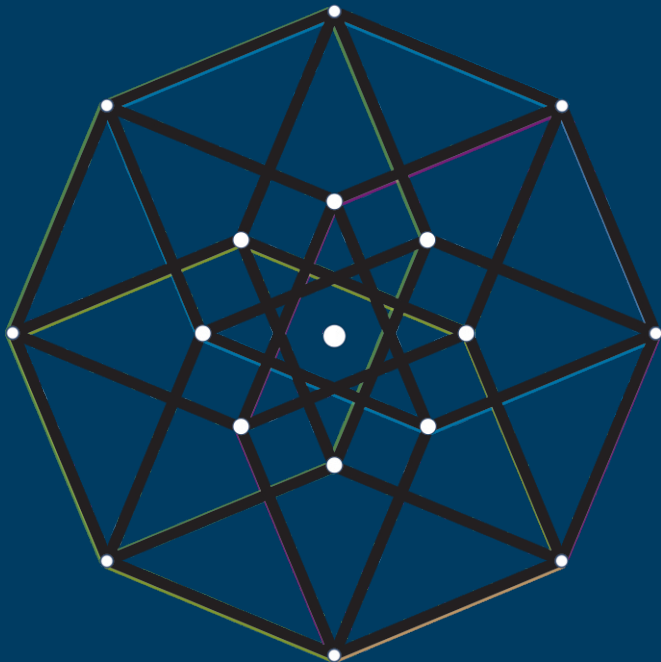


# ФИНАЛНА ПРОГРАМА FINAL PROGRAMME



ГРАДЕЖНО КОНСТРУКТОРСТВО – БЕЗ ОГРАНИЧУВАЊА  
STRUCTURAL ENGINEERING – LIMITLESS



**ДГКМ**

ДРУШТВО НА  
ГРАДЕЖНИ  
КОНСТРУКТОРИ НА  
МАКЕДОНИЈА

**MASE 21**

MACEDONIAN  
ASSOCIATION OF  
STRUCTURAL  
ENGINEERS

МЕЃУНАРОДЕН СИМПОЗИУМ  
INTERNATIONAL SYMPOSIUM

ОХРИД, С. МАКЕДОНИЈА  
OHRID, N. MACEDONIA  
24 - 27 септември 2025  
September 24<sup>th</sup> - 27<sup>th</sup> 2025



15<sup>00</sup>-17<sup>00</sup>

## Registration of participants

17<sup>00</sup>-18<sup>30</sup>

## Opening Ceremony (Diamond Hall)

- Opening ballet show "Limitless"

### **Welcome and Opening speech**

- Darko Nakov, President of MASE

### **Salute speeches**

- Goran Markovski, Dean of FCE, UKIM, N. Macedonia
- Maria Pina Limongelli, Vice-President of IABSE
- Ivan Ignjatović, President of ASSES, Serbia
- Primož Može, President of SASE, Slovenia
- Milivoje Rogać, Dean of FCE, Podgorica, Montenegro
- Peter Mark, RUB, Germany
- Doncho Partov, USEA "L.Karavelov", Bulgaria
- Kristinka Chulak, President of the Chamber of certified architects and certified engineers, N. Macedonia
- Igor Gjorgjiev, Director of IZIIS, UKIM, N. Macedonia
- Aneta Hristova Popovska, Dean of AFS, UKIM, N. Macedonia

### **Patron speech**

- Aleksandar Nikoloski, Deputy President of the Government of the Republic of N. Macedonia and Minister for Transport and communications
- Traditional music act, Damjan Pejchinoski & Nikola Micevski
- **Granting of MASE Awards**
- **Granting of Honorary and Meritorious memberships of MASE**

18<sup>30</sup>-19<sup>00</sup>

## Keynote Lecture (Diamond Hall)

IP-2

Eugen BRÜHWILER

UHPFRC TO IMPROVE EXISTING AND BUILD NEW, SUSTAINABLE BRIDGES

19<sup>00</sup>-21<sup>00</sup>

## Welcome Reception

08<sup>00</sup>-09<sup>00</sup> **Registration of participants**

09<sup>00</sup>-11<sup>00</sup> **SESSION 1 (Diamond Hall)**

Chair: Simona BOGOEVSKA & Gjorgji GOSHEV

09<sup>00</sup>- 09<sup>30</sup> **Keynote Lecture**

Maria PINA LIMONGELLI

IP-7

DIGITAL BRIDGES: HARNESSING STRUCTURAL HEALTH MONITORING FOR INTEGRITY MANAGEMENT

09<sup>30</sup>-10<sup>00</sup> **Presentation of sponsors**

Platinum Sponsors: ADING | BECHTEL & ENKA

10<sup>00</sup>-11<sup>00</sup> **MASE Awards**

MA-1

Tome TROMBEV, Ljubisha CAUSEVSKI, Zlatko SAMARDZIOSKI, Robert KONESKI, Ilija PETROVSKI, Aleksandar TROMBEV, Filip SPASEVSKI, Toni JOVANOVSKI  
MANUFACTURING, TRANSPORT AND INSTALLATION OF STEEL STRUCTURE FOR TWO COMPOSITE BRIDGES IN TIRANA – ALBANIA

