ASSESSMENT PROCESS TO THE NATIONAL STRATEGIES

09³⁰-09⁴⁰

Presentation of sponsors (Diamond Hall)

Chair: Toni ARANGJELOVSKI and Ivan IGNJATOVIC

GS-1

Gold Sponsor: DOJRAN STEEL

09⁴⁵-10⁴⁵

Parallel Session 4 (Diamond Hall)

Chair: Toni ARANGJELOVSKI and Ivan IGNJATOVIC

CM-17

Mladen ULIČEVIĆ, Jovan FURTULA, Ana PETRANOVIĆ
EXTRADOSED BRIDGE OVER MORAČA RIVER IN PODGORICA - DESIGN AND CONSTRUCTION

Goran MILUTINOVIC, Duško BOBERA

CM-6

COMPARATIVE ANALYSES OF BRIDGE PIER CAP USING STRUT-AND-TIE AND BEAM MODEL

CM-15

Elena STOKUCA, Marija STOKUCA TERZIEVSKA

INSTALLATION OF STEEL TRANSVERSE BEAMS UNDER THE PYLON OF THE RHINE BRIDGE IN LEVERKUSEN

CM-14

Nenad STOJCHEVSKI, Jovana VELICHKOVA

PROJECT FOR NEW BRIDGES OVER THE ELBE RIVER IN MAGDEBURG

09⁴⁵-10⁴⁵

Parallel Session 4 (Platinum 1 Hall)

Chair: Elena DUMOVA-JOVANOSKA and Marina RAKOČEVIĆ

Marko MARINKOVIĆ, Christoph BUTENWEG, Aleksa MILIJAŠ, Matija GAMS

NES-11

ISOLATION OF INFILL WALLS AS A SOLUTION FOR BOTH MASONRY INFILLS AND RC STRUCTURES: EXPERIMENTAL INVESTIGATION

CM-5

Ivan MILIĆEVIĆ, Milica VIDOVIC, Jelena DRAGAŠ, Branko MILOSAVLJEVIĆ

BEHAVIOUR AND DESIGN OF BOLTED CONNECTORS WITH MECHANICAL COUPLER: AN OVERVIEW

Lisa JUSUFI, Leart TARAVARI, Borjan PETRESKI

NES-6

INVESTIGATING THE PROBABILISTIC SEISMIC RISK ASSESSMENT PRINCIPLES THROUGH A TYPICAL CASE STUDY

Kefajet EDIP, Roberta APOSTOLSKA

RSC-6

SUSTAINABLE URBAN PLANNING THROUGH SEISMIC RISK ASSESSMENT - CASE STUDY KARPOSH

Zabedin NEZIRI, Radmila SALIC MAKRESKA

RSC-13

COMPARATIVE ANALYSIS OF AVAILABLE EARTHQUAKE CATALOGS FOR THE TERRITORY OF NORTH MACEDONIA AND THE BORDER REGION

Friday, September, 29th, 2023

09⁴⁵-10⁴⁵

Parallel Session 4 (Platinum 2 Hall)

Chair: Todorka SAMARDZIOSKA and Daniel CEKOV

UTILIZING AMBIENT NOISE TO EVALUATE POTENTIAL RESONANT CONDITIONS IN SEISMIC EVENTS: A CASE STUDY OF NOVO LISICHE, SKOPJE

