4th Civil Engineering Symposium

4. İnşaat Mühendisliği Sempozyumu

3-4 December Aralık 2026

Afet Riskleri ve Yapısal Çözümler

Disaster Risks and Engineering Solutions



Doğu Akdeniz Üniversitesi

KTMMOB
İNŞAAT MÜHENDİSLERİ ODASI
CHAMBER OF CIVIL ENGINEERS
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Daily Program

4th Civil Engineering Symposium

3 December 2026, Thursday

Big Hall Opening and invited talks

Topic	Authors	Theme	Time
Registration			08:00–09:20
OPENING SPEECHES			09:30–10:00
COFFEE BREAK			10:00–10:15
KEYNOTES 1 AND 2			10:15–11:15
Chair of Session: Prof. Dr. Serhan Şensoy and Assoc. Prof. Dr. Zehra Çağnan (Middle East Technical University)			
Soil Improvement to Reduce Liquefaction Risk: Design Goals, Performance Criteria, and Post-Earthquake Effectiveness	**Prof. Dr. Özer Çinicioğlu**	Earthquake	10:15–10:45
Design and Implementation Mistakes in Hydraulic Engineering and the Lessons Learned	**Prof. Dr. Oral Yağcı**	Hydraulics	10:45–11:15
COFFEE BREAK			11:15–11:30

WORKSHOP Disaster Resilience Measures			11:30–12:30
Chair of Session: Prof. Dr. Umut Türker (Eastern Mediterranean University) and Seran Aysal			
Flood Disasters: The Case of the Bozkurt Flood Disaster	**Dr. İhsan Kaş**	Hydraulics	11:30–11:50
Türkiye's Experience in Structural Strengthening: Design Principles, Field Realities, and Institutional Vision	**Murat Yılmaz**	Structures	11:50–12:10
Disaster Risk Reduction and Resilience Framework	**Eylem Ulutaş Ayatar**	Transportation	12:10–12:30
COFFEE BREAK			12:30–12:45

KEYNOTES 3 AND 4			12:45–13:45
Chair of Session: Prof. Dr. Özgür Eren (Eastern Mediterranean University) and Özgün Akcan			
Diagnostic Methods for Resilience Against Disasters: Recent Advances in Non-Destructive Testing for Critical Infrastructures	**Prof. Dr. Ninel Alver**	Infrastructure	12:45–13:15
Transportation System Components and Methods in Earthquakes	**Prof. Dr. Halit Özen**	Transportation	13:15–13:45
LUNCH BREAK			13:45–14:45

Daily Program

4th Civil Engineering Symposium

3 December 2026, Thursday

Parallel sessions 14:45–16:00

SESSION 1 BIG HALL 14:45–16:00				
Chair of Session: Assoc. Prof. Dr. Mehmet Metin Kunt (Eastern Mediterranean University) and Özer Seyitali				
Topic	**Authors**	**Theme**	**Institution**	**Time**
An Overview of Evacuation Plan Under an Earthquake Scenario	Dilan Oruczade, **Yalçın Alver**	Transportation	Ege University	14:45–15:00
Engineering education at a turning point: to use or not to use ai tools in future curriculum-a perspective from civil and transportation engineering	**Mehmet Metin Kunt**	Transportation	Eastern Mediterranean University	15:00–15:15
Performance evaluation of a yolo – based object detection model for vehicle traffic count in Yola - Nigeria	Ayodeji O.A., Raphael J.M., **Abdulhameed Umar Abubakar**	Transportation	Modibbo Adama University The Open University	15:15–15:30
Transportation and traffic engineering	**Hüseyin Alsan**	Transportation	AECOM	15:30–15:45
Combined effects of clinoptilolite zeolite and biochar on the strength development of cement-stabilized clay	Usama Bin Mateen, **Hamza Saeed,** and Abdullah Ekinci	Geotechnics	Middle East Technical University	15:45–16:00
COFFEE BREAK				16:00–16:15

SESSION 1 SALAMIS HALL 14:45–16:00				
Chair of Session: Assoc. Prof. Dr. Şevket Can Bostancı (European University of Lefke)				
Topic	**Authors**	**Theme**	**Institution**	**Time**
Durability Performance of Marble Dust-Incorporated Self-Compacting Mortar Under Elevated Temperatures: A Multi-Parameter Assessment of Normal and High-Strength Series	**Marwan Mahmoud M. Bileid,** Khaled Hamed Marar	Materials	Eastern Mediterranean University	14:45–15:00
Performance and sustainability of cement paste incorporating waste materials reinforced with natural and synthetic fibers	**Abdullah Gabwr,** Şevket Can Bostancı	Materials	European University of Lefke	15:00–15:15
Utilization of marble powder