MA-2

Goran CHAPRAGOSKI

SEISMIC ASSESSMENT AND RETROFITTING OF RC BUILDINGS USING INNOVATIVE BUILDING MATERIALS

MA-3

Milica JOVANOSKA-MITREVSKA

ACOUSTIC RESONANT METAMATERIALS FOR SOUND TRANSMISSION REDUCTION

MA-4

Aleksandar ZHUROVSKI

DAMAGE EVALUATION OF BUILDING STRUCTURES USING SEISMIC INTERFEROMETRY

MA-5

Marija DOCEVSKA JOVANOVA

CONCRETE CREEP UNDER VARIABLE LOADINGS

11<sup>00</sup>-11<sup>30</sup> **Coffee break**

11<sup>30</sup>-13<sup>30</sup>

## **SESSION 2 (Diamond Hall)**

Chair: Ana TROMBEVA-GAVRILOSKA & Igor GJORGJIEV

11<sup>30</sup>-12<sup>00</sup>

### **Keynote Lecture**

Josè C. MATOS

IP-8

IMPLEMENTING NOVEL TECHNOLOGIES TOWARDS THE SUSTAINABLE MANAGEMENT OF EXISTING INFRASTRUCTURES

12<sup>00</sup>-12<sup>30</sup>

### **Presentation of sponsors**

Platinum Sponsors: GOLDEN ART | PENETRON IZOTEHNA

12<sup>30</sup>-13<sup>30</sup>

### **MASE Awards**

Jasna GRUJOSKA-KUNESKA

MA-6

MODERN APPROACH IN EXISTING STATE DIAGNOSIS OF CULTURAL-HISTORICAL MONUMENTS – ARCHITECTURAL PERSPECTIVE

Borjan PETRESKI

MA-7

EVALUATION OF DESIGN METHODOLOGY FOR SELF-CENTRING CONCENTRICALLY BRACED FRAMES

Angela POPOSKA, Zoran RAKICEVIC, Theodoros L. KARAVASILIS

MA-8

ENHANCED SELF-CENTERING BRACED STEEL FRAMES IN SEISMIC PRONE REGIONS

Liljana DIMEVSKA SOFRONIEVSKA

MA-9

ENERGY PERFORMANCE ANALYSIS OF MODERNIST BUILDINGS WITH APPLIED FACADE NANOMATERIALS

Aleksandar ZLATESKI

MA-10

ASSESSMENT AND UPGRADING OF SEISMIC RESILIENCE OF URBAN CULTURAL HERITAGE CENTERS

13<sup>30</sup>-14<sup>30</sup>

### **Buffet lunch (Restaurant)**

14<sup>30</sup>-15<sup>15</sup>

## **SESSION 3 (Diamond Hall)**

Chair: Darko NAKOV & Ivan IGNJATOVIĆ

14<sup>30</sup>-15<sup>00</sup>

### **Keynote Lecture**

Jesper PIHL

IP-9

LONG SPAN SUSPENSION BRIDGES WITHOUT LIMITS

15<sup>00</sup>-15<sup>15</sup>

### **Presentation of sponsors**

Platinum Sponsor: KARPOSH

## 15<sup>15</sup>-16<sup>15</sup> Parallel session 3-1: (Diamond Hall)

Chair: Darko NAKOV & Ivan IGNJATOVIĆ

- |       |  |
|-------|--|
| CM-14 | <b>Marco NOVARIN</b><br>SEISMIC ISOLATION OF BRIDGES FOR ROADWAY AND RAILWAY INCREMENTALLY LAUNCHED DECKS IN AZERBAIJAN AND SERBIA |
| TEA-8 | <b>Radomir FOLIĆ, Miloš ČOKIĆ</b><br>SEISMIC FRAGILITY ANALYSIS OF CORRODED REINFORCED CONCRETE BRIDGES                            |
| CM-12 | <b>Goran MILUTINOVIC, Rade HAJDIN</b><br>TYPICAL BRIDGE REHABILITATION ISSUES IN THE U.S.A.  |
| RDS-2 | <b>Doncho PARTOV, Jiří STUDNIČKA, Hartmut PASTERNAK, Lazar GEORGIEV</b><br>STEEL BRIDGE ACCIDENTS AND THE LESSONS THEY TEACH       |

## 15<sup>15</sup>-16<sup>15</sup> Parallel session 3-2: (VIP Hall)

Chair: Kristina MILKOVA & Vlastimir RADONJANIN

- |        |   |
|--------|---|
| MMT-2  | <b>Igor GJORGJIEV, Marija VITANOVA, Borjan PETRESKI, Alfred STRAUSS, Florentina Doina IONESCU, Sérgio FERNANDES</b><br>A COMPARATIVE RISK ASSESSMENT OF GREY INFRASTRUCTURE AND NB SOLUTIONS FOR PROTECTING CRITICAL INFRASTRUCTURE |
| CM-23  | <b>Ljubomir VLAISAVLJEVIĆ, Milica RADOVIĆ</b><br>BRIDGES IN INTERCHANGES KUZMIN AND BOSUT, WHICH ARE PART OF THE HIGHWAY KUZMIN – SREMSKA RACA  |
| MMT-11 | <b>Jovana TOPALIĆ, Vladimir MUČENSKI, Maja PETROVIĆ</b><br>DELPHI-BASED RISK ASSESSMENT MODEL FOR WASTEWATER TREATMENT: TOWARD SUSTAINABLE DEVELOPMENT  |
| SHM-2  | <b>Bernardica CRNOGORAC, Borna GRADEČAK, Domagoj DOBRILOVIĆ, Marko BABIĆ, Marko BUKOVAC</b><br>TESTING AND SURVEYING OF WATER TOWER TŽV "GREDELJ" FOR THE PURPOSE OF BUILDING CONDITION ASSESSMENT                                  |

## 15<sup>15</sup>-16<sup>15</sup> Parallel session 3-3: (Golden Hall)

Chair: Josif JOSIFOVSKI & Djordje LADJINOVIC

- |       |   |
|-------|---|
| TEA-4 | <b>Kenneth C. CRAWFORD, Evan BALDWIN</b><br>APPLYING THE FOURIER TRANSFORM TO ANALYZE STRUCTURAL MATERIAL DETERIORATION   |
| CM-13 | <b>Jelena MIRJANIĆ, Petar LAZIČIĆ, Igor DŽOLEV, Andrija RAŠETA, Vladimir ŽIVALJEVIĆ</b><br>IMPORTANCE OF PHASED CONSTRUCTION ANALYSIS IN STRUCTURAL ENGINEERING ASSIGNMENTS |