Nikola PETROV, Nurzhan SATUOV, Radmila SALIC MAKRESKA

MMT-1

Hassan AWADAT SALEM

DEVELOPMENT OF PAVEMENT TEMPERATURE REGRESSION MODELS AT BRAK, LIBYA

MMT-7

Marija MIHAJLOVIĆ, Ljiljana STOŠIĆ MIHAJLOVIĆ

GREEN CONSTRUCTION AND GREEN CIRCULAR ECONOMY

MMT-17

Stojanche STOJANOV, Ljubomir TRAJCHEV

WATERPROOFING OF CONCRETE BRIDGES WITH POLYMER-MODIFIED BITUMINOUS MEMBRANES

Olivera BUKVIĆ, Mirjana MALEŠEV, Marijana SERDAR, Suzana DRAGANIĆ,

MMT-2

Vlastimir RADONJANIN

FEASIBILITY OF USING SUNFLOWER HUSK ASH AS AN ALTERNATIVE ACTIVATOR FOR ALKALI-ACTIVATED SLAG

10⁴⁵-11⁰⁰

Coffee break

11⁰⁰-11³⁰

Invited speakers (Diamond Hall)

Chair: Sergey CHURILOV and Branko MIOSAVLJEVIĆ

Eleni CHATZI

IP-3

AUGMENTED TWINS: PHYSICS AND DATA IN SUPPORT OF VIRTUALIZING STRUCTURAL SYSTEMS

11³⁰-11⁴⁵

Presentation of sponsors (Diamond Hall)

Chair: Sergey CHURILOV and Branko MIOSAVLJEVIĆ

SS-1

Silver Sponsor: KNAUF

SS-2

Silver Sponsor: MASON

SS-3

Silver Sponsor: WB&E

11⁴⁵-12⁴⁵

Parallel Session 5 (Diamond Hall)

Chair: Sergey CHURILOV and Branko MIOSAVLJEVIĆ

MRS-7

Predrag POPOVIC

ASSESSMENT AND REHABILITATION OF COLLAPSED FIRE DAMAGED CONCRETE STRUCTURES

MRS-8

Boško STEVANOVIĆ, Ivan GLIŠOVIĆ, Dragoljub TODOROVIĆ

PALACE OF GOLUBAC FORTRESS

SHM-4

Mirjana LABAN, Sandra NEDELJKOVIĆ, Željko ŽUGIĆ, Miloš KNEŽEVIĆ

POST DISASTER NEEDS ASSESSMENT METHODOLOGY

Sandra NEDELJKOVIĆ, Željko ŽUGIĆ, Mirjana LABAN, Zdravko MAKSIMOVIĆ

RSC-12

RISK REGISTER AS A BASIS FOR SUSTAINABLE PUBLIC INVESTMENTS STRATEGY IN REPUBLIC OF SERBIA

Friday, September, 29th, 2023

11⁴⁵-12⁴⁵ Parallel Session 5 (Diamond Hall)

Chair: Sergey CHURILOV and Branko MILOSAVLJEVIĆ

RSC-5 Suzana DRAGANIC, Mirjana LABAN, Igor ĐŽOLEV, Meri CVETKOVSKA

FIRE RESILIENCE AND BUILDINGS' SUSTAINABILITY IN RENOVATION WAVE

11⁴⁵-12⁴⁵ Parallel Session 5 (Platinum 1 Hall)

Chair: Ana TROMBEVA GAVRILOSKA and Igor PESKO

Novak JOKSIMOVIC, Ljiljana BRAJOVIC

CHALLENGES AND POTENTIAL OF FIBER OPTIC SENSORS FOR STRUCTURAL HEALTH MONITORING OF BRIDGES: A REVIEW

BIM-2 Sonja CHEREPNALKOVSKA, Dijana LIKAR

DIGITALIZATION IN CONSTRUCTION -BIM TECHNOLOGY

BIM-5 Teodora PANAJOTOVIKJ, Silvija PETRESKA, Boban BOJCHEVSKI, Boris TASEVSKI

IMPLEMENTATION OF 3D MODELING (BIM) FROM DESIGN TO EXECUTION

Nenad KRSTIVOJEVIĆ

MRS-5 DESIGN AND SUPERVISION ON THE CONSERVATION WORKS ON THE REHABILITATION OF THE RESIDENCE GEORGIJEVIC

SHM-5 Riste VOLCHEV, Nikola POSTOLOV, Koce TODOROV, Ljupcho LAZAROV

OVERVIEW OF THE DAMAGES TO THE AQUEDUCT IN SKOPJE

11⁴⁵-12⁴⁵ Parallel Session 5 (Platinum 2 Hall)

