

TRABZON / TÜRKİYE



4<sup>th</sup> INTERNATIONAL  
**CIVIL ENGINEERING  
AND ARCHITECTURE**  
CONFERENCE

## CONFERENCE PROGRAM

17 MAY

18 MAY

19 MAY



4<sup>th</sup> INTERNATIONAL  
**CIVIL ENGINEERING  
AND ARCHITECTURE**  
CONFERENCE

**REGISTRATION OPENS AT**

**08.30**

**OPENING CEREMONY**

**10.00 - 12.00**

**LUNCH**

**12.00-13.30**

## 13.30-15.00 SESSION 1

**Koc E, Aribas U N, Ermis M, Omurtag M H**

Geometrically Nonlinear Analysis of Composite Beams Via Mixed FEM

**Cebir F, Soalih H, Demir S, Demir A D**

A New Type Shear Connector for Lipped Channel Section Cold Formed Steel-Concrete Composite Beams

**Bouhafara D, Menail Y, Mesrafet F, Aissaoui M I**

The Degradation of Mechanical Characteristics in GFRP Composite Under Real Maritime Conditions for Civil Building Application

**Ince O, Çakıl B, Taş Ö F, Osmanlı Ö F, Karaton M, Sayın E**

Nonlinear Time History and Pushover Analysis of a Multi-Storey Reinforced Concrete Building

**Çanakçı K, Karaton M**

Post-Earthquake Damage Status and Numerical Analysis of a Historical Masonry Building

**Çakıl B, Osmanlı Ö F, Taş Ö F, Ince O, Sayın E, Karaton M**

Effects of Different Basement Wall Configurations on Structural Seismic Behavior of the Buildings

**Kaniğ D, Bab Y, Kutlu A, Omurtag M H**

Mixed Finite Element Formulation for Functionally Graded Beams Resting on Elastic Foundation Using HSDT

**Güner O, Ermis M, Aribas U N, Omurtag M H**

Free Vibration Analysis of FG-GPLRC Straight Beams Via Warping-Included Mixed FEM

**Sayed S S M A, Ermis M, Eratli N**

Parametric Analysis for Axially Functionally Graded Beams Developed Using Different Micromechanical Models

## COFFEE BREAK

15.00 - 15.15

## 15.15-16.45 SESSION 2

**Başağa H B, Alkan İ B**

Identification of Gaps in Civil Engineering Undergraduate Education in Turkey

**Yavan F, Maalek R, Aali A**

Sketch-To-BIM: A Comparative Analysis for Automated Truss Design and Optimization

**Şengül A N, Bettemir Ö H**

A Spreadsheet Application for the Heuristic Solution of Time Cost Trade-Off Problem

**Tuz A**

Sustainability Practices in Public-Private Partnership Projects: A Global Comparative Analysis

**Arslan V, Ibadov N**

Sources of Competitive Advantage of Turkish Construction Companies in Poland

**Alrasheed K A, Soliman E**

Cost Estimation in Early Design Stages Using Regression Model- Kuwait Case Study

**Roudini A, İnal S, Beşer M H, Aydinler K**

Enhancing Tunnel Projects with Digital Twin Technology: Applications and Benefits Across the Tunnel Lifespan

**Shafiq M T, Rehman M S U, Rauf A**

A Case Study of Forensic Delay Analysis in the Construction of a Revamp Power Transmission Project

**Boz E, Toğan V**

An Analysis of Course Contents and Educational Materials in Strengthening University-Industry Collaboration

## COFFEE BREAK

16.45 - 17.00

## 17.00-18.30 SESSION 3

**Orhan D, Fahjan Y**

Selection of Ground Motion Records Considering Near Field Effects for Nonlinear Time History Analysis

**Khalbous Y**

An Investigation on the Effects of Rotational Ground Motions on Seismic Behavior of Precast Reinforced Concrete Single Story Industrial Buildings

**Kiliç S, Çakmak T**

The Effect of Solar Power Panels on Industrial Structure's Seismic Performance

**Salameh N, El-hacha R**

Critical Evaluation of Empirical and Analytical Models for Predicting the Behaviour of FRP-Confined Concrete

**Aras Y, Şişman R**

Assessment of the Effect of Strengthening Measures on Seismic Fragility Curves in Reinforced Concrete Structures

**Hamadi S E, Bekiroğlu S**

Nonlinear Design Parameters Investigation of Steel Moment Frames in Different Seismic Sites in Turkey

**Taş Ö F, Ince O, Çakıl B, Karaton M, Sayın E, Gör M**

Numerical Analysis of Historical Masonry Nebi Mosque Minaret Using Finite Element Method

**Özdoğan D B, Okuyucu D, Askan A**

Ground Motion Simulation of 1859 Erzurum Earthquake

**Nemutlu Ö F, Üzen H, Özçelik S T A, Sarı A**

Development of Rapid Visual Screening Method for Earthquake Risk Assessment of Existing RC Buildings Using Deep Learning-Based Classification

## DINNER

20.00

## 13.30-15.00 SESSION 1

**Samancı Ö N, Kılıçaslan H**

Place-Specific Structures: The Effect of Hidden Designs on the Spirit of Space

**Bakan Ö C, Kasalı A**

Reconsidering Online Whiteboards As Collaborative Design Interfaces in Architectural Education

**Umar A D, Canakcioglu N G, Boyacioglu D, Saglam N G**

Exploring the Social Affordances of Physical Setting in Public Open Space of Higher Institution: Case of Ozyegin University Quad

**Bonabi F A, Hojjati S A**

Place and Space: Conceptual Transformations and Philosophical Approaches in Architecture

**Bruno F, Teixeira F, Silva R, Silva T**

From Theory to Practice: Bridging Cognitive and Psychomotor Domains in Descriptive Geometry

**Özgül E E, Şensoy S A**

Social Perception of Public Buildings: Urban Users' Perspective

**Eroğlu E, Tuluk E E, Sarı R M**

User Satisfaction After Pedestrianization in Trabzon Kahramanmaraş Street

**Etemadi P, Ribeiro H C, Yüksel Ç Y**

Social Housing Dynamics: Adapting Architectural Design to Evolving Resident Needs

## COFFEE BREAK

15.00 - 15.15

## 15.15-16.45 SESSION 2

**Tanrıvermiş Y, Tanrıvermiş H, Güneş P**

The Impact of Migration on Spatial Organization and Sociological Change: An Analysis of Cognitive Mapping in Yomra District, Trabzon Province

**Bayram Z Y, Güneş P**

The Role of Public Buildings in the Urban Memory of Ankara

**Miyan A, Yönet N A**

Shaping Behavior and Emotions Through Urban Design: Tackling Social Inequality

**Hekimoğlu N, Bayram Z Y**

Representation of Disadvantaged Groups in the Education of Professions Influential in Spatial Production

**Ghoddusifar S M, Asli M F**

A Multi-Criteria Decision-Making Approach for Selecting Optimal Sustainable Facades in Residential Buildings of Tabriz

**Vatansever A Z D, Sarı T**

Between Mega-Structures: The Spatial-Temporal Memory of Bomontiada

**Varol E**

Evaluation of the Healthy City Approach in the Context of Urban Design Competitions

## COFFEE BREAK

16.45 - 17.00

## 17.00-18.30 SESSION 3

**Nayeb A**

Urban Identity and Architectural Representation: A Studio Practice

**Akhgar B**

Wind Vibrations to Wattage: The Potential of Piezoelectric Facades in Energy-Conscious Building

**Carlioğlu E G**

The Analysis of Usage Metal Powder Waste As Cement Substitute in Concrete

**Yemenici D K, Barış K E**

Enhancing Thermal Comfort and Energy-Saving Potential of the Buildings with Multiple-Layered Phase Change Material

**Koç H, Kasalı A, Demir U**

The Impact of Plan Configurations and Design Decisions in Healthcare Facilities on Wind Resilience of Roofs

**Çınar M Ç, Bostancıoğlu E**

Evaluation of the Effects of Building Form on the Wind Performance of Structures

**Kızılörenli E, Orhon A V**

Balancing Daylight Performance and User Comfort Through Pleated Folding Square Façade Modules

**Aydın Ö, Uncuoğlu T**

The Impact of Thermal Insulation on Energy Savings and Thermal Comfort: A Study in Multi-Story Residential Buildings

**Kaplan E, Beyhan F**

Investigation of Design Parameters and Performance Optimization Processes of Kinetic Shading Devices

## DINNER

20.00

## 13.30-15.00 SESSION 1

**Çelebi O, Bayrak B, Kılıç M, Aydın A C**

Investigation of Earthquake Performance of Reinforced Concrete Beam Structures Arranged in Different Forms: Flat Beam and Deep Beam Example

**Thomas J, Vikram A**

Impact of Openings on the Structural Performance of Walls of Recycled Plastic Lumber Panels Under Cyclic Loading

**Öztürk M M, Alpaslan E, Sözen Ş**

Numerical and Analytical Study of the Dynamic Behaviour of Tokat Clock Tower

**Kiliç S**

The Design of Multi-Story Steel Industrial Building with Various Equipments

**Koçak A, Aleit H**

Influence of Infilled Walls on the Seismic Vibration Period of Reinforced Concrete Structures with Shear Walls

**Özgençli S, Şenkaya M**

Seismic Evaluation of Soil-Structure Interaction for Bursa Uludağ University Hospital Using Ambient Noise and Site Response Analyses

**Khonaiv J, Timurağaoğlu M Ö, Hakan Ö, Livaoglu R**

An Examination of the Impact of Infill Walls on the Seismic Performance of RC Prefabricated Structures

**Yıldırım Ş, Fatih M**

Seismic Design of High Rise Building with Different Structural Configuration.