TEA-10	<b>Marija GALEVSKA, Simona BOGOEVSKA, Kristina MILKOVA, Sergej CHURILOV, Elena DUMOVA-JOVANOSKA</b> VIBRATIONS IN BUILDINGS: COMPARATIVE ANALYSIS ACCORDING TO ISO 2631-1 AND ISO 2631-2
TEA-9	<b>Vasko GACEVSKI, Stefani GJORGJEVSKA, Zlatko ZAFIROVSKI</b> QUANTITATIVE TIME ANALYSIS: COMPARING TWO TUNNEL SEGMENTS OF EQUAL LENGTH

## 16<sup>15</sup>-17<sup>00</sup> **Posters & Coffee (Terrace)**

AI-4	<b>Mihailo OSTOJIC, Milos KNEZEVIC</b> OPTIMIZING CONSTRUCTION START DATES USING NEURAL NETWORKS: THE ŽABLJAK MOUNTAIN CASE STUDY
AI-6	<b>Žarko PETROVIĆ, Bojan MILOŠEVIĆ, Nenad KOJIĆ</b> ARTIFICIAL NEURAL NETWORKS AND THEIR APPLICATION IN THE DESIGN OF MASONRY STRUCTURES
AI-7	<b>Dragana STANOJEVIĆ, Vladimir MUČENSKI, Igor PEŠKO, Mirjana TERZIĆ, Milena SENJAK PEJIĆ, Jovana TOPALIĆ</b> ARTIFICIAL INTELLIGENCE IN CONSTRUCTION – ANALYSIS OF METHODOLOGIES, ADVANTAGES AND CHALLENGES
AT-15	<b>Valentina ZILESKA PANCOVSKA, Admir AJDINOSKI, Todorka SAMARDZIOSKA, Sead ABAZI</b> COSTS FOR TEMPORARY CONSTRUCTION SITE FOR BUILDINGS
AT-6	<b>Bojan ILIOSKI, Violeta GJESHOVSKA, Aleksandar BOZINOV</b> NUMERICAL ANALYSIS OF FLOOD WAVE PROPAGATION DUE TO DAM FAILURE
AT-8	<b>Eva KRSTESKA, Emilija STOJKOVSKA</b> INTEGRATED ENGINEERING APPROACH FOR THE DESIGN AND ANALYSIS OF A STEEL STORAGE STRUCTURE IN A SEISMIC ZONE IN BELGRADE
BIM-1	<b>Marija ARANGJELOVSKA, Denis POPOVSKI, Mile PARTIKOV</b> APPLICATION OF SOFTWARES FOR ANALYSIS OF STEEL CONSTRUCTION OF A MODULAR PARKING LOT
BIM-2	<b>Jelena BLEIZIFFER, Jurica Tin HLEBEC</b> BIM FOR BRIDGE MANAGEMENT SYSTEMS
CM-2	<b>Jelena BLEIZIFFER, Predrag PRESEČKI, Dunja BOŽIĆ</b> ANALYSIS OF TWO VARIANTS FOR THE FLOOR SLABS ON EXAMPLE OF THE SKYLINE SKYSCRAPER IN BELGRADE
CM-8	<b>Biljana LOVČEVIĆ-KURELJUŠIĆ, Đorđe JOVANOVIĆ, Rastislav KRAGIĆ, Anka STARČEV-ČURČIN</b> ANALYSIS OF THE IMPACT OF STORM WINDS ON THE SUPPORTING STRUCTURES OF SOLAR POWER PLANTS AND PROPOSALS FOR STRUCTURAL ELEMENTS' STRENGTHENING
CM-16	<b>Nada PAVLOVIĆ, Lazar STANKIĆ</b> STRUCTURAL SOLUTIONS FOR BRIDGES AND OVERPASSES ON THE E763 HIGHWAY, PRELJINA - POŽEGA SECTION

CM-19	Anita RUSOMAROVSKA, Simona KOSTESKA, Vasilija K. SHTERJOSKI, Merita ISMAILI, Katerina TRIFUNOSKA PRECAST REINFORCED CONCRETE STRUCTURES: APPLICATION, ADVANTAGES AND SEISMIC RESISTANCE
CM-21	Bojan SUSINOV, Sead ABAZI, Pavle PETROVSKI, Bulent SULOODZA A DESIGN APPROACH FOR WIND TURBINE FOUNDATIONS IN VARYING ROCK TYPES
CM-22	Ivana TADIĆ, Mirko VOJINOVIĆ DESIGN OF BRIDGE M1 AT KM 0+225 ON KRAGUJEVAC BYPASS
MMT-3	Bojan GOLABOSKI, Todorka SAMARDZIOSKA, Dragan STAMEV SUSTAINABLE APPLICATION OF RED CLAY IN MASONRY BLOCKS
MMT-4	Vesna GRUJOSKA, Todorka SAMARDZIOSKA BACTERIAL SELF-HEALING CEMENT COMPOSITES: WORLD RESEARCH REVIEW
MMT-5	Jasna GRUJOSKA-KUNESKA, Veronika SHENDOVA SAFEGUARDING BUILT HERITAGE: A NON-DESTRUCTIVE APPROACH TO SUSTAINABLE CONSERVATION
MMT-9	Aleksandra RADUJKOVIĆ, Tatjana KOČETOV MIŠULIĆ, Ivan LUKIĆ, Zoran BRUJIĆ PREDICTION OF MODULUS OF ELASTICITY OF TWO POPLAR CLONES USING ULTRASOUND TECHNIQUE
MMT-10	Marko STOJANOVIĆ, Ksenija JANKOVIĆ, Dragan BOJOVIĆ, Anja TERZIĆ, Ljiljana MILIČIĆ, Slobodan ŠUPIĆ THE INFLUENCE OF CRUMB RUBBER ON THE CHLORIDE PENETRATION RESISTANCE OF CONCRETE
MRS-3	Marija PETKOVSKA REASONS FOR DAMAGE AND REHABILITATION OF BUILDINGS
SHM-9	Zlatko SRBINOSKI, Zlatko BOGDANOVSKI, Filip KASAPOVSKI, Filip PETROVSKI, Tome GEGOVSKI APPLICATION OF CONTEMPORARY GEODETIC MEASUREMENT TECHNOLOGIES FOR SPECIALIZED STRUCTURAL ANALYSE