Chair: Vladimir VITANOV and Igor ĐŽOLEV

NES-4 Isidora JAKOVLJEVIĆ, Milan SPREMIĆ, Zlatko MARKOVIĆ

CONCRETE MODELING IN FINITE ELEMENT PUSH-OUT TEST SIMULATIONS

CM-7 Jelena MIRJANIĆ, Vladimir ŽIVALJEVIĆ, Igor ĐŽOLEV, Andrija RAŠETA

INFLUENCE OF NON-LINEAR MATERIAL MODELS ON SEISMIC RESPONSE OF RC BUILDING

Leart TARAVARI, Koce TODOROV

NES-29 COMPARATIVE ANALYSES OF VARIOUS NONLINEAR MODELLING APPROACHES OF REINFORCED CONCRETE FRAMES

Bojan SUSINOV, Josif JOSIFOVSKI, Sead ABAZI

CM-16 PILE BEARING CAPACITY CALCULATION USING RESULTS FROM STATIC AND DYNAMIC LOAD TESTS ACCORDING TO EUROCODE 7

NES-2 Anita GJUKAJ, Petar CVETANOVSKI, Ana Trombeva GAVRILOSKA

NUMERICAL ANALYSIS OF EXTENDED END-PLATE BOLTED CONNECTION

12⁴⁵-13⁴⁵ Buffet lunch (Foyer in front of Platinum Halls)

13⁴⁵-14⁴⁵ Invited speakers (Diamond Hall)

Chair: Goran MARKOVSKI and Vlastimir RADONJANIN

IP-7 Marco NOVARIN

RESILIENT BRIDGES IN SEISMIC AREAS

Peter MARK, Patrick FORMAN, Jannik HOPPE

IP-6 SUSTAINABLE CONCRETE ENGINEERING – STRATEGIES FOR EXISTING AND NEW STRUCTURES

Friday, September, 29th, 2023

14⁴⁵-15⁰⁰

Presentation of sponsors (Diamond Hall)

Chair: Goran MARKOVSKI and Vlastimir RADONJANIN

SS-5 Silver Sponsor: STRABAG

SS-6 Silver Sponsor: GIM

SS-7 Silver Sponsor: STOKUCA

15⁰⁰-16⁰⁰

Parallel Session 6 (Diamond Hall)

Chair: Goran MARKOVSKI and Vlastimir RADONJANIN

Vladimir GOCEVSKI

NES-3 EVALUATION OF HYDROELECTRIC POWERHOUSES FOUNDED ON ALKALI-AGGREGATE REACTION (AAR) AFFECTED CONCRETE

Tiana MILOVIĆ, Mirjana MALEŠEV, Ivan LUKIĆ, Vesna BULATOVIĆ, Vlastimir RADONJANIN

MMT-8 MECHANICAL, PHYSICAL AND DEFORMATION PROPERTIES OF REPAIR CEMENT-BASED MORTARS CONTAINING ZEOLITE

Nenad PEĆIĆ, Saša STOŠIĆ, Snežana MAŠOVIĆ, Dragan MAŠOVIĆ

CM-9 SHEAR DESIGN OF CIRCULAR CONCRETE SECTIONS ACCORDING TO THE EC2 TRUSS MODEL

Irina STEFANOVSKA

MMT-16 STIMULATED AUTOGENOUS SELF-HEALING OF CEMENT MATERIALS USING FLY ASH AND CRYSTAL FORMING ADDITIVES

Stefan Ž. MITROVIĆ, Ivan IGNJATOVIC

HARDENED PROPERTIES OF 3D PRINTED CONCRETE – EXPERIMENTAL INVESTIGATION

15⁰⁰-16⁰⁰

Parallel Session 6 (Platinum 1 Hall)

