

# **GENERAL CONFERENCE PROGRAMME**

# MONDAY, 26th SEPTEMBER 2022

FACULTY OF CIVIL ENGINEERING AND ARCHITECTURE
OPOLE UNIVERSITY OF TECHNOLOGY

Katowicka 48, 45-061 Opole, Poland

14:00 - 16:00 Registration 18:00 - 18:15 Coffee break

16:00 - 17:00 Opening ceremony 18:15 - 19:15 Plenary session II

(2 papers, co. presentation)

17:00 - 18:00 Plenary session I 19:15 Welcome reception

(2 papers, co. presentation)

# **TUESDAY, 27th SEPTEMBER 2022**

HOTEL MERCURE OPOLE

Krakowska 57/59, 45-018 Opole, Poland

07.30 - 08:45 Breakfast 13:45 - 14:15 Company presentations

09.00 - 11:00 Thematic session I 14:15 - 15:45 Lunch

11:00 - 11:30 Company presentations 16:00 - 19:00 Technical tour or visiting

museums

11:30 - 11:45 Coffee break 20:00 Gala dinner in Hotel

**Mercure Opole** 

11:45 - 13:45 Thematic session II

# WEDNESDAY, 28th SEPTEMBER 2022

HOTEL MERCURE OPOLE

Krakowska 57/59, 45-018 Opole, Poland

07.30 - 08:45 Breakfast 12:00 - 13:15 Thematic session IV

09.00 - 11:00 Thematic session III 13:15 - 13:30 Closing ceremony

11:00 - 11:30 Company presentations 13:30 Lunch

11:30 - 12:00 Coffee break





Opole District Chamber of Civil Engineers



Polish Association of Civil Engineers and Technicians Opole Branch



# **CONFERENCE PROGRAMME**

# MONDAY, 26th SEPTEMBER 2022

FACULTY OF CIVIL ENGINEERING AND ARCHITECTURE
OPOLE UNIVERSITY OF TECHNOLOGY

Katowicka 48, 45-061 Opole, Poland

14:00 - 16:00 **REGISTRATION** 

Lobby near the Assembly Hall of Prof. Oswald Mateja

16:00 - 17:00 **OPENING CEREMONY** 

Assembly Hall of Prof. Oswald Mateja

Chairman: Zbigniew Perkowski, Dominika Bysiec

**Speeches by the organizers and invited guests** (representatives of the authorities of Opole University of Technology and Opole Voivodeship)

## 17:00 - 18:00 PLENARY SESSION I

Assembly Hall of Prof. Oswald Mateja

- 1) M. R. Massimino<sup>1</sup>, G. Abate<sup>1</sup>, A. Fiamingo<sup>1</sup>, D. Pitilakis<sup>2</sup>
- <sup>1</sup> Department of Civil Engineering and Architecture, University of Catania, Catania, Italy
- <sup>2</sup> Department of Civil Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece

SEISMIC RISK AND ENVIRONMENTALLY FRIENDLY SOLUTIONS: THE GEOTECHNICAL POINT OF VIEW

## 2) M. Pustelnik

Pracownia Projektowa MOSTOPOL sp. z o.o., Opole, Poland TECHNICAL ASPECTS OF THE DESIGNED RAILWAY BRIDGE OVER THE ODRA RIVER IN OPOLE

3) Presentation of company – INTOP Warszawa

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Lobby near the Assembly Hall of Prof. Oswald Mateja







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## 18:15 - 19:15 PLENARY SESSION II

Assembly Hall of Prof. Oswald Mateja

## 1) O. Lavan, O. Idels

Technion – Israel Institute of Technology, Haifa, Israel
SEISMIC RETROFITTING AND SEISMIC DESIGN USING ADVANCED
TECHNOLOGIES: AN ENVIRONMENTAL POINT-OF-VIEW

## 2) Z. Giergiczny

Faculty of Civil Engineering, Silesian University of Technology, Gliwice, Poland

CEMENT AND CONCRETE IN A LOW-CARBON ECONOMY

3) Company presentation - PORR

## 19:15 WELCOME RECEPTION

Hall in the new wing of the Faculty of Civil Engineering and Architecture







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# TUESDAY, 27th SEPTEMBER 2022