**Doğangün A, Jadallah M**

Assessment of Sequential Earthquake Response of the Historic Karahan Mosque Minaret

## COFFEE BREAK

15.00 - 15.15

## 15.15-16.45 SESSION 2

**Gedik B, Şahud İ, Şenbakar B, Yılmaz K, Okuyucu D**

An Experimental Investigation on the Compressive Strength Development of Concrete Samples Poured in Winter

**İşsever F**

Mechanical and Fresh Properties of Self-Compacting Mortars Containing Silica Fume and Waste Marble Powder

**Işık N, Alemdar F**

Experimental and Numerical Investigation of the Effects of Bolt and Nut Configurations on the Tensile Capacity of Wind Turbine Flange Connections

**Çakmak T, Ustabas İ**

Enhanced Compressive Strength Prediction Using Concrete Mix Parameters and Feature Importance Analysis: Using AI-Alternative ML Algorithms

**Imani D, Rajabi-kafshgar A, Aliha M, Darvish M G, Shafiei A, Sani N**

Utilizing Design of Experiment Method to Optimize the Mixture of Polymer Concrete Against Tensile and Shear Type Fracture

**Kobyva V, Kaya Y, Mardani A**

Assessment of the Utilization of Grinding Aids in Terms of Grinding Efficiency and Environmental Impact

**Nas M, Kurbetci Ş**

Investigation of the Properties of Ground Granulated Blast Furnace Slag-Based Geopolymer Concretes with Recycled Aggregates Impregnated with Pozzolanic Slurry

**Gürbüz G, Moghimi S, Çakır Ö A**

Effect of Water-Proofing Admixture in Geopolymer Slurries on the Treatment of Recycled Aggregate

**Köktaş U, Kumandaş A, Ertek M K, Kırbaş U**

Investigation of the Effect of Alkali Treatment and Bitumen Coating on the Tensile Strength of Hemp Fibers

## COFFEE BREAK

16.45 - 17.00

## 17.00-18.30 SESSION 3

**Saedi S, Seyedi M, Naimi S**

Investigating the Effect of Polyamine Fatty Acid on the Moisture Sensitivity of Warm Mix Asphalt Mixtures

**Ozturk O F, Mazlum Y, Coruh E, Bayata H F, Aydın M M**

The Effect of Chevrons Markings for Tunnel Safety: A Simulator Based Approach

**Çelik M, Abut Y, Yaşar D**

Investigation of the Use of Recycled Concrete Aggregate and Fly Ash in Highway Subbase by Improving with Cement

**Akbulut A, Kırbaş U**

Object Detection Methods for Vehicle Counting: Comparison and Optimal Approach Proposal

**Demirtürk D, Öztürk H İ, Güler M**

Current Methods for Determining the Thermal Properties of Asphalt Concrete: A Comprehensive Review

**Şahin S N A, Korkmaz A, Özden A**

A Comparative Analysis of Bus Rapid Transit (BRT) Systems: A Framework for Sakarya

**Khasawneh M A**Carbon Emission Reduction in the Asphalt Industry: A Review  
Çavdar E, Kumandaş A, Şahan N, Kabadayi E, Kumandaş M, Oruç Ş  
Usability of the T-Flex in Bitumen Modification and Its Effects on Physical Properties**Asgharpour S, Mohammadian K**

Investigating Severity of Motorcycle-Involved Crashes in the Context of Developing Countries

**Çavdar E, Kumandaş A, Şahan N, Kabadayi E, Kumandaş M, Oruç Ş**

Usability of the T-Flex in Bitumen Modification and Its Effects on Physical Properties

## DINNER

20.00

## 13.30-15.00 SESSION 1

**Menail Y, Bouhafara D, Mesrafet F, Mahi A E**

Use of Two Composite Materials Glass-Epoxy and Aramid-Epoxy in Marine Environment in the Field of Civil Engineering

**Avşar Y E, Uysal M, Akca A H**Improvement of 3D Printing Properties of Mgo Derived Binders by CO<sub>2</sub> Curing in Hardened State**Sarıkaya M K, Bundur Z B, Yılmaz T, Erkmen B, Benam S S**

Seismic Performance Assessment of 3D-Printed Concrete Structures

**Yılmaz Y, Nayır S, Nas M, Erdoğan Ş**

Investigation of Engineering Properties of Mortars Containing Basalt Fiber and Plastic Waste Aggregate Exposed to High Temperature

**Aktürk B**

Effects of Different Types of Fibers on the Mechanical Properties and Shrinkage of One-Part Sodium Carbonate-Activated Slag-Based Mortars

**Akyüz B M, Öztürk İ Ş, Sarı F A, Maraşlı M, Emiroğlu M, Yıldız M K**

The Impact of Varying Alginate Ratios on Soil-Based Composites

**Hamid S Z, Hassanzadeh Z, Parsa J**

Seismic Resilience of Multi-Story Buildings: Evaluating the Effectiveness of Viscoelastic Damper Arrangements

**Irshidat M, Albeitjani N, Amjad U, Al-nuaimi H, Maurya M**

From Waste to Strength: Recycled Steel Fibers for Sustainable 3D Printing of Cementitious Composites

## COFFEE BREAK

15.00 - 15.15

## 15.15-16.45 SESSION 2

**Mortazavi A, Arslan K E**

Solving Structural Optimization Problems Using Marathon Runner Algorithm

**Mesrafet F, Menail Y, Bouhafara D**

Delamination Study When Drilling on a Carbon C-Orthocryl Composite Used in Civil Structural Strengthening

**Mandal A, Jawalkar C K**

Measurement of Residual Stiffness of Cracked Segmental Girder Using Multi-Reference Impact Testing

**Akatay V, Sarı M, Marangoz A M**

Use of Digital Twin and GIS in the Construction Industry

**Bostan A, Hacıfendioğlu K**

Automated Structural Crack Detection Using a Deep Learning Based-YOLO Algorithm and Robotic Dog

**Kazaz İ, Kazaz E**

Dynamic Load Analysis and Damage Investigation of a Multispan Masonry Railway Bridge

**Mostofi S, Okur F Y, Altunışık A C**

Dynamic Spatio-Temporal Modeling for Fire-Induced Damage Prediction in Suspension Bridges: An RNN-GCN Approach

**Alhasan M**

Structural Health Monitoring Through Vibration-Based Feature Extraction and Machine Learning: A Comparative Study of AR, VAR, and SVD Methods

**Jadallah M, Doğangün A A**

Comparative Analysis of Ribbed and Solid Slabs in Enhancing Progressive Collapse Resistance of RC Buildings Following Multiple Column Loss

## COFFEE BREAK

16.45 - 17.00

## 17.00-18.30 SESSION 3

**Aytekin M**

Improvement of a Collapsible Soil: The Sabkha

**Keskin T, Yılmaz E, Sari M, Kasap T**

Assessment of Cemented Paste Backfill Strength and Microstructure Using Mixing Waters with Varying Ph

**Jolfaei S, Lakirouhani A**

Applying Gene Expression Programming to Predict Fracture Pressure in Elongated Wellbores

**Hu B, Demir G, Şimşek A**

Sustainable Materials for Ground Improvement: Hemp

**Sevdi M S, Babagiray G**

Evaluation of the Effect of Clay Core Parameters on Deformation of Rockfill Dams Using Artificial Intelligence Methods

**Kasap T, Yılmaz E, Sari M, Keskin T**

Optimization of Sand-Enhanced Cementitious Fillings: mechanical and Microstructural Evaluation Via UCS and UPV Methods

**Sertkaya K, Gör M, Nasery R K, Altunbey A**

Liquefaction Analysis of Various Soil Profiles Based on TBEC 2018: Case Studies from Elazığ Province

**Atılur B, Gezgın A T, Şenkaya M**

Determination of Soil Amplification Factors by Seismic Soil Response Analysis in Altınşehir Region - Abstract

**Benli A, Calım M H, Sengun E, Yolcu E M, İkizler S B, Dayioglu A Y, Hatipoglu M, Usta R**

Investigation of the Filtration Properties of Waste Concrete Obtained from a University Campus Roadway Renovation

## DINNER

20.00

## 13.30-15.00 SESSION 1

**Demirkaya S, Tanrıvermiş H**

Analysis of Design Parameters in Office Buildings in Terms of Sustainability Concept: The Case of Ankara Province

**Arioğlu Ş B**

Evaluation of Karadeniz Technical University Kanuni Campus with Universal Design Criteria

**Kasul N, Halicioğlu F H**

A Review of Innovation Research in Building Information Modelling (BIM)

**Reza S A A, Farhad A**

Definition and Typology of Nomadic Architecture (case Study: Iranian Nomads)

**Erdoğan E**

From Notes to Structures: Translating Musical Composition Into the Architectural Realm

**Aykan N, Alemdağ E L**

Evaluation of Wood Material Awareness in Architecture Education

**Alankuş B, Çelik S**

The Role of Material Passports in the Integration of Building Materials with Circularity Strategies