Chair: Zlatko MARKOVIĆ and Mile PARTIKOV

NES-13 Primož MOŽE

LOAD-DEFORMATION BEHAVIOR OF BOLTED BEARING-TYPE CONNECTIONS

Petar SUBOTIĆ, Duško LUČIĆ

NES-26 THE PATH TO AN ANALYTICAL SOLUTION FOR ELASTIC CRITICAL LATERAL TORSIONAL BUCKLING MOMENT FOR I BEAMS WITH BATTEN PLATES

Denis POPOVSKI, Mile PARTIKOV, Ditar MEMEDI

NES-19 EVALUATION OF THE BEHAVIOUR FACTOR FOR COMPOSITE STEEL-CONCRETE MOMENT FRAMES USING NONLINEAR STATIC ANALYSIS

NES-18 Denis POPOVSKI, Mile PARTIKOV, Ditar MEMEDI

ANALYSIS OF STEEL MOMENT FRAME USING NONLINEAR STATIC ANALYSIS

Leart TARAVARI, Denis POPOVSKI, Mile PARTIKOV

NES-28 COMPARATIVE ANALYSES OF THE DESIGN SEISMIC BEHAVIOR OF CHARACTERISTIC STEEL FRAMES

Friday, September, 29th, 2023

15⁰⁰-16⁰⁰

Parallel Session 6 (Platinum 2 Hall)

Chair: Meri CVETKOVSKA and Mirjana MALESEV

Arta SYLEJMANI, Ivana BANJAD PEČUR, Bojan MILOVANOVIĆ

MMT-21

PROPERTIES AND CHARACTERISTICS OF EXPANDED POLYSTYRENE INSULATION AND ITS USE IN BUILDINGS

RDS-5

Visar KRELANI, Muhamet AHMETI, Driton KRYEZIU, Liberato FERRARA, Theodor MENTZIKOFAKIS

INCREASED DURABILITY FOR CONCRETE STRUCTURES UNDER SEVERE CONDITIONS BY USING CRYSTALLINE ADMIXTURES

MMT-6

Milica JOVANOSKA-MITREVSKA, Todorka SAMARDZIOSKA, Aleksandar MILENKOVIC, Danica BOLJEVIC

METAMATERIAL-BASED LIGHTWEIGHT DOUBLE WALL FOR LOW FREQUENCY NOISE REDUCTION

MMT-19

Milica STOJKOVIĆ, Marina AŠKRABIĆ, Aleksandar RADEVIC, Aleksandar SAVIĆ, Dimitrije ZAKIĆ

SOLIDIFIED WASTE WATER TREATED SLUDGE AS PARTIAL REPLACEMENT OF CEMENT IN CONCRETE COMPOSITES

Marija TODOROVIĆ, Nađa SIMOVIĆ, Ivan GLIŠOVIĆ

NES-30

BENDING BEHAVIOUR OF CROSS LAMINATED TIMBER PANELS MADE FROM LOCALLY SOURCED SPRUCE WOOD

16⁰⁰-16¹⁵

Coffee break

16¹⁵-16⁴⁵

Invited speakers (Diamond Hall)

Chair: Josif JOSIFOVSKI and Primoz MOZE

Rüdiger HÖFFER

IP-4

FUTURE EUROPEAN STANDARDS FOR THE DETERMINATION OF GENERAL ACTIONS FOR THE DESIGN OF STRUCTURES

16⁴⁵-17⁴⁵

Parallel Session 7 (Diamond Hall)