17<sup>00</sup>-17<sup>50</sup>

## **SESSION 4 (Diamond Hall)**

Chair: Sergey CHURILOV & Miloš KNJEZEVIĆ

17<sup>00</sup>-17<sup>30</sup>

### **Keynote Lecture**

IP-4

**Tomo CEROVŠEK**

THE DIGITAL TRANSFORMATION OF STRUCTURAL ENGINEERING WITH BUILDING INFORMATION MODELLING (BIM) AND AI

17<sup>30</sup>-17<sup>50</sup>

### **Presentation of sponsors**

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## THURSDAY | September 25 | 2025

17<sup>50</sup>-18<sup>50</sup>

### **Parallel session 4-1: (Diamond Hall)**

Chair: Sergey CHURILOV & Miloš KNJEZEVIĆ

CM-1

**Toni ARANGJELOVSKI, Sonja CHEREPNALKOVSKA, Katerina VELJANOVSKA, Goce PRANGOVSKI**

CHALLENGES IN THE STANDARDIZATION OF CONSTRUCTION PRODUCTS AND PROCESSES IN THE CONSTRUCTION INDUSTRY

BIM-4

**Nikola NISEV, Denis POPOVSKI, Mile PARTIKOV**

IMPLEMENTATION AND EVOLUTION OF BIM

BIM-3

**Nikola NISEV, Denis POPOVSKI, Mile PARTIKOV**

COMPARATIVE EVALUATION OF DIFFERENT BIM APPLICATIONS FOR STRUCTURAL DESIGN

CM-18

**Nikola RAJIĆ**

CUSTOMIZABLE PARAMETRIC FRAMEWORKS FOR BRIDGE DESIGN IN LARGE-SCALE PROJECTS

17<sup>50</sup>-18<sup>35</sup>

### **Parallel session 4-2: (VIP Hall)**

Chair: Aleksandra BOGDANOVIC & Duško LUČIĆ

CM-24

**Jovana VUJIČIĆ, Slobodan JAČOVIĆ**

STABILITY PROBLEMS OF THE NEW SAVA BRIDGE STEEL SUPERSTRUCTURE

CM-20

**Elena STOKUĆA, Marija STOKUĆA TERZIEVSKA, Semrane HEBIPI**

STRUCTURE NECESSARY FOR THE CRUCIAL INSTALLATION PHASES OF THE BRIDGE

AT-7

**Jovanka KOVACHESKA**

TIED-ARCH STEEL BRIDGES: THE COMPLEXITY OF INSTALLATION SHOWN THROUGH THE PROJECT EU ZOLLKANAL - RENEWAL OF THE VEDDEL BRIDGES

17<sup>50</sup>-19<sup>05</sup>

### **Parallel session 4-3: (Golden Hall)**

Chair: Vladimir VITANOV & Sandra KLINGE

ANM-1

**Milica JOVANOSKA-MITREVSKA, Kristina MILKOVA, Vladimir VITANOV**

MACHINE LEARNING PREDICTION OF MOMENT-CURVATURE RESPONSE OF RANDOMIZED STEEL SECTIONS

ANM-2

**Simona BOGOEVSKA**

DATA-DRIVEN PROGNOSTIC MODELING OF ENGINEERING STRUCTURES WITHIN A MACHINE LEARNING FRAMEWORK

ANM-3

**Sreten MASTILOVIC, Branislav DJORDJEVIC, Aleksandar SEDMAK**

A DATA-DRIVEN OUTLOOK ON THE CHARACTERIZATION OF FERRITIC STEELS IN THE DUCTILE-BRITTLE TRANSITION REGION

## THURSDAY | September 25 | 2025

ANM-4

**Luzie SCHMOLLACK, Sandra KLINGE**

A MACHINE LEARNING APPROACH FOR A STATISTICAL HOMOGENIZATION METHOD FOR ELASTIC MATERIALS

ANM-5

**Tina WIECZOREK**

STRESS-CONSTRAINED TOPOLOGY OPTIMIZATION

21<sup>00</sup>-01<sup>00</sup>

**MASE Gala Dinner (Diamond Hall)**

Music: Southpark the band

Dress code: Elegant

Included: Dinner and unlimited selected drinks

09<sup>00</sup>-10<sup>00</sup>

**SESSION 5 (Diamond Hall)**

Chair: Elena DUMOVA-JOVANOSKA & Veronika SHENDOVA

09<sup>00</sup>-09<sup>30</sup>

**Keynote Lecture**

IP-3

**Christoph BUTENWEG**

INNOVATIVE SOLUTIONS AND DESIGN FOR MODERN AND SUSTAINABLE MASONRY UNDER SEISMIC LOADS

09<sup>30</sup>-10<sup>00</sup>

**Presentation of sponsors**

Silver Sponsors: CEIM | DOJRAN STEEL | EPTISA | ISOGKP | MASON ENGINEERING | PEIKKO

10<sup>00</sup>-11<sup>00</sup>

**Parallel session 5-1: (Diamond Hall)**

Chair: Elena DUMOVA-JOVANOSKA & Veronika SHENDOVA

CM-9

**Marko MARINKOVIĆ, Christoph BUTENWEG**

ENHANCED SEISMIC SAFETY OF MASONRY INFILLED RC FRAME STRUCTURES: INODIS CONNECTION

TEA-15

**Liljana B. MIJALKOVA, Aleksandra BOGDANOVIC, Marko MARINKOVIĆ, Enrico TUBALDI, Bartolomeo PANTÒ**

ANALYTICAL APPROACH TO SEISMIC BEHAVIOUR ASSESSMENT OF RC FRAME STRUCTURES WITH RUBBER JOINTED MASONRY INFILL

MRS-6

**Antonio SHOKLAROVSKI, Antonio FORMISANO, Aleksandra BOGDANOVIC, Zoran RAKICEVIC, Angela POPOSKA, Filip MANOJLOVSKI, Marco DOMANESCHI, Emilia MEGLIO, Vlatko SHESHOV, Julijana BOJADJIEVA, Toni KITANOVSKI, Dejan IVANOVSKI, Raffaele CUCUZZA, Valentina VILLA, Giuseppe Carlo MARANO**