HOTEL MERCURE OPOLE Krakowska 57/59, 45-018 Opole, Poland

07:30 - 08:45 BREAKFAST

#### 09:00 - 11:00 THEMATIC SESSION I: SEISMIC ENGINEERING, GEOTECHNICS

Presentation and discussion of the papers:

1) G. Abate, A. Fiamingo, M. R. Massimino

Department of Civil Engineering and Architecture, University of Catania, Italy

SUSTAINABLE BUILDING: THE ROLE OF THE SOIL ON EARTHQUAKE SAFETY

2) G. Abate, A. Fiamingo, M. R. Massimino

Department of Civil Engineering and Architecture, University of Catania, Italy

THE ROLE OF DSSI ON THE SEISMIC RISK ASSESSMENT OF AN HISTORICAL BUILDING

- **3) G. Dănilă, A. Iordăchescu, V. Petrescu, A. Basarab Cheșcă** "Ion Mincu" University of Architecture and Urbanism, Bucharest, Romania SEISMIC ISOLATION METHOD. A WAY TO REDUCE THE CARBON FOOTPRINT.
- **4)** T. Maleska<sup>1</sup>, N. Al Zubairi<sup>2</sup>, A. Janda<sup>1</sup>, D. Bęben<sup>1</sup>, K. Embaby<sup>3</sup>

  <sup>1</sup> Faculty of Civil Engineering and Architecture, Opole University of Technology, Opole, Poland

<sup>2</sup> Faculty of Engineering and Natural Science, Konya Technical University, Ardıçlı, Mahal-lesi, Selçuklu, Turkey

<sup>3</sup> AECOM, New York City, NY, USA

IMPACT OF DURATION AND INTENSITY OF SEISMIC RECORDS ON THE SOIL-STEEL BRIDGE BEHAVIOR

5) D. Bysiec, A. Janda, T. Maleska

Faculty of Civil Engineering and Architecture, Opole University of Technology, Opole, Poland
RESPONSE OF GEODESIC DOMES ON THE SEISMIC EXCITATION
WITH TIME HISTORY ANALYSIS







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#### 6) E. M. J. da Silva, M. Oliveira

Institute of Engineering, University of Algarve, Portugal ANALYSIS OF DYNAMIC COMPACTION EFFECTS – TAVIRA CASE STUDY

## 7) A. Valletta<sup>1</sup>, A. Carri<sup>2</sup>, R. Savi<sup>2</sup>, A. Segalini<sup>1</sup>

<sup>1</sup> Department of Engineering and Architecture, University of Parma, Parma, Italy

<sup>2</sup> ASE – Advanced Slope Engineering S.r.I., Parma, Italy ALGORITHMS FOR THE NEAR-REAL TIME IDENTIFICATION AND CLASSIFICATION OF LANDSLIDE EVENTS DETECTED BY AUTOMATIC MONITORING TOOLS

## 11:00 - 11:30 COMPANY PRESENTATIONS

15-min. presentations of the companies:

- 1) Wienerberger Ceramika Budowlana
- **2) BSSTC.PL**, Kompaktowe stacje pomiarowo integrujące All-in-One w ramach Systemu Zarządzania BMS Economic Health

## 11:30 - 11:45 **COFFEE BREAK**

# 11:45 - 13:45 <u>THEMATIC SESSION II: BRIDGE ENGINEERING, WIND ENGINEERING, ORGANIZATIONAL ISSUES</u>

Presentation and discussion of the papers:

1) P. Bujňáková¹, J. Kraľovanec¹, M. Moravčík¹, F. Bahleda²¹ Faculty of Civil Engineering, University of Žilina, Žilina, Slovakia² Laboratory of Civil Engineering, University of Zilina, Žilina, Slovakia DURABILITY AND ASSESSMENT OF EARLY POST-TENSIONED BRIDGES

## 2) D. Radu<sup>1</sup>, R. Băncilă<sup>2</sup>

<sup>1</sup> Faculty of Civil Engineering, Transilvania University of Braşov, Romania
 <sup>2</sup> Faculty of Civil Engineering, Politehnica University of Timişoara,
 Romania