## COFFEE BREAK

15.00 - 15.15

## 15.15-16.45 SESSION 2

**Şahin Ö F, Adanur S, Türker H T, Altunışık A C**

Nonlinear Time-History Analysis of a Steel-Reinforced Concrete Composite Building According to TBEC-2018

**Ekkawi A A, El-hacha R**

A Rapid and Hybrid Prestressed Seismic Strengthening System for RC Piers Using Fe-SMA Plates: Experimental Breakthrough

**Idriss B A, Günaydın M, Sunca F, Okur F Y, Şahin C, Karahasan A K, Altunışık A C**

Dynamic Vibration Control Through Tuned Liquid Damper Under Different Excitation Angle: Shaking Table Tests Study

**Yılmaz M, Hakan Ö, Bayram A H, Livaoğlu R**

Evaluating Strong-Column/weak-Beam Behavior in Reinforced Concrete Structures: Insights from the 2023 Kahramanmaraş Earthquakes

**Ibrahim M M, El-hacha R**

Effect of Concrete Discharge on Tensile Strength and Fibre Distribution of UHPFRC

**Awassa O, El-hacha R**

Innovative Housing Solutions: Integrating Ultra-High-Performance Concrete in Modular Construction for Sustainability and Efficiency

**Turer A**

Timber As the Sustainable Building Material of the 21st Century: Key Advantages and Facts

**Şenkaya M, Silahtar A, Erkan E F, Karaaslan H**

Machine Learning-Based Modeling of Damages in the 2023 Kahramanmaraş Earthquakes Using Seismic Local-Site Parameters

## COFFEE BREAK

16.45 - 17.00

## 17.00-18.30 SESSION 3

**Şahin N, Şan M, Kankal M**

Non-Stationarity Assessment of Intensity-Duration-Frequency (IDF) Curves of Standard Duration Rainfall in the Eastern Black Sea Region, Türkiye

**Hassanzadeh Z, Hamid S Z, Parsa J**

Impact of Acidic Groundwater on Quarry Wall Stability: Evaluating Drainage and Chemical Treatment Effectiveness

**Yılmaz B, Aras E**

Development of the MARS Models for the Prediction of Monthly Dam Inflow

**Ghaznavinia S, Hosseini S M**

Mathematical Formulations for the Temporal Intensity Pattern of 6-Hour Design Storm in Central Tehran Metropolis

**Parsa J, Hamid S Z, Hassanzadeh Z**

AI-Based Water Quality Evaluation: Uncovering Key Chemical Contaminants with a Data-Driven Index

**Öztürk N**

Optimization of Well Flow Rate's Pumping Cost with Various Metaheuristic Algorithms

## DINNER

20.00

## 08.30-10.00 SESSION 1

**Yıldırım A, Doran B, Alacalı S, Aslan Z Ü**  
Numerical Investigation on the Out-of-Plane Behavior of Unreinforced Masonry Walls with and Without Opening

**Gedik B, Okuyucu D, Kazaz İ, Bingöl A F, Şahin M, Şahin B**  
An Experimental Investigation on Internal Temperature Monitoring of RC Beams Cast-in-Winter

**Yahya I N, Soysal B F**  
FEM and X-FEM Analyses of a Reinforced Concrete Flat Slab Under Sudden Dynamic Impact Loading

**Kurt G, Polat A, Yaylı M Ö, Yazıcı M, Deliktaş B**  
Buckling and Load Capacity of Thin-Walled Variable Cross-Section Columns: Influence of Fiber Orientation and Weld Lines

**Arpacıktaş M, Altun F**  
Effect of Hybrid Steel Fiber Effect on Concrete Mechanical Properties

**Kachouh L, Jaafari C, Durif S, Bouchair A**  
Development of Demountable Steel-Timber-Concrete Composite Floors: Connection Challenges and Literature Review

**Öztürk M M, Nacar S, Akbulut Y E, Altunışık A C**  
Estimation of the Frequency Value of Masonry Arches by Classical Regression Analysis

**Guner S**  
Quality Processes for Bridge Analysis Models

## COFFEE BREAK

10.00 - 10.15

## 10.15-11.45 SESSION 2

**Sarı M, Bayram S**  
The Impact of Directorate of High Technics Board and Court of Cassation Decisions on Disputes in the Construction Sector: Early Resolution Perspective

**Jehhad F, Khannoussi F E, Yamouni B E, Bounab L**  
Different Stakeholders in Construction and Public Works Knowledge of Building Information Modeling for Construction in Morocco

**Sarı M, Akcay C**  
Sustainability Under Disaster Threat: A LEED-Based Assessment of Istanbul University Hasdal Campus

**Kulabi A K A, Calis G**  
Identifying the Crucial Success Factors Influencing Project Management Indicators of Construction Projects in Türkiye

**Kaya M, Bettemir Ö H**  
Proposal of a Framework for Data Acquisition for Digital Twin of Building Façade

**Kunkcu H, Calik I, Koc K, Gurgun A P**  
A Review of Technology Trends for Off-Site Construction

**Kazaz A, Arslan G**  
Prioritization of Design Risks in Construction Projects

**Erdem M K, Gökalp O, Calis G**  
Input Scenario-Based Modeling of Office Building Energy Consumption with Ensemble Algorithms

**Abuelaish R, Bahadır Ü, Toğan V**  
Analyzing Causal Factors of Workflow Variability in Construction Projects: An Exploratory Factor Analysis

## COFFEE BREAK

11.45 - 12.00

## 12.00-13.00 SESSION 3

**Aydiner M F, Sevim B, Bekiroğlu S, Alemdar F, Arslan G, Ayvaz Y**  
Investigation of Soft Storey Action of a Reinforced Concrete Building by Pushover Analysis

**Al-gaadi F M, Alemdar F**  
Numerical Evaluation of the Optimal Configuration of the Cold-Formed Steel Storage Rack Systems' Seismic Performance in the Down-Aisle Direction by Means of Nonlinear Static Pushover Analysis

**Atasoy A, Yiğit A, Çibuk F, Yüksel İ**  
Prediction of Newmark Displacement Via Gene Expression Programming

**Kocaman İ, Mercimek Ö, Gürbüz M, Erbaş Y, Anıl Ö**  
The Effect of Material Properties on the Seismic Behavior of Historical Masonry Mosques

**Araz O, Saif M M A**  
Influence of Location of Tuned Mass Damper in Reducing Vibrations of a Building Subjected to Ground Motions

**Okur E K**  
Evaluating the Structural Impact of Restoration in Historical Timber Buildings with Numerical Modeling and Analysis

## LUNCH

13.00-14.00



## 14.00-15.30 SESSION 4

**Arasan A İ, Aşkın M F, Çomu S**

Exploring the Feasibility of Istanbul As an Olympic Host: Lessons from Previous Hosts

**Ali Z, Çelik G T**

Türkiye's Climate Change Mitigation Efforts: Evaluating the Role of Gbcs in the Construction Sector

**Uzunkaya A, Topuz S, Bettemir Ö H**

Estimation of Construction Material Consumption with Smart Contract

**Arar E, Halıcıoğlu F H**

Understanding Risk Factors in Green Building Construction: A Review

**Zalmai M L, Akcay C**

Application of BIM Autodesk 360 Technology in Quality Control and Construction Project Management

**Kazaz A, Esendal H**

The Use of Augmented Reality Application to Improve Design Quality

**Un B, Erdi E**

Predicting the Resolution Time of Disputes in Public-Private Construction Contracts Using Bayesian Network Analysis

**Petek E, Tokdemir O**

A Literature Review on the Implementation of Digital Twins (DT) in Infrastructure Projects: Trends, Challenges, and Future Directions

**Koralay S, Halıcıoğlu F H**

A Bibliometric Analysis of Project Complexity Research in the Construction Industry

## COFFEE BREAK

15.30 - 15.45

## 15.45-17.15 SESSION 5

**Toprak B, Öncü-davas S, Taşkın Y**

Numerical Validation of a Building Model Via Experimental Modal Analysis Method

**Solak A, Pamom A M, Kamanlı M**

Investigation of the Effect of Different Wall Layouts on B1 Irregularity in Buildings

**Qutait S F, Karouni N, Saleh W Z, Gelisen G, Kouchchad R M, Ali A A H B, Bahceci B**

NARS-Z Earthquake Robot

**Behrouz A, Ozakgul K**

Multiple Earthquake Effect on Seismic Behavior of 3D Steel Moment-Resisting Frames

**Atmaca E E, Genç A F, Adanur S, Altunışık A C**

Determining the Collapse Mechanism of a Historical Minaret Under the Earthquake Effect by Finite Element Simulation

**Douare L, Jaafari C, Pitti R M, Hashemi A, Quenneville P**

Design of a Seismic Resilient CLT Multistorey Building Complying with Eurocode 8 Using RSFJ Joints: A Case Study

**Üçdemir G, Dursun F M, Öz A, Kaplan G**

High Temperature and Freeze-Thaw Performance of Geopolymers with Glass Fiber and Natural Zeolite

**Bayram A H, Hakan Ö, Livaoğlu R**Fragility Curves of 100 M<sup>3</sup>-Elevated Water Tank Stock Based on Operating Level**Karahasan A K, Altunışık A C, Demirkır C, Okur F Y, Sunca F**

Finite Element Model Updating of Different Cross-Laminated Timber (CLT) Panel Groups Using Dynamic Tests