EXPERIMENTAL INVESTIGATION OF AN EXOSKELETON SYSTEM FOR INTEGRATED STRUCTURAL AND ENERGY RETROFITTING OF REINFORCED CONCRETE STRUCTURES

TEA-11

**Maja GOSHEVA, Aleksandra BOGDANOVIC, Zoran RAKICEVIC, Christian MEINHARDT**

NUMERICAL MODELING OF GERB VISCOUS WALL DAMPERS WITH THE EXPONENTIAL MAXWELL MODEL

10<sup>00</sup>-11<sup>00</sup>

**Parallel session 5-2: (VIP Hall)**

Chair: Vlatko SHESHOV & Milica JOVANOSKA-MITREVSKA

CM-7

**Milorad JOVANOVSKE, Igor PESHEVSKI, Jovan Br. PAPIC, Sead ABAZI**

INTEGRATED METHODOLOGY FOR DESIGN OF GEOTECHNICAL STRUCTURES

TEA-13

**Josif JOSIFOVSKI, Guxim RRUDHANI, Sead ABAZI, Bojan SUSINOV**

INVESTIGATING THERMO-MECHANICAL RESPONSES OF ENERGY PILES THROUGH SCALED PHYSICAL MODELLING

# FRIDAY | September 26 | 2025

TEA-20

**Nikola PETROV, Julijana BOJADJIEVA, Jordan BOJADJIEV**

EFFECTS OF KINEMATIC SOIL-STRUCTURE INTERACTION ON THE NONLINEAR SEISMIC RESPONSE OF RC FRAME STRUCTURES

TEA-3

**Matija BOŠKOVIĆ, Milan STAMENIĆ, Marija NEFOVSKA-DANILOVIĆ**

SOIL-STRUCTURE INTERACTION EFFECT ON SEISMIC RESPONSE OF MID-RISE RC BUILDINGS

10<sup>00</sup>-11<sup>00</sup>

## Parallel session 5-3: (Golden Hall)

Chair: Meri CVETKOVSKA & Daniel CEKOV

AT-9

**Mirjana LABAN, Suzana DRAGANIĆ, Meri CVETKOVSKA, Elona POJANI, Perseta GRABOVA**

BUILDING CAPACITIES AND INTERDISCIPLINARY KNOWLEDGE FOR A SUSTAINABLE AND RESILIENT SOCIETY

AT-4

**Suzana DRAGANIĆ, Mirjana LABAN, Anka STARČEV-ČURČIN, Srdjan POPOV, Marko MARKOVIĆ, Miloš KNEŽEVIĆ, Meri CVETKOVSKA**

BOOSTING DIGITAL AND GREEN SKILLS FOR A RESILIENT AND SUSTAINABLE BUILT ENVIRONMENT

MMT-7

**Vuk MILOŠEVIĆ, Marija JEVRIĆ, Olga ČALASAN, Nemanja RANĐELOVIĆ**

INDOOR AIR TEMPERATURE MEASUREMENT IN A MEMBRANE-COVERED BUILDING IN PODGORICA

AT-10

**Aleksandar PETANOVSKI, Marija PETROVA**

MEGASTRUCTURE AS A PARERAGON FOR URBAN HOUSING COEXISTENCE: THE CASE OF THE SKOPJE CITY WALL

AT-14

**Milco UZUNOV**

VIDEO PROJECTION FOR FACADE SURFACE DESIGN

11<sup>00</sup>-11<sup>30</sup>

## Coffee break

11<sup>30</sup>-12<sup>25</sup>

## SESSION 6 (Diamond Hall)

Chair: Toni ARANGJELOVSKI & Peter MARK

11<sup>30</sup>-12<sup>00</sup>

### Keynote Lecture

IP-6

**Albert de la FUENTE**

SUSTAINABILITY OF SMART 3D-PRINTED CONCRETE STRUCTURES

12<sup>00</sup>-12<sup>25</sup>

### Presentation of sponsors

Silver Sponsors: STOKUĆA | STO-SEH | STRABAG | TITAN USJE | WB&E

12<sup>30</sup>-13<sup>30</sup>

## Parallel session 6-1: (Diamond Hall)

Chair: Toni ARANGJELOVSKI & Peter MARK

RDS-4

**Bojidar YANEV**

ROBUSTNESS, RESILIENCE AND SUSTAINABILITY AS ENGINEERING AND ECONOMIC CRITERIA OF BRIDGE MANAGEMENT

CM-17

**Nenad PECIĆ, Saša STOŠIĆ, Snežana MAŠOVIĆ**

EUROCODE 2: CRACKING IN PRESTRESSED CONCRETE

SHM-1

**Sergey CHURILOV, Ayman ELFOULY**

FROM CRACKS TO COLLAPSE: CASE STUDIES IN APPLIED ELEMENT METHOD FOR EXTREME STRUCTURAL ANALYSIS

MMT-1

**Ane ANCHEV, Goce BOGDANOSKI, Goce CVETKOSKI**

DECARBONIZATION OF CEMENT BY INTRODUCING SCM: FLY ASH AND RECYCLED CONCRETE FINES

12<sup>30</sup>-13<sup>30</sup>

## Parallel session 6-2: (VIP Hall)

Chair: Koce TODOROV & Marina RAKOČEVIĆ

SHM-8

**Burbuqe SHATRI, Golubka NECHEVSKA-CVETANOVSKA, Bajram SHEFKIU, Vlora SHATRI**

POST-EARTHQUAKE DAMAGE EVALUATION OF URBAN BUILDING STOCK: A CASE STUDY OF GJILAN (KOSOVA)