Chair: Josif JOSIFOVSKI and Primoz MOZE

RDS-4

Radomir FOLIĆ, Zoran BRUJIĆ

NEW TENDENCIES IN DESIGNING DURABILITY OF CONCRETE STRUCTURES

CM-18

Todor VACEV, Danijela ĐURIĆ MIJOVIĆ, Miloš MILIĆ, Andrija ZORIĆ

ANALYSIS OF WIND ACTION ON CONTAINER STACKS ACCORDING TO EC STANDARDS

RDS-6

Goran MILLUTINOVIC, Rade HAJDIN, Ivana ANDRIJANIC, Milos MILOSAVLJEVIC, Marko BAJIC
OVERVIEW OF BRIDGE TRAFFIC LOADS IN SERBIA USING B-WIM

NES-5

Dejan JANEV, Toni ARANGJELOVSKI, Darko NAKOV, Goran MARKOVSKI, Peter MARK
DYNAMIC BEHAVIOUR OF RC BRIDGES UNDER MOVING LOADS: A SIMPLIFIED NUMERICAL AND ANALYTICAL APPROACH

16⁴⁵-17⁴⁵

Parallel Session 7 (Platinum 1 Hall)

Chair: Zoran RAKICEVIC and Vladimir VUKOBRAТОTOVIC

RSC-17

Arthur ROSHI, Golubka NECHEVSKA-CVETANOVSKA, Jordan BOJADJIEV

ENHANCING SEISMIC RESILIENCE OF RC BUILDING COLUMNS USING CFRP

Friday, September, 29th, 2023

16⁴⁵-17⁴⁵

Parallel Session 7 (Platinum 1 Hall)

Chair: Zoran RAKICEVIC and Vladimir VUKOBRAТОVIC

Luka NAUMOVSKI, Boris AZINoviĆ, Tomaž PAZLAR, Matija GAMS

NES-15

PUSHOVER-BASED FRAGILITY ANALYSIS OF MULTI-STORY CROSS-LAMINATED TIMBER PLATFORM-TYPE BUILDINGS

NES-20

Nikola POSTOLOV, Riste VOLCHEV, Kristina MILKOVA, Koce TODOROV, Elena DUMOVA-JOVANOSKA
SEISMIC VULNERABILITY OF OPEN GROUND FLOOR RC FRAMES WITH MASONRY INFILL

NES-27

Leart TARAVARI, Lisa JUSUFI, Borjan PETRESKI, Koce TODOROV
PERFORMANCE-BASED ANALYSIS OF A MULTI-STORY AND MULTI-BAY REINFORCED CONCRETE FRAME

NES-8

Toni KITANOVSKI, Vlatko SHESOV, Julijana BOJADJIEVA, Kemal EDIP, Dejan IVANOVSKI
EFFECTS OF PRE-EXISTING CYCLIC LOADING ON TRIAXIAL MONOTONIC BEHAVIOR

17⁴⁵-19¹⁵

Round table: Current state and trends in structural engineering

19¹⁵-19³⁰

Closing of the Symposium

MASE Closing party (Tribeca Restaurant & Bar)

Music:

21⁰⁰-01⁰⁰

The Ringtones (21⁰⁰-23⁰⁰)

The Hounds (23⁰⁰-01⁰⁰)

Dress code: Casual/MASE T-shirt

(Included: Buffet dinner and Welcome cocktail drink)

Saturday, September, 30th, 2023

Excursion

Technical visit of Ljubljanska Bridge and touristic visit of Canyon Matka (Supported by ADING and GRANIT)

Dress code: Sport/Sport shoes

10⁰⁰-10³⁰

Bus transport: Hotel Hilton – Ljubljanska Bridge

10³⁰-11³⁰

Site visit of Ljubljanska Bridge

11³⁰-12⁰⁰

Bus transport: Ljubljanska Bridge – Canyon Matka

12⁰⁰-13³⁰

Visit of Canyon Matka

13³⁰-15³⁰

Lunch

15³⁰-16⁰⁰

Bus transport: Canyon Matka - Hotel Hilton

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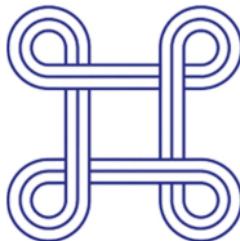
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