ASSESSMENT AND RETROFITTING OF HISTORICAL STEEL BRIDGES IN TRANSILVANIA REGION PART OF THE SUSTAINABLE DEVELOPMENT







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# 3) O. Shymanovskyi<sup>1</sup>, V. Shalinskyi<sup>1</sup>, M. Shymanovska<sup>1</sup>, W. Baran<sup>2</sup>

<sup>1</sup> Ukrainian Institute of Steel Construction, Kyiv, Ukraine

<sup>2</sup> Faculty of Civil Engineering and Architecture, Opole University of Technology, Opole, Poland

STRESS STATE AND SEVERAL PROBLEMS OF ESTIMATING THE ACTUAL OPERATION OF EFFECTIVE BRIDGE SUPERSTRUCTURES

## 4) P. Tomala, A. Czerepak

ViaCon Polska Sp. z o.o., Rydzyna, Poland SOIL-STEEL BRIDGES VS CONVENTIONAL REINFORCED CONCRETE BRIDGES – ENVIRONMENTAL IMPACT ISSUES

## 5) T. Maleska<sup>1</sup>, A. Wysokowski<sup>2</sup>, D. Bęben<sup>1</sup>

- <sup>1</sup> Faculty of Civil Engineering and Architecture, Opole University of Technology, Opole, Poland
- <sup>2</sup> Faculty of Civil Engineering, Architecture and Environmental Engineering, University of Zielona Góra, Zielona Góra, Poland NUMERICAL ANALYSIS AND EXPERIMENTAL VERIFICATION OF SOIL-STEEL CULVERT WITH GEOTEXTILE REINFORCEMENT

## 6) L. Kabošová<sup>1</sup>, T. Baroš<sup>2</sup>, S. Kmeť<sup>3</sup>, E. Kormaníková<sup>3</sup>, D. Katunský<sup>2</sup>

- <sup>1</sup> Center for Research and Innovation in Construction, Technical University of Košice, Košice, Slovakia
- <sup>2</sup> Civil Engineering Faculty, Technical University of Košice, Košice, Slovakia
- <sup>3</sup> Structural Engineering Faculty, Technical University of Košice, Košice, Slovakia

WIND-BASED FORM-FINDING OF A TENSEGRITY PAVILION

#### 7) J. Konior, M. Szóstak

Faculty of Civil Engineering, Wrocław University of Science and Technology, Wroclaw, Poland COURSE SHAPING OF EARNED VALUES COSTS CURVES IN DIVERSIFIED INVESTMENTS SECTORS







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## 13:45 - 14:15 COMPANY PRESENTATIONS

15-min. presentations of the companies:

- 1) FAKRO
- 2) HABA-Beton
- 14:15 15:45 **LUNCH**
- 16:00 19:00 <u>TECHNICAL TOUR TO THE GÓRAZDZE CEMENT PLANT IN</u>
  CHORULA / VISITING MUSEUMS IN OPOLE
- 20:00 GALA DINNER IN THE HOTEL MERCURE OPOLE







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# WEDNESDAY, 28th SEPTEMBER 2022

HOTEL MERCURE OPOLE Krakowska 57/59, 45-018 Opole, Poland

07:30 - 08:45 BREAKFAST

09:00 - 11:00 THEMATIC SESSION III: DURABILITY, INNOVATIVE SOLUTIONS, DIAGNOSTICS, RECONSTRUCTION, ORGANIZATIONAL ISSUES, ENVIRONMENTAL ENGINEERING

Presentation and discussion of the papers:

## 1) K. Yurkova, T. Krykowski

Faculty of Civil Engineering, Silesian University of Technology, Gliwice, Poland

COMPARATIVE ANALYSIS OF THE USE OF DIFFERENT CONCRETE MODELS IN THE EVALUATION OF THE PROPAGATION OF DAMAGE IN THE REINFORCED CONCRETE SAMPLE

#### 2) R. Gliniorz, C. Petzoldt, K. Mandel, S. Gelbrich

Chemnitz University of Technology, Chemnitz, Germany ENERGY-EFFICIENT REINFORCED HEATING SYSTEM IMPLEMENTED AS A CARBON CONCRETE FORMWORK

#### 3) P. Koteš, M. Zahuranec, M. Vavruš

Faculty of Civil Engineering, University of Žilina, Žilina, Slovakia DIAGNOSTIC AND DESIGN OF RECONSTRUCTION OF BUILDING VÁHOSTAV

## 4) D. Bajno, A. Grzybowska, M. Chylewska-Szabat

Faculty of Civil and Environmental Engineering and Architecture, Bydgoszcz University of Science and Technology, Bydgoszcz, Poland ORIGINALITY AND SAFETY AS A PRIORITY IN THE REVITALIZATION OF IMMOVABLE MONUMENTS?