MRS-7

**Mustafa TUMER TAN, Baris BINICI, Ozkan KALE, Guney OZCEBE**

SEISMIC PERFORMANCE OF AN FRP-SHEARWALL RETROFITTED RC BUILDING AFFECTED BY 2023 TURKISH EARTHQUAKES

MRS-1

**Duško BOBERA, Predrag BAKIĆ, Isidora GAVRILOVIC-BUKVIC, Goran MILUTINOVIC, Nikola RAJIĆ, Marko LEKOVIĆ**

SEISMIC DESIGN OF BRIDGES ON KRAGUJEVAC BYPASS

TEA-17

**Zoran MIRCEVSKI, Dragana BANOVSKA, Marina KORDOSKA, Mihail GAREVSKI**

EXTENDED INTERACTION ANALYSIS OF CONFINED AND UNCONFINED REINFORCED CONCRETE SECTIONS WITH SYMMETRICAL AND ASYMMETRICAL REINFORCEMENT

12<sup>30</sup>-13<sup>30</sup>

## Parallel session 6-3: (Golden Hall)

Chair: Todorka SAMARDZIOSKA & Mladen ULIČEVIĆ

RDS-1

**Klaus LANZINGER, Larry KRAUSER**

SUSTAINABLE BRIDGE CONSTRUCTION USING PLASTIC DUCTS WITH REFERENCE TO EUROCODE 2 AND FIB BULLETIN NO. 113

RDS-3

**Irina STEFANOVSKA, Nikola UZUNOV**

PROTECTION OF RC STRUCTURES CORROSION INHIBITORS

MRS-4

**Mihail PETROV, Ivica STOILOVSKI, Nikola UZUNOV**

FROM CRACKS TO COLLAPSE: MATERIALS AND METHODS FOR REPAIR AND LEVELING OF BRIDGE AND VIADUCT DECK SLABS

TEA-35

**Milica VIDOVIĆ, Ivan MILIĆEVIĆ, Jelena CAREVIĆ**

DEMOUNTABLE CONNECTORS WITH PARALLEL THREADED COUPLER (PTC) AND REBAR ANCHOR LOADED IN TENSION

13<sup>30</sup>-14<sup>30</sup>

**Buffet lunch (Restaurant)**

14<sup>30</sup>-15<sup>00</sup>

## **SESSION 7 (Diamond Hall)**

**Chair: Roberta APOSTOLSKA & Marko MARINKOVIĆ**

IP-5

### **Keynote Lecture**

**Helen CROWLEY**

ENGINEERING THE FUTURE: HOW SEISMIC RISK MODELS CAN BUILD MORE RESILIENT SOCIETIES

15<sup>00</sup>-16<sup>00</sup>

## **Parallel session 7-1: (Diamond Hall)**

**Chair: Roberta APOSTOLSKA & Marko MARINKOVIĆ**

TEA-16

**Kristina MILKOVA, Elena DUMOVA- JOVANOSKA**

BUILDING A RESILIENT NATION: THE IMPORTANCE OF SEISMIC HAZARD ASSESSMENT

AT-5

**Kefajet EDIP, Roberta APOSTOLSKA**

INCREASING SEISMIC RISK AWARENESS AT LEVEL OF URBAN UNIT THROUGH INSIGHT INTO ECONOMIC LOSSES

AT-12

**Radmila SALIC MAKRESKA, Igor GJORGJIEV, Julijana BOJADJIEVA, Vlatko SESOV, Roberta APOSTOLSKA, Goran CAPRAGOSKI**

REGIONAL AND EUROPEAN EFFORTS IN THE DOMAIN OF NEEDS ASSESSMENT FOR EFFECTIVE DISASTER MANAGEMENT – THE “EMERGE” PROJECT

SHM-3

**Kemal EDIP, Julijana BOJADJIEVA, Aleksandra BOGDANOVIC, Vlatko ŠEŠOV, Zoran RAKICEVIC, Metin KOSE, Sila AVGIN, Aydin DEMIR, Hakan OZTURK**

IZIIS RECONNAISSANCE MISSION TO KAHRAMANMARASH, TURKIYE

15<sup>00</sup>-16<sup>00</sup>

## **Parallel session 7-2: (VIP Hall)**

**Chair: Zoran RAKICEVIC & Rüdiger HÖFFER**

CM-4

**Vladimir GOCEVSKI**

MONTREAL OLYMPIC STADIUM REPLACEMENT OF THE FLEXIBLE MEMBRANE ROOF

CM-5

**Aleksandar JOVANOVSKI, Andreja GJURESKI, Naum PETROVSKI, Ana ZDRAVKOVSKA, Hristina DAVITKOVSKA**

DESIGN AND CONSTRUCTION OF MEMBRANE STRUCTURES

CM-6

**Aleksandar JOVANOVSKI, Andreja GJURESKI, Ana ZDRAVKOVSKA**

MEMBRANE PAVILLION "PHOENIX"