## COFFEE BREAK

17.15 - 17.30

## 17.30-19.00 SESSION 6

**Ayhan E, Polat B Y, Khatti J**

Contact Problem in Functionally Graded Layer Between Two Homogeneous Layers Resting on a Rigid Plane and Loaded by a Rigid Punch

**Polat A, Polat B Y, Ayhan E**

Contact Stress Analysis of Layers Loaded with Two Elastic Punches

**Serhatoğlu C, Livaoğlu R**

Wind Speed Simulation Techniques for Dynamic Structural Analysis and Design

**Demir A, Vatansever C**

Nonlinear Analysis of Flush End-Plate Beam-to-Column Connections Under Cyclic Loading

**Gholibeygi S, Ayhan B, Ergün H**

Finite Element Homogenization of Octet-Truss-Based Lattice Structures with Periodic Boundary Conditions

**Gençcelep S, Kahya V, Hacıfendioğlu K, Şimşek S, Aslan T**

Comparative Analysis of Vision-Based Vibration Identification Techniques Using Digital Camera Imaging

**Turan M, Hacıoğlu M İ**

A Higher-Order Finite Element for Buckling Analysis of Functionally Graded Sandwich Beams

## GALA DINNER

20.00

## 08.30-10.00 SESSION 1

**Tıra Y**

Revitalizing Cultural Heritage: The Transformative Power of Circular Adaptive Reuse in Istanbul Ferry Boat Stations

**Başaran F**

Conservation Assessment of Historical Healthcare Facilities: An Investigation of Cebeci Hospital in Ankara University Faculty of Medicine

**Yıldız Y, Akarca H**

The Impact of Russian Period Buildings on Today's Kars City Identity in Terms of Cocio-Cultural Sustainability

**Ghanini N, Akhoundi F**

Structural Techniques of Northern Iran: Traditional Methods and Sustainability

**Taştan H**

Design Studio Experiences in the Context of a New Building in a Historic Environment: The Example of Fertek Hammam

**Orhan H N, Özgen S**

The Impact of Climate Change on Stone Structures: An Evaluation of the Yakutiye Medrese in Erzurum

**Yavru T E, Kalfa S M**

Fire Risk Assessment Methods for Historical Buildings

**Kaçıran A, Demirkaya F Ü**

Rize Architectural Historiography: What Archive Sources Tell Us

**Kutlu İ, Şimşek D**

Artificial Intelligence (AI) Assisted Digital Reconstruction of Historical Buildings

## COFFEE BREAK

10.00 - 10.15

## 10.15-11.45 SESSION 2

**Çakmak H, Öksüz A M**

The Impact of Socio-Cultural Change in Rural Areas on the Built Environment: The Case of Ataköy, Trabzon

**Mostofi L, Acar C**

Enhancing Urban Resilience: A Comparative Study of Dubai and Trabzon

**Şen G E, Ofloğlu S**

Assessing the Knowledge of BIM Professionals and the Need for Theoretical BIM Education

**Toruk N S, Manisa K**

The Role of Informal Learning Spaces in Contemporary University Designs

**Yaşar K, Kuban Z**

Regional Economics and Relocation: A Case Study of Gümüşhane

**GhasemiBaghdadi S**

The Ecological Survey of Semi-Open Spaces in Hot-Dry Climates to Achieve a Cultural and Zero-Energy Housing Model

**Feizi S, Ahmadiyan F, Motamadnia A, Seyyedhassanlou M**

Study of Aesthetic Components for the Revitalization of the Old Fabric of Tabriz, Iran (Case Study: Tarbiat-e-Gharbi)

**Khumaira H H, Taş N, Taş M**

Comparative Analysis Among Cross Background Green Building Rating System: LEED, DGNB, SBAT, and Greenship

**Wahdaniyah N, Tuncer A**

Sustainable Landscape Planning in Muradiye Külliyesi Historical Area

## COFFEE BREAK

11.45 - 12.00

## 12.00-13.00 SESSION 3

**Aktuglu Y K**

The Magical Structural System of Munich Olympic Stadium

**Ertaş G, Aydın D**

An Evaluation of the Use of Energy Performance Simulations in Turkey

**Tulukcu D A, Sayın S**

Algorithm-Aided Energy Efficient Building Optimization

**Altunkaya G U, Günay R G, Engin N**

Investigation of the Effects of Wind-Driven Rain (WDR) on Building Facades: A Case Study of KTÜ Kanuni Campus

**Hamida B, Boulerbah T**

Improving the Thermal Comfort of Traditional Housing by Adapting a High-Performance Material

**Cabacı B N, Ünay A İ**

Evaluation of Lightweight Steel Construction Systems As an Alternative to Conventional Construction Systems

## LUNCH

13.00-14.00

## 14.00-15.30 SESSION 1

**Özdemir G N, Akkurt G G, Akkurt S**  
Cool Roofs: Development and Characterization of Reflective Tile Coatings to Mitigate Urban Heat Island Effect

**Karabulut Z E, Avingç G M, İkizler S B**  
Reuse Trends and Current Situation in Architectural Building Material Research: A Bibliometric

**Akalp S, Ayçam İ**  
Fire Risk Assessment of Atrium-Planned Shopping Centers: The Case of Ceylan Karavil Park Shopping Mall

**Yüksel F Ş K, Akalp S, Melikoğlu Y**  
Birecik Bridge in the Context of Long Span Reinforced Concrete Bridges: An Architectural and Structural Analysis

**Sargök M, İpekçi C A, Coşgun N**  
Examination of Green Building Certified "haut Amsterdam" Building in the Context of Sustainable Building Material Selection Criteria

**Yavuz Ş, Aktuğlu Y K**  
Investigation of the Steel Material Used in the Structural System of Alvar Aalto's Buildings: The Case of Villa Mairea

**Gebel Ş, Gökğöz B İ, İlerisoy Z Y**  
Evaluating Risks in the 3D Concrete Printing Process: 5x5 Matrix Approach

**Bastem S S, Oral G K**  
Evaluation of Energy-Efficient Design Parameters in Traditional Ayvalık Houses

**İlipınar D, Türker C, Akalın D Z**  
Assessing Material Performance in Tiny Houses: Energy Consumption and Carbon Emissions

## COFFEE BREAK

15.30 - 15.45

## 15.45-17.15 SESSION 5

**Sondaş A, Kabataş F H, Demirci Ö S**  
Masculine Spaces and Feminine Spaces in Rural Settlements: The Case of Ankara Çamlıdere

**Kalak M, Sondaş A, Demirci Ö S**  
Conservation Issues in Mixed Heritage Sites: The Cases of Akdamar Island, Church and Side

**Yılmaz E, Kalak M**  
The Relocation and Preservation Issues of Hasankeyf

**Tutkun M, Uğurlu E, Tutkun M**  
Revitalization and Integration of Historic City Walls and Castles Into the Urban Fabric: A Comparative Analysis

**Kadri M**  
Preserving Algeria's Architectural Heritage: Balancing Tradition and Modern Restoration Practices

**Karkaş Z S, Özgünler S A, Alhan E T**  
Customized Kutahya Pozzolan and Metakaolin-Based Geopolymers for Stone Conservation: Initial Findings on Mechanical Properties

**Aykutlu F, Pilehvarian N K**  
Preliminary Research on Two Ancient Aqueducts in the Fortress of Amasya

**Kadri M**  
Sustainable Interior Design in Algeria: Blending Tradition and Innovation for a Greener Future

## COFFEE BREAK

17.15 - 17.30

## 17.30-19.00 SESSION 6

**Savur D, Emekçi Ş**  
Evaluating Generative AI Capabilities for Architectural Visualization

**Melikoğlu Y**  
A Review on Artificial Intelligence Extensions Integrated Into Architectural Drawing Programs and Their Applications

**Ateş D K, Oğuz G P**  
A Rock Carving Structure of Eymir Khan

**Varışlıaslan N T**  
Unveiling the Hidden Meanings of Transparency: Fondation Cartier's Structural Reading As an Art-Cell

**Şensoy S A, Öngöz S**  
The Use of Artificial Intelligence Technology in the Field of Architecture: Current Situation and Future Projections

**Öksüz M E, Hacıaliefendioğlu E E, Topaloğlu G**  
The Potential of Artificial Intelligence Applications in the Architectural Criticism: Comparative Analysis

**Manioğlu G, Taşkın H F, Murathan E K**  
A Roadmap for Preliminary Assessment of Energy Performance in Traditional Houses: The Case of Ayvalık

**Gökkaya İ, Uz F**  
Understanding Architectural Memory Through Cinematographic Montage Milli Reasürans Example

## GALA DINNER

20.00

## 08.30-10.00 SESSION 1

**Yüksel E, Zeppio J A A, Aydogdu G, Kayaalp B T**  
Investigation of the Creep Performance of Basalt Fiber-Reinforced Hot Mix Asphalt Under Different Temperatures

**İskender C, Solak H, İskender E, Aksoy A, Aslan M T**  
Superhydrophobic Surfaces and Road Pavement Applications

**Demir E**  
Balancing Costs and Commuter Comfort to Enhance Urban Rail Transit Performance

**Erakman D D, Pancar E B**  
Samsun E1 Bus Route Analysis: Impacts of Urban Traffic Regulations on Public Transportation

**Çelebi M E, Kuşkan E**  
Estimation of Air Pollution Indices from Road Transport in Turkey for 2024 Based on Fuel Types Using the IPCC Tier 2 Method