#### 5) D. Przywara, A. Rak

Faculty of Civil Engineering and Architecture, Opole University of Technology, Opole, Poland ECONOMIC CONDITIONS OF LEAVING THE CONSTRUCTION SITE BY THE CONTRACTOR AT DIFFERENT STAGES OF ITS IMPLEMENTATION







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#### Discussion on the paper:

## 6) A. Rak, D. Przywara

Faculty of Civil Engineering and Architecture, Opole University of Technology, Opole, Poland IMPACT OF CONTAMINATION OF THE RAILWAY TRACK BED FOR GROUNDWATER

#### 11:00 - 11:30 COMPANY PRESENTATIONS

15-min. presentations of the companies:

- 1) Remmers Polska
- 2) Xella Polska

#### 11:30 - 12:00 **COFFEE BREAK**

# 12:00 - 13:15 THEMATIC SESSION IV: ARCHITECTURE AND URBAN PLANNING, BUILDING MATERIALS ENGINEERING

## Presentation and discussion of the papers:

- 1) L. Trabattoni<sup>1</sup>, C. Berizzi<sup>2</sup>, M. Capotorto<sup>2</sup>, G. N. Terlicher<sup>2</sup>, M. Mazurkiewicz<sup>2</sup>
- <sup>1</sup> Faculty of Civil Engineering and Architecture, Opole University of Technology, Opole, Poland
- <sup>2</sup> Pavia University, Pavia, Italy SUMMER CITY – SUSTAINABILITY STRATEGIES DECLINED IN OUTDOOR ACCOMMODATION STRUCTURES IN ITALY

## 2) A. Grajper<sup>1</sup>, S. Dobiesz<sup>2</sup>

- <sup>1</sup> Faculty of Civil Engineering and Architecture, Opole University of Technology, Opole, Poland
- <sup>2</sup> LAX laboratory for architectural experiment, Wrocław, Poland ECOLOGICAL ASPECT OF WATER RETENTION THROUGH ALGAE BASED HYDRAULIC SYSTEMS IN INTERACTIVE ARCHITECTURE







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#### 3) K. Wilk

Faculty of Civil Engineering and Architecture, Opole University of Technology, Opole, Poland
THE USE OF A PREFABRICATED MASS TIMBER STRUCTURE
IN THE DESIGN OF SINGLE-FAMILY HOUSES IN TERMS OF
SUSTAINABLE DEVELOPMENT

## 4) M. Zakrzewski, A. Sanok, J. Domski

Faculty of Civil Engineering, Environmental and Geodetic Sciences, Koszalin University of Technology, Koszalin, Poland RHEOLOGICAL PROPERTIES OF CONCRETE BASED ON WASTE MATERIALS

## Discussion on the papers:

**5) A. Sanok, M. Zakrzewski, M. Lehmann, J. Domski**Faculty of Civil Engineering, Environmental and Geodetic Sciences,
Koszalin University of Technology, Koszalin, Poland
EFFECT OF THE ADDITION OF WASTE FIBRES ON THE SOME
PROPERTIES OF CONCRETE

## 6) D. Bajno<sup>1</sup>, M. Fiutak<sup>2</sup>, M. Niedostatkiewicz<sup>3</sup>

<sup>1</sup> Faculty of Civil and Environmental Engineering and Architecture, Bydgoszcz University of Science and Technology, Poland

<sup>2</sup> Przedsiębiorstwo Projektowo-Usługowo-Handlowe "MARDOM" Marcin Fiutak, Kluczbork, Poland

<sup>3</sup> Faculty of Civil and Environmental Engineering, Gdańsk University of Technology, Gdańsk, Poland RURAL BUILDING IN OPOLE REGION VILLAGES DURING

COLONIZATION PERIOD OF FREDERICK II

## 13:15 - 13:30 **CLOSING CEREMONY**

Chairman: Damian Beben

13:30 <u>LUNCH</u>







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