CM-10

**Teodora MIHAJLOVSKA, Ana TROMBEVA - GAVRILOSKA**

FORM-FINDING OF ARCHES UNDER HORIZONTAL LOADING BASED ON THRUST LINE ANALYSIS

15<sup>00</sup>-16<sup>00</sup>

## **Parallel session 7-3: (Golden Hall)**

**Chair: Denis POPOVSKI & Milivoje ROGAČ**

TEA-18

**Primož MOŽE, Anita OGRIN, Sara ZOUBEK**

IMPACT OF HOLE MISALIGNMENT ON THE PERFORMANCE OF BOLTED S960 BEARING-TYPE LAP CONNECTIONS

TEA-22

**Denis POPOVSKI, Mile PARTIKOV, Ditar MEMEDI**

ANALYSIS OF INTERFACIAL SLIP AND DEFORMATION IN COMPOSITE STEEL-COCONCRETE BEAMS WITH PARTIAL SHEAR CONNECTION

TEA-32

**Antonio TOMESKI, Denis POPOVSKI, Mile PARTIKOV, Ditar MEMEDI, Nikola NISEV**

EXPERIMENTAL INVESTIGATION OF A TENSION ANGLE CONNECTED WITH BOLTS ON ONE LEG

TEA-31

**Antonio TOMESKI, Denis POPOVSKI, Mile PARTIKOV, Ditar MEMEDI, Nikola NISEV**

COMPARATIVE ANALYSIS OF A TENSION ANGLE CONNECTED WITH BOLTS ON ONE LEG

16<sup>00</sup>-16<sup>45</sup>

## **Posters & Coffee (Terrace)**

AT-1

**Lars ABRAHAMCZYK, Aanis UZAIR, Roberta APOSTOLSKA, Ruediger HÖFFER, Julia SALZINGER, Ulf WINKELMANN, Davorin PENAVA, Krunoslav MINAZEK, Silva LOZANCIC, Nuno LOPES, Paulo VILA REAL, Uwe KAHLER, Ricardo MONTEIRO, Nicola SCATTARREGGIA, Elena DELOVA**

FORENSIC STRUCTURAL ENGINEERING DATABASE FOR HEI AND INNOVATIVE PILOT COURSE – RECONSTRUCT PROJECT

AT-2	<b>Nikolina ĆIRIĆ, Panta KRSTIĆ, Sara KRSMANOVIĆ, Miloš ŠEŠLIJA</b> GEOTECHNICAL PROFILE OF FLUVIAL SEDIMENTS IN RATINA (KRALJEVO, SERBIA): LITHOLOGICAL AND GRAIN-SIZE ANALYSIS
AT-11	<b>Hassan Awadat SALEM</b> THE EFFECT OF CALIBRATION ON THE QUALITY OF CONCRETE
CM-3	<b>Ivan BOSKOSKI, Sergej CHURILOV, Sead ABAZI</b> ANALYSIS OF SOIL-STRUCTURE INTERACTION ACCORDING TO EUROCODES 7 AND 8 USING DIFFERENT MODELING METHODS
MRS-5	<b>Artur ROSHI, Golubka NECHEVSKA-CVETANOVSKA, Jordan BOJADJIEV</b> SEISMIC RETROFIT FOR RC BUILDINGS USING INNOVATIVE MATERIALS: ANALYTICAL AND EXPERIMENTAL INVESTIGATIONS
MRS-8	<b>Aleksandar ZHUROVSKI, Aleksandar ZLATESKI, Goran CHAPRAGOSKI, Elena DELOVA, Goran JEKIC, Veronika SHENDOVA, Roberta APOSTOLSKA</b> THE IMPORTANCE OF CONTROLLING THE EXISTING SEISMIC STABILITY IN THE PROCESS OF REHABILITATION OF EXISTING STUDENT DORMITORIES
SHM-4	<b>Juan Manuel GARCIA, Andres VICENTE</b> PREDICTIVE MONITORING OF CRITICAL INFRASTRUCTURES
TEA-1	<b>Besar ABDIU, Julijana BOJADJIEVA, Lisa STAR</b> THE ROLE OF SOIL-STRUCTURE INTERACTION IN ANALYSING A DUAL WALL-FRAME SYSTEM BUILDING
TEA-5	<b>Julija DIMITRIJEVSKA, Julijana BOJADJIEVA, Vlatko SHESHOV, Kemal EDIP, Josif JOSIFOVSKI, Toni KITANOVSKI, Dejan IVANOVSKI</b> APPLICATION OF EUROCODES IN THE DESIGN OF A SHALLOW FOUNDATIONS FOR A RESIDENTIAL BUILDING: A CASE STUDY
TEA-6	<b>Marija DOJCHINOVSKA, Koce TODOROV</b> REDISTRIBUTION OF SEISMIC ACTION EFFECTS IN DUAL REINFORCED CONCRETE SYSTEMS
TEA-12	<b>Petar JANEV, Toni ARANGJELOVSKI</b> ANALYSIS OF SHEAR AND TORSION FOR REINFORCED CONCRETE ELEMENTS ACCORDING TO EUROCODE 2 AND MODEL CODE 2010
TEA-14	<b>Marina LATINOVIĆ-KRNDIJA, Gordana BROĆETA, Anđelko CUMBO, Gordana JAKOVLEVIĆ, Milisav MARKOVIĆ, Žarko LAZIĆ, Aleksandar SAVIĆ</b> LOAD TESTING OF STEEL STRUCTURE IN DOBOJ
TEA-19	<b>Mladen MUHADINOVIC, Petar SUBOTIC, Duško LUČIĆ</b> COLUMN WEB RESISTANCE IN TRANSVERSE COMPRESSION - EXPERIMENTAL RESEARCH
TEA-21	<b>Svetislav POPOVIĆ, Marina RAKOČEVIĆ, Vasilije BOJOVIĆ</b> REFINED ZIGZAG AND PARTIAL LAYERWISE THEORY - REVIEW AND COMPARISON
TEA-23	<b>Denis POPOVSKI, Mile PARTIKOV, Ditar MEMEDI</b> FEM ANALYSIS ON ROTATIONAL STIFFNESS OF WELDED I-BEAM TO SHS COLUMN CONNECTION
TEA-25	<b>Goran SIMONOVIC, Senad MEDIC, Mustafa HRASNICA, Muhamed ZLATAR</b> PROBLEM OF OVALIZATION OF A CYLINDRICAL SHELL