**Kırbaş U, Genç Z, Başoğlu M**  
Comparison of the Pavement Condition Index and Riding Comfort Levels of Newly Built Urban Interlocking Concrete Pavements

**Bozdemir M G, Yeşilçiçek H, Oruç Ş**  
Rheological Characterization of BARC-Modified Asphalt Binder Via Frequency Sweep Testing

**Seferoğlu M T**  
Sustainable Concrete Pavements Using Pb-Zn-Cu Mining Waste and Recycled Tire Steel Fibers

**Kabakuş N, Mwasembe N W**  
The Innovations Shaping the Future of Traffic: Autonomous Vehicles and Smart Transportation

## COFFEE BREAK

10.00 - 10.15

## 10.15-11.45 SESSION 2

**Djati Utomo H, Li X**  
Performance of Concrete Mix Incorporating Incinerated Bottom Ash

**Al-khatib I A**  
Evaluating the Zahret Al-Finjan and Al-Minyah Landfills in Palestine: Present Conditions and Future Challenges

**Yıldız E, Tosunbayraktar Ö, Çalım M H, Usta R, İkizler S B, Dayioğlu A Y, Hatipoğlu M**  
Investigation of Filtration Performance of Recycled Asphalt Material Under Different Geotextile Apparent Opening Size

**Eyada S, Altawil H**  
Production of Building Blocks Using Demolished Buildings Waste and Gypsum in Gaza City, Palestine

**Alp M C, Bundur Z B, Güven G**  
Smart Demolition Strategies: Enhancing Efficiency in Concrete Recycling with BIM

**Pakseresht M, Akbardoost J**  
The Effect of Waste Foundary Sand on Mixed-Mode I/II Fracture Behavior of Concrete

**Baradaran S, Aliha M, Ameri M, Erarslan N, Sadowski T**  
Evaluation of Crack Resistance in Asphalt Mixtures Modified with Recycled PET Granules at Low and Intermediate Temperatures

**Çelik D N, Yıldızlı T**  
Utilization of Juniper Seed Waste As a Lightweight Aggregate in Scms-Based Cementitious Composites: Effects on Physical and Mechanical Properties

## COFFEE BREAK

11.45 - 12.00

## 12.00-13.00 SESSION 3

**Türk A, Keskin Ü S**  
Effect of Pre-Curing Rest Period on the Compressive Strength of Calcined Marl-Based Geopolymer Mortars

**Türk F, Keskin Ü S, Uzal B**  
Pozolanic Activity of Calcareous Clay: An Uncommon Cement Replacement Material

**Ersoy S, Abuqasim S, Yıldız M K, Öztürk İ Ş, Sarı F A, Maraşlı M, Emiroğlu M**  
Machine Learning Approximation of Water Transport in 3D-Printable Composites Via Karsten Tube

**Aygun B, Uysal M**  
Role of Nano-SiO<sub>2</sub> in Enhancing Properties of Slag-Waste Ceramic Powder-Based Geopolymer Composites

**Aygun B, Uysal M**  
Effect of Nano-TiO<sub>2</sub> on Physical Properties of Slag-Ceramic Powder-Based Geopolymer Composites

## LUNCH

13.00-14.00

## 14.00-15.30 SESSION 4

**Öztürk H T**

Chaotic Rao (ch-Rao) Algorithm for Optimization of RC Symmetric Spread Footings

**Prakash J, Daloğlu A T**

Optimal Design of Steel Frames with Semi-Rigid Connections and Column Bases Using Particle Swarm Optimization

**Soysal N, Muvafik M**

Effect of the Connection Shape of Cables on Behaviour of Suspension Bridges

**Thomas J, Sindhu D R**

Strength and Deformation Characteristics of Concrete Filled Steel Tubular Columns with Cap Gaps

**Jaafari C, Hammoudi I, Durif S, Bertel L, Henzel F, Huong L B T, Fiabane M, Catterou T, Saneh M**

Mechanical Performance of a Flat Tie Connection System for Timber and Clay Bricks Cavity Walls: Numerical and Experimental Study

**Abdullayev G, Avey A, Alyev Y**

Stability of Multilayer Cylindrical Shells Formed from Nanocomposite Layers in Various Environments Under Lateral Pressure

**Bayburt A, Adanur S, Günaydin M, Altunışık A C**

Design and Analysis of Unreinforced and Reinforced Masonry Buildings According to TBDY-2018

**Ören S, Sunca F, Altunışık A C**

Pounding Effects on Seismic Behaviour and Damage Pattern of RC Buildings

## COFFEE BREAK

15.30 - 15.45

## 15.45-17.15 SESSION 5

**Polat A, Amin H, Ahmed C, Samir L, Campilho R D**

Numerical Analysis of the Reinforcement of Flexible Concrete Structures by Patch in FGM

**Beglarigale A**

Comparative Investigation of Micro Steel Fiber Effects on the Electrical Resistivity of PC and AAS Composites

**Ekmekci S, Uysal M, Aygun B**

Advancing Geopolymer Mortars with Recycled Concrete Aggregates Through Joule Heating Curing

**Taştemür Ö, Uysal M**

Evaluation of Kocaeli Gulf Marine Solid Wastes in Geopolymer Composite Production

**Arslannur B, Özdemir M A**

Evaluation of Concrete Paving Block Strength Through Ultrasonic Pulse Velocity (UPV) Measurements

**Arslan B, Evcı P U**

Reinforcement of Unreinforced Masonry Buildings with Carbon Emission Reduced Cement

**Yılmaz M, Uysal M**

The Effect of Ohmic Heating on Alkali-Activated Blast Furnace Slag-Fly Ash Concrete with Marble Powder Replacement

**Akhtarian S, Semercioğlu İ N, Başağa H B**

An Automation-Based Smart Curing Blanket for Optimizing the Concrete Curing Process

**Capraz D, Uysal M, Sahin F, Aygun B**

A New Era for Lime with Natural Hydraulic Lime Binder and Innovative Aggregates of Hemp Stalks, Sunflower Husks

## COFFEE BREAK

17.15 - 17.30

## 17.30-19.00 SESSION 6

**Alizadeh M, Afzalimehr H, Okhravi S**

Comparison of Reynolds Shear Stress and Drag Coefficient in a Meander with Submerged Flexible and Rigid Vegetation

**Takano K, Muto Y, Hayashimoto R, Tamura T**

Study on Riverbed Evolution in the Flow Field Around Japanese River Works "hijiri-Ushi"

**Hayashimoto R, Muto Y, Takano K, Tamura T**

Experimental Study on Restoration of Sandbar Using Traditional Japanese River Works "hijiri-Ushi"

**Akbarian H, Jaefarzadeh M R**

Hydraulic Characteristics of Supercritical Open Channel Bend Flows

**Baki O T**

Investigation of Temporal Change of Lake Van Surface Area with Climatic Parameters

**Yıldırım G**

Essentials of Manifold Flow Hydraulics-I: Hydraulic and Energy Gradient Lines

**Yıldırım G**

Hydraulic Analysis of Multi-Outlets Submains-I: Software Development

**Yıldırım G**

Hydraulic Analysis of Multi-Outlets Submains-II: Implementation

**Yıldırım G**

Essentials of Manifold Flow Hydraulics-II: Energy-Gradient Ratio (EGR) Approach

## GALA DINNER

20.00

## 08.30-10.00 SESSION 1

**Hakan Ö, Timurağaoğlu M Ö, Livaoğlu R**  
Retrofitting of Single-Story RC Prefabricated Structures with FVD

**Akkaya K, Baş S, Selçuk S**  
Risk Analysis of Buildings with Earthquake Performance Index

**Hacıfendioğlu K, Motamedi A, Aslan T, Duman C, Bostan A**  
Advanced Deep Learning Models for Anomaly Detection in Masonry Structures

**Timurağaoğlu M Ö, Hakan Ö, Livaoğlu R**  
Evaluation of Seismic Pile Demands Resting on Soft Soils Across Seismic Hazards

**Ertaş Ö F, Güler K**  
Seismic Performance Assessment of an Existing Pre-Stressed Reinforced Concrete Bridge

**Çalım F, Güllü A, Yüksel E**  
Predicting Displacement Demands in SDOF Systems Using Seismic Input Energy: A Machine Learning Approach

**Kapıcıoğlu S, Aydinler M F, Alemdar F, Sevim B, Bekiroğlu S, Arslan G, Ayvaz Y**  
Calibration of FE Models of Reinforced Concrete Specimens Using Experimental Modal Analysis

**Onat Ö, Evcı P U**  
Impact of Infill Walls and Strengthening Methods on the Seismic Behavior of RC Buildings: A Time-History Approach

**Şen D, Sunca F, Altunışık A C**  
Investigation of Infill Wall Effects on Structural Behavior of RC Buildings: A Case Study of Collapsed Building After the 2023 Kahramanmaraş Earthquakes

## COFFEE BREAK

10.00 - 10.15

## 10.15-11.45 SESSION 2

**Zardari S, Sağlam A D**  
Deformation Analysis of Anchored Retaining Systems: A Case Study with PLAXIS Modeling and Field Data Comparison

**Ateş B, Zardari S**  
The Influence of Geogrid Reinforcement Configuration on the Settlement Behaviour of Soil-Pipe Systems

**Kaya D, Cakir T, Ozturk K F**  
Dynamic Analysis of a Building Structure Including Soil-Structure Interaction

**Aytekin M**  
A New Approach in the Design of Mechanically Stabilized Earth Walls

**Bayat M, Feng W**  
Optimizing Cement-Stabilized Soil Behavior Using Zeolite

**Abdulkareem A, Ahmed T, Kwad N**  
Enhancing Mechanical Properties of Subgrade Soil Using RAP-Geopolymer

**Mohammadi H, Cüre E, Türker E**  
Investigation of the Effects of Land Surface Sensitivity on Rockfall Analyses

**Karakan E, Sezer A**  
Salinity's Effect on the Atterberg Limits of Bentonite Clay

**Kılıç M E**  
Effects of Fire-Related Disasters on Natural Building Stones used in Historical Buildings

## COFFEE BREAK

11.45 - 12.00

## 12.00-13.00 SESSION 3

**Akyurt S E, İlker P, Sorgun M**  
Potential of Machine Learning Algorithms for Sediment Transport in Annulus

**Günay A, Yüksek Ö, Anılan T**  
Prediction of Flood Discharge with Jaya Algorithm for Trabzon Province

**Tezel A Ç, Akpınar A**  
Enhancing Model Performance: Calibration of SWAT+ Model for the İznik Lake Watershed

**Ay M**  
Examination of Existing Buildings for Rainwater Harvesting System and Feasibility of the System

**Yüksek Ö, Yüksek O**  
Rainfall Intensity-Duration-Frequency Analysis in the Eastern Black Sea Basin

**Arzhangı A, Partani S, Jouybari Y, Mohammadi M**  
The Effects of River Morphological Parameters on Organic Carbon Dynamics

## LUNCH

13.00-14.00

## 14.00-15.30 SESSION 1

**Haciemiroğlu M, Aydoğan M, Alhan C**

Seismic Performance Assessment of a Fire-Damaged Reinforced Concrete Building According to TBDY-2018

**Tülen H, Öztürk H, Atalay H M**

Effects of Seismic Isolators on the Structural Behavior of Reinforced Concrete Buildings

**Damlar K, Demir H C, Palanci M, Subaşı R O**

Comparative Analysis of Kahramanmaraş Earthquakes for Old and New Buildings

**Shukurova G, Özyurt E**

Hysteretic Behaviour of Aluminium Foam Filled Double-Skin Steel Sections

**Onat O, Albayrak Ş**

A Comprehensive Assessment of the As-Built Projects of Severely Damaged or Collapsed Residence in Malatya After Feb 6, 2023, Kahramanmaraş Earthquakes

**Salameh N, El-hacha R**

Compressive Behaviour of CFRP- and SFRP-Confined Concrete: A Performance Assessment

**Demirtaş Y, Yurdakul Ö, Avcı H**

Cost-Effective Seismic Retrofitting of Deficient RC Structures Using Shape Memory Alloy Bars

**Canözü Ö, Acar H**

Semi-Automatic Detection of Unusable Roads After an Earthquake

## COFFEE BREAK

15.30 - 15.45

## 15.45-17.15 SESSION 5

**Yesilcicek H, Bozdemir M G, Oruç Ş**

Investigation of Rheological Properties of Asphalt Binder Modified with TOBO Additive

**Dabbaghi A, Hoseini M S, Naderan A**

Effects of Variable Speed Limit to Control on-Ramp in Countries with Careless Traffic Behavior (case Study Tehran)

**Özden A, Kocaman H, Halimergün Y**

Are Public Transport Information Systems Equally Effective? Insights from Local and Migrant Passengers

**Demirtürk D, Mintemur Ö**

Tree-Based Estimation of Voids in Mineral Aggregate in Superpave Mix Design: Feature Importance and Validation Analysis

**Aytekın M**

Design and Estimation of Plastic Properties of Gradations for Flexible Pavement Courses

**Avci T, Gokasar I**

The Impact of Big Data and Artificial Intelligence on Public Transportation Optimization

**Akgol K, Ozturk O F, Kara Y N**

Comparison of Terrain Modeling Approaches: Evaluating Software Performance in Infrastructure Projects

**Imani A H, Bayati A, Partani S, Mohammadi M, Mousavi S M**

Evaluation of the Effects of Centralized Multi-Purpose Urban Transportation Stations on Land Use with a TOD Approach

**Gokasar I, Karaismailoglu A E**

Renovating Transportation Infrastructure in Emerging Economies: Transforming Systems for a Sustainable Future

## COFFEE BREAK

17.15 - 17.30

## 17.30-19.00 SESSION 6

**Aissaoui M I, Bouhafara D, Menail Y, Mesrafet F**

The Distilled Water Absorption Behavior of Two Types of Resin Polymers Used in the Manufacturing of Structures

**Akbulut Y E, Koçak S A, Göç A, Çalık A, Altunışık A C**

High-Temperature Performance of FRP Systems for Structural Strengthening Applications

**Nuhair A M, Günaydın M, Alabsi S, Özyurt E, Altunışık A C**

Progressive Collapse Simulation of a Multi-Storey Building Constructed Using Carbon Steel and Stainless Steel Under Fire Conditions

**Çolak H, Türker H T, Coşkun H**

A Novel Equivalent Continuous Beam Model for Seismic Performance Evaluation of Multi-Story Buildings

**Soysal N, Alemdar Z F**

Finite Element Analysis and Experimental Investigation of Load Capacities of Cold Formed Steel Columns

**Ayatollahi M R, Moghaddam M R**

Geometry Effects on Rock Fracture Toughness Under Combined Tension-Shear Loading

## GALA DINNER

20.00

**08.30-10.00 SESSION 1****Al-rubaye H A H, Şafarkhani M**

Spatial and Physical Studio Configurations: A Conceptual Model for Student Satisfaction and Efficacy

**Ünal M, Özten Ü, Anay H**

Enhancing Visitor Experiences in Cultural Heritage Sites Through AI-Driven Smart System

**Karadelioglu İ E, Oktan S**

An Artificial Intelligence Aided Design Process from Text to 3D Printing

**Türker C, Akalın D Z, İlipınar D**

Comparative Research of Historical and Modern Train Stations in Turkey in Terms of Scale, Function and Architecture

**Cetin M, Halicioglu F H**

BIM-Based Construction Quality Management: A Bibliometric Analysis

**Temel M U, Şen D E**

Non-Formal Learning Environments and Their Importance in Architectural Education

**Safarkhani M, Yılmaz F Ş**

Multidisciplinary Sustainability Model in Post-Disaster Housing Recovery: User-Oriented and Energy-Efficient Strategies

**Keçeci B, Alabisi S, Sunca F, Altunışık A C**

Investigation of Progressive Collapse Behavior in Seismically and Non-Seismically Detailed RC Frames Under Middle Column Removal Scenario

**Özyıldırım G**

Effects of Water Level Changes of Lake Burdur and Lake Van on Built Environment

**COFFEE BREAK****10.00 - 10.15****10.15-11.45 SESSION 2****Akalın D Z, Türker C, İlipınar D**

Conceptual Evaluation for the Integration of Historical Railway Stations Into High Speed Railway Systems in the Perspective of Sustainable Development Goals

**Büyükcelik M, Dabanlı Ö**

Damage Observations of February 6th 2023 Earthquakes on Historical Buildings in Kahramanmaraş

**Tıra Y**

Revitalizing Cultural Heritage: The Transformative Power of Circular Adaptive Reuse in Istanbul Ferry Boat Stations

**Das D K, Aiyetan A O**

Enhancing Mega-Infrastructure Project Performance in South Africa Through Critical Construction Management Factors: Insights from Confirmatory Factor Analysis

**Yüksel F S K**

Sustainable Concrete with Reduced Environmental Impact As a Building Material

**İnce F, Anay H**

Bridging Barriers: Overcoming Resistance to Digital and Computational Design in Architecture

**Donduran C G, Karadağ Ö**

Enhancing Structural Awareness in Architecture: Promoting Early Collaboration with Structural Engineers

**Ertek M, Özyıldırım G**

Analysis of Van Pier and Tatvan Pier at the Intersection of Railway and Sea Routes

**Kazemi E, Sattari M T, Mohammadzadeh R**

A Brief Overview of Historical Water Supply Structures in Ancient Tabriz

**COFFEE BREAK****11.45 - 12.00****12.00-13.00 SESSION 3****Ateş B, Şadoğlu E**

Performance Assessment with Numerical Modelling for a Road Embankment Built on Soft Subbase Reinforced with Geocell

**Aliha M, Nabavi S M, Choupani N, Bedir F, Moshtaghi S, Rafiee K**

Impact of Freezing-Thawing Cycles on Modes I and II Cracking Resistance of Soil and Cement Concrete Materials

**Karahasan O Ş, Akçay B**

Examining the Dynamic Performance of Loose Sands Reinforced by Recycled Concrete Aggregate (RCA)

**Gokasar I, Tülü M G, Yıldız V**

Examining the Link Between Property Development and Transportation Infrastructure

**Gokasar I, Yıldız V**

Streetmeter As a Tool for Human-Centered Urban Analysis: Expanding the Metrics

**Erener M F, Erener T T, Nuhoglu A, Erdoğan D Ş**

Effect of Nonlinear Behaviour of Steel on Lateral Response of Steel Pipe Piles in Saturated Sand

**LUNCH****13.00-14.00**



## 14.00-15.30 SESSION 1

**Ünal M T, Gökçe H S, Hashim H B**

Mechanical Properties of Pre-Treated Plant-Based Lightweight Aggregate Concrete

**Tarhan Y, Tarhan İ H, Perrot A**

Flexural Performance of Glass Fibre Textile Reinforced 3D Printed Concrete

**Bostancı A, Atabey S**

Structural Performance of Concrete and Steel Pedestrian Overpasses in Ortahisar: Experiences and Innovations

**Baloğlu B, Bosna B, Atacan O, Yılmaz E**

Corporate Carbon Footprint Analysis of Ready-Mixed Concrete Facilities

**Rahimi E, Yui A, Yamachi Y, Kawasaki Y**

Eco-Friendly Composite Development Using Cement Paste Waste, Hemicellulose, Chitosan, and Natural Fibers

**Polat A, Amin H, Ahmed C, Samir L, Campilho R D**

Numerical Analysis of the Reinforcement of Flexible Concrete Structures by Patch in FGM

## COFFEE BREAK

15.30 - 15.45

## 15.45-17.15 SESSION 5

**Ates M N, Türkoğlu H, Damci A, Demirkesen S**

Strategies for Delay Mitigation in Construction Projects: A Systematic Review

**Semerçioğlu İ N, Motamedi M, Başağa H B**

Work Accident Analysis with LLMs: Can LLMs Identify Liability Classifications?