TEA-26	<b>Goran SIMONVIĆ, Senad MEDIĆ, Mustafa HRASNICA, Jelena MEDIĆ</b> STRUCTURAL TESTING OF A CYLINDRICAL SHELL
TEA-27	<b>Nađa SIMOVIĆ, Ivan GLIŠOVIĆ, Marija TODOROVIĆ, Marko POPOVIĆ</b> STATIC AND DYNAMIC DETERMINATION OF STIFFNESS PROPERTIES OF CLT PANELS
TEA-28	<b>Andrej STOJKOSKI, Josif JOSIFOVSKI</b> A NUMERICAL APPROACH TO ANALYSIS OF THERMO – MECHANICAL EFFECTS IN GEOTHERMAL PILES
TEA-33	<b>Goce VELESKI</b> ANALYSIS OF A STEEL THREE – SPAN HALL WITH A TRUSS STRUCTURE AS AN EFFICIENT STRUCTURAL SOLUTION
TEA-34	<b>Valon VESELI, Sergey CHURILOV</b> COMPARISON OF EXPERIMENTAL RESULTS AND NUMERICAL SIMULATIONS OF AAC-INFILLED RC FRAMES

16<sup>45</sup>-17<sup>15</sup>

## **SESSION 8 (Diamond Hall)**

**Chair: Goran MARKOVSKI & Mirjana MALEŠEV**

IP-1

### **Keynote Lecture**

**Ioannis BRILAKIS**  
TWIN SYSTEMS

17<sup>15</sup>-18<sup>00</sup>

## **Parallel session 8-1: (Diamond Hall)**

**Chair: Goran MARKOVSKI & Mirjana MALEŠEV**

SHM-7

**Aeneas PAUL, David SANIO, Peter MARK**  
EXPERIMENTAL AND NUMERICAL INVESTIGATION ON DETECTING INTERNAL TENDON BREAKS BY EXTERNAL FIBER-OPTIC MEASUREMENTS

SHM-6

**Mihail GAREVSKI, Zoran MIRCEVSKI, Marina KORDOSKA, Dragana BANOVSKA, Ljupco LAZAROV**  
POST-FIRE EVALUATION OF PRESTRESSED CONCRETE BRIDGES: DETAILED FINDINGS FROM THE BELASICA BRIDGE INCIDENT

SHM-5

**Mihail GAREVSKI, Zoran MIRCEVSKI, Marina KORDOSKA, Dragana BANOVSKA, Ljupco LAZAROV**  
POST-FIRE STRUCTURAL INTEGRITY ASSESSMENT OF THE UNIVERSAL HALL DOME IN SKOPJE

17<sup>15</sup>-18<sup>15</sup>

## **Parallel session 8-2: (VIP Hall)**

**Chair: Kemal EDIP & Marija DOCEVSKA JOVANOVA**

TEA-36

**Trajche ZAFIROV, Viktor HRISTOVSKI, Ana NANEVSKA, Daniel TOMIKJ**  
DERIVATION OF FRAGILITY CURVES AND BEHAVIOR FACTOR OF VERTICAL EXTENSIONS ON RC STRUCTURES

## FRIDAY | September 26 | 2025

TEA-29	<b>Leart TARAVARI, Koce TODOROV</b> INFLUENCE OF THE STRENGTH CHARACTERISTICS OF CONCRETE ON THE SEISMIC CAPACITY OF RC FRAME STRUCTURES
TEA-30	<b>Leart TARAVARI, Koce TODOROV</b> INCREMENTAL DYNAMIC ANALYSES OF A RC FRAME WITH DIFFERENT DEFINITIONS OF CONCRETE STRENGTH PROPERTIES
TEA-7	<b>Jasna DONEVSKA, Darko NAKOV</b> INFLUENCE OF TORSIONAL FLEXIBILITY ON THE DESIGN OF RC BUILDING ACCORDING TO THE SECOND GENERATION OF EUROCODE 8

17 <sup>15</sup> -18 <sup>15</sup>	<b><u>Parallel session 8-3: (Golden Hall)</u></b> <b>Chair: Radmila SALIC MAKRESKA &amp; Primož MOŽE</b>
CM-11	<b>Lena MIHOVA, Doncho PARTOV</b> FE MODELING OF THE DEVIL'S STONE BRIDGE IN BULGARIA
AI-3	<b>Mihailo OSTOJIC, Milos KNEZEVIC</b> DEVELOPMENT OF A GPS-BASED MONITORING FRAMEWORK FOR STEEL HALL ASSEMBLY – PART ONE: PROOF OF CONCEPT
AI-1	<b>Aleksandra CHUBRINOVSKA, Denis POPOVSKI, Mile PARTIKOV</b> TRANSFORMING LEARNED AI SKILLS INTO CIVIL ENGINEERING PRACTICE: A THEORETICAL PRE-FORM FOR FUTURE APPLICATIONS
AI-2	<b>Aleksandra CHUBRINOVSKA, Denis POPOVSKI, Mile PARTIKOV</b> AI-BASED FATIGUE RISK CLASSIFICATION IN STEEL-CONCRETE COMPOSITE BRIDGES VIA CNN SURROGATES

18 <sup>15</sup> -19 <sup>15</sup>	<b><u>Roundtable (Diamond Hall):</u></b> <b>How is digitalization reshaping the construction sector?</b> Moderator: Vladimir VITANOV & Sergey CHURILOV
19 <sup>15</sup> -19 <sup>30</sup>	<b>Closing Ceremony</b>

21 <sup>00</sup> -01 <sup>00</sup>	<b>Closing party</b> Music: The Hounds & DJ Dress code: Casual (Included: Buffet dinner and Welcome drink)
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## SATURDAY | September 27 | 2025

10<sup>00</sup>-16<sup>00</sup>

### EXCURSION (optional)

10<sup>00</sup>-11<sup>00</sup>

Visit of Bay of Bones - Museum on Water

11<sup>00</sup>-13<sup>00</sup>

Visit of St. Naum Monastery complex and the  
Springs of the river Black Drim

13<sup>00</sup>-15<sup>00</sup>

Lunch in Restaurant Ostrovo

## NOTES

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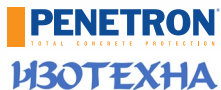


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