**Koçak S A, Göç A, Başağa H B**

The Cost Impact of Using High Fire-Resistance Materials in Building Claddings

**Motamedi M, Semerçioğlu İ N, Başağa H B**

Comparative Analysis of AI Platforms Developed in the AEC Industry

**Temel B A**

Implementing IDS-Based Information Validation in BIM: A Practical Application

**Yavan F, Maalek R, Aali A**

Sketch-To-BIM: A Comparative Analysis for Automated Truss Design and Optimization

**Yılmaz G K, Başağa H B**

Identification of the Criteria Affecting the Selection of Suitable Site Locations Along the Route for Highway Construction Sites

**Kazaz A, Yetim E**

Thermal Insulation Optimization for Energy Efficient Buildings in Antalya: Multi-Criteria Decision Making Approach

**Görhan M F, Kürklü G, Görhan G**

Investigation of the Usage of Technology in the Civil Engineering Education with Bibliometric Analysis

## COFFEE BREAK

17.15 - 17.30

## 17.30-19.00 SESSION 6

**Marangoz H O, Anılan T, Süme V**

Advances in Breach Formation Modeling and Flood Risk Assessment for Dam Failures

**Güney M Ş, Politi R, Kalyoncu Y, Dallı K**

Experimental Study of the Temporal Evolution of the Breach and Flowrate Outgoing from the Breach Due to Overtopping at Homogeneous Earth-Fill Dam

**Günay A, Sayıl M C, Anılan T**

Modeling of the Maximum Rise Height of a Dense Discharge Using the Teaching-Learning-Based Algorithm

**Erduran K, Ünal U, Adekoya O**

Experimental and Numerical Investigation of Tsunami Impact Force on a Square Obstacle

**Seçkin M, Emek A K, Özpolat Y, Dilmen Ö, Koca K**

Numerical Investigation of Flow Around a Circular Cylinder with a Spoiler at Low Reynolds Number

**Yüksel İ, Yılmaz E, Çibuk F, Terzi M**

Cost Analysis of Small Hydroelectric Power Plants: A Case Study Euphrates and Tigris Basins

**Bedir M, Değirmenci B, Aras E, Çelik D Y**

An Experimental Investigation of the Effects of Discharge Height and Angle on the Dilution Characteristics of Dense Brine Effluents

## GALA DINNER

20.00

## 08.30-10.00 SESSION 1

**Kılıç U, Altun İ B, Çomu S**

Developing a Virtual Reality-Based Safety Training Tool for Civil Engineering Students

**Doğan N, Bettemir Ö H**

Cost Analysis of UWB and SLAM Integrated Building Surveying Technologies

**Abdillahi A M, Bayram S**

Understanding the Key Drivers of Construction Labor Productivity in Bricklaying

**Ozcan-deniz G, Ozorhon B, Guler C**

BIM in Developing Countries: A Framework for Successful Transition

**Aydınlı S**

Clustering of Construction Business Surveys: Case of Türkiye

**Alboğa Ö, Erdiş E**

Measures of the Central Tendency for Occupational Accidents in the Building Industry

**Mostofi F, Tokdemir O B, Toğan V**

Leveraging Graph-Based Neural Networks for Enhancing Early-Stage Screening of Construction Projects: Graphsage Model

**Bahadır Ü, Toğan V**

Generating a Dynamo-Based Bill of Quantities from BIM Models: A Case Study

## COFFEE BREAK

10.00 - 10.15

## 10.15-11.45 SESSION 2

**Toprak B, Davas S Ö**

Effect of Vertical Earthquake Components on the Base Displacement Response of Seismically Isolated Buildings

**Çayır H, Vatansever C**

Nonlinear Behavior of Multi-Tiered Steel Eccentrically Braced Frames Effects of Lateral Support and Initial Imperfections

**Dag B, Borekci M**

Investigation of the Effects of Direct Integration Methods and Their Parameters on Pounding in Different Impact Models

**Yön B, Yön M Ş, Karataş M, İcen A, Cemalgil S**

Performance of Reinforced Concrete Buildings Built in Tunceli During the Period When the 1975 Earthquake Code Was in Force: A Case Study

**Toplu E, Kirtel O**

The Integrated VS30 Maps and Soil Classification for Sakarya Province

**Ateş S, Avşar Ö**

The Effect of Nonuniform Scour in Transverse Direction on Seismic Behavior of Ordinary Highway Bridges

**Sönmez M A, Koçak A, Başeğmez Y Y, Ulusoy S İ**

Behavior of Untopped Precast Floors in High-Seismic Applications

**Demirel Z, Selçuk S**

Structural Damage and Transportation Closure Analyses Based on Earthquake Performance

**Aslan T, Hacıfendioğlu K, Bostan A, Duman C**

Autoencoder Based Damage Detection in Masonry Structures

## COFFEE BREAK

11.45 - 12.00

## 12.00-13.00 SESSION 3

**Dawood M A, Khalaf S, Abed F**

Postfire Response of GFRP-Reinforced Concrete Beams with Cement-Based and Intumescent Fireproofing Systems

**Torunoglu I, Daloglu A T**

Comparison of Integrated Force Method and Displacement Method for Metaheuristic Optimization of Civil Structural Systems

**Sakar G, Celik H K**

A Study on Methods to Increase the Ductility of Timber Beams

**Hamadi D, Al-nadhari A, Hamadi S E, Legouirah M**

A Parametric Study of Rectangular Plates Under Large Deflection by a Quadrilateral Finite Element

**Sevilmiş E, Kahya V, Şimşek S**

Effects of Cracks on Dynamic Behavior of Stepped Beams with General Boundary Conditions

## 08.30-10.00 SESSION 1

**Akdağ N, Demir U**

A Cost-Effective Optimization of Post-Fire Strengthening of Reinforced Concrete Columns Using FRP Fabrics

**İlipınar D**

The Millennium Tent: A Critical Review on Astana Khan Shatyr

**Aras A, Canca Ç**

In the Context of Urban Memory Studies: The Relationship Between Boulevard and Architecture (Ankara Apartments)

**Abdelkhalek E, Dewidar K**

Tectonics of Actively Bent Grid Shell, a Holistic Design and Build Approach for Weaved Timber Morphology

**Toprak E G**

Examining the Earthquake Behavior of Kırıkkale Historical Steel Bridge with Numerical Analysis

**Khojasteh N, Kalfa S M**

The Impact of Metaverse on Architecture and Engineering Disciplines

**Avci E, Torunbalci N**

Structural System Interventions in Adaptive Reused of Industrial Buildings: The Case of Ayvalık Rahmi Koc Museum

**Karavin Y S, Demir U**

Seismic Characterization and Vulnerability of Stone Masonry Buildings in Urla

## 12.00-13.00 SESSION 3

**Kabataş F H, Kalak M, Demirci Ö S**

Comparison of Wooden Masonry (Çanti) Technical Mosques in Near Geographies: Georgia Adjara Region and Trabzon Rural Architecture

**Bideci A, Çelik O**

Investigation of Windows of Traditional Houses in Düzce-Prusias Region

**Nami S, Akhoundi F, Amer S**

Seismic Assessment and Effectiveness of Structural Retrofitting Techniques: A Case Study of Industrial Chimneys at Khosravi Leather Factory in Tabriz

**Gharehayaghi S, Akhoundi F**

Vulnerability Assessment of Holy Mary Historical Church in East Azerbaijan, Iran According to Italian Guidelines

**Demirci Ö S, Oğuz G P, Aydın Ö**

In the Context of Protecting Ankara's Modern Architectural Heritage: Anafartalar Street

**Kırcı O**

The Impact of Climate Change on Adobe Structures in UNESCO World Heritage List

## COFFEE BREAK

10.00 - 10.15

## 10.15-11.45 SESSION 2

**Özkan C, Tanaçan L**

Graphite's Multifunctional Effects on Thermal Properties in Construction Materials

**Aras A, Ergin B**

Green Building Evaluation in Historical Buildings: The Case of Sveti Stefan Church (Bulgarian Church)

**Özdoğan M, Coşgun N**

Deterioration in Buildings: A Study on Failure Analysis and Solutions

**Gökgöz B İ, Gebel Ş, Takva Ç, Top S M, İlerisoy Z Y**

Evaluation of 3D Concrete Printing Production Processes with Multicriteria Decision-Making Methods

**Ehven M, Metin B**

Potential of Using Agricultural Wastes As Thermal Insulation Material: The Case of Wheat Straw Insulation on External Walls

**Elçin E, Orhon A V**

Parametric Modelling and Geometrical Arrangement of Ellipse-Plan Diagrid Structural System

**Polat E, Erten Ş Y**

An Examination of the Illumination Levels of Vertical Circulation Elements in Historical Buildings: Stair Towers of the Old Edirne Train Station Building

## COFFEE BREAK

11.45 - 12.00

## 08.30-10.00 SESSION 1

**Öztürk H T, Öztürk N**

Performance of Ch-SAMP-Rao Algorithm on RC Slab Bridge Superstructure CO<sub>2</sub> Emission Optimization: A New Improved Metaheuristic Algorithm

**Celik H K, Sakar G**

Seismic Performance Evaluation of Monopole Billboard Regarding Connection Stiffness

**Selman E**

Distribution of Progressive Collapse Mechanisms in the Reinforced Concrete Shear Wall-Frame Systems

**Prakash J, Daloglu A T**

Advanced Connection Topology Optimization in Steel Space Frames Using Metaheuristic Algorithms

**İnan E, Canbazoğlu H N, Palanci M, Subaşı İ**

Comparison of FRP and RC Jacketing Methods on the Behaviour of Old Buildings

**Yakak B, Atmaca B, Aksoy H**

Size Optimization of Truss Bridge Using BMR and BWR Algorithms

## COFFEE BREAK

10.00 - 10.15

## 10.15-11.45 SESSION 2

**Noorzad A J, Dilmac H**

Investigation of P-M Interaction for Rrc Columns Confined with CFRP Sheets Under Uniaxial Bending

**Chara A H, Toqey M M**

Effect of Water to Binder (W/B) Ratio on Concrete Properties with Replacement of Biochar and Biochar with Supplementary Cementitious Materials (scms)

**Abdulla N**

Effect of Shear Span-Depth Ratio on Recycled Coarse Aggregate Concrete Beams Without Stirrups

**Köse M B, Çetin S Y**

Investigation of Mechanical Properties of Ultra High Strength Concrete Under Various Fibers

**Iğdir M J A, Sert Y, Küçükömeroğlu T**

Effect of Tin Coating Applied to New Generation Steel Material Used in Elevator Parts Subject to Friction

**Baki V A, Nas M, Kuleyin H, Alalea K**

The Impact of Calcite Impurities on the Mechanically Activated(mca) Montmorillonite Structure and Its Performance in Limestone Calcined Clay Cement (LC3) System

**Yön M Ş, Cemalgil S**

Mechanical and High Temperature Properties of Geopolymer Mortars with Dunite Powder, Fly Ash and Polypropylene Fibers

## COFFEE BREAK

11.45 - 12.00

## 12.00-13.00 SESSION 3

**Erduran K S, Adekoya O O, Ünal U**

Experimental and Numerical Study of the Influence of Bridge Pier Skew Angle on Dam Break Flood Flow and Impact Force

**Marangoz H O, Anılan T**

Evaluation of Flood Propagation Dynamics Through Diffusion Wave-Based Two-Dimensional Modeling

**Alyaz B N, Sorgun M**

Comparison of Friction Factor Correlations for Non-Newtonian Fluids in Pipes Under Turbulent Flow

## 08.30-10.00 SESSION 1

**Usta R, Calim M H, İkizler S B, Dayioglu A Y, Hatipoglu M, Erdogan I**  
Experimental Investigation of the Filtration Performance of Various Demolition Waste-Geotextile Systems

**Badawi B, Arama Z A**  
Behavior of Two Nearby Strip Foundation Located on Slope

**Sari M, Yilmaz E, Kasap T, Keskin T**  
Valorization of Mixed Mine Tailings and Tea Powder Wastes for Underground Backfill Production: A Lab-Scale Study

**Çağdaş B, Toprak B**  
Investigation of the Variation of Micro-Pile Parameters Under Moment Effect with Length Variation

**Akçakal Ö, Hatipoğlu M**  
Alkali-Activated by-Product Materials As Alternative Binders in Deep Soil Mixing Applications

**Nesrine A, Mohammed A M S, Youcef H**  
Probabilistic Analysis of Consolidated Soil

**Kamiloğlu H A, Haşlak Ö**  
Prediction of Active Earth Thrusts Acting on a T-Type Cantilever Retaining Wall by Soft Computing Methods

**Selek G, Yilmaz E, Sari M, Keskin T, Kasap T**  
Understanding the Permeability Behavior of Sand-Modified Cemented Paste Backfill

**Akçay B, Sivrikaya O**  
Evaluation of the Bearing Capacity and Displacements of Strip Footings on Cohesionless Sloped Soils by Finite Element Analysis

## COFFEE BREAK

10.00 - 10.15

## 10.15-11.45 SESSION 2

**Güçlü G, Uzun B, Kafkas U, Yaylı M Ö**  
Deformable Spring Effects on Axial Vibration of Rayleigh Bars Reinforced with Short Fibers

**Tretjakovas J, Pileckienė J**  
Decrease of the Radius of Gyration of the I-Beam Column Due to Long-term Corrosion

**Kapci C İ, Tekin M Z, Tariq A, Deliktaş B, Yaylı M Ö**  
Dynamic Characterization of Polycarbonate: A Constitutive Model Capturing Temperature and Strain Rate Effects

**Aydın E, Alemdar F**  
Relationship Between Slot Gap Length and Fatigue Performance in Knife Plate Connections

**Tuncer D, Sezer E, Ekmekci S, Uysal M, Sahin F, Aygün B**  
Ohmic Heating As a Novel Curing Method for Enhancing the Properties of Geopolymer Mortars Containing Waste Marble Powder

**Koç S, Adıyaman G**  
Free Vibration Analysis of Carbon Nanotube Reinforced Composite Beams with Arbitrary CNT Distribution Based on Higher-Order Shear Deformation Theory

**Alabsi S, Sunca F, Alabsi S, Altunışık A C**  
Numerical Simulation of Progressive Collapse Behavior in Self-Centering Precast Concrete Frames with Infill Walls

**Şimşek S, Kahya V**  
Comparative Analysis of Optimization Algorithms for Vibration-Based Damage Detection in Laminated Composite Beams

## COFFEE BREAK

11.45 - 12.00

## 12.00-13.00 SESSION 3

**Okur E K, Okur F Y, Altunışık A C**  
Structural Health Monitoring in Yusufeli Arch Dam

**Esen M C, Güler K**  
The Importance of Evaluating Building Needs in Retrofitting Method Selection

**Esen M C, Güler K**  
The Importance of Evaluating Building Needs in Retrofitting Method Selection

**Tam G, Yön B**  
Evaluation of Strengthening RC Building with X Steel Cross Elements

**Amumpeire S, Demir A**  
Progressive Collapse and the Turkish Earthquake Code 2018: A Review for Precast Industrial Buildings

**Larouzi B E, Fahjan Y**  
Ground Motion Parameters Importance in Machine Learning-Based Damage Prediction

## 08.30-10.00 SESSION 1

**Şen F, Sunca F, Altunışık A C**

Pounding-Induced Seismic Response of Base-Isolated and Fixed-Base Buildings: Effect of Separation Distance

**Yerli Y, Karakoç M M, Demir T, Demirel B, Özkaynak F**

Evolution of Post-Earthquake Damage Assessment Forms: Practices and New Developments in Turkey

**Gholami S, Akhoundi F, Aminifar E**

Safety Assessment of Historical Residential Buildings in North West of Iran

**Dedeoğlu İ Ö, Yetkin M, Calayır Y**

October 16, 2024, Akuşağı-Kale (malatya) Earthquake Seismic Characteristics and Investigation Directionality Effect

**Özay R, Er Z G, Birben A R**

The Importance of Urban Infrastructure in Disasters

**Keçeci B, Alabsi S, Sunca F, Altunışık A C**

Investigation of Progressive Collapse Behavior in Seismically and Non-Seismically Detailed RC Frames Under Middle Column Removal Scenario

**Okur F Y, Altunışık A C, Okur E K**

Development of a Cloud-Based Website for Structural Health Monitoring in Engineering Structures

**Okur F Y**

Performance-Based Assessment with Numerical Modeling and Strengthening of an Masonry Historical Building

## COFFEE BREAK

10.00 - 10.15

## 10.15-11.45 SESSION 2

**Uzunhisarcıklı E, Karakuş M Ö, Dikmen Ç B**

Digitalization of Transportation with Artificial Intelligence: A Case Study of Yozgat

**Yıldız T, Tanaçan L**

Capillary Active Thermal Insulation Materials Used in Architecture

**Nayeb A**

Urban Identity and Architectural Representation: A Studio Practice

**Direk Y S, Direk N**

Structural Damages of Van Ernis Village Institute Buildings

**Dikmen Ç B, Uzunhisarcıklı E, Karakuş M Ö, Kırmızı E**

Automated Detection and Spatial Analysis of Biophilic Design Elements Using the YOLO Algorithm

**Kuru O N, Halicioğlu F H**

A Review of Applications of Monte Carlo Simulation in Construction Risk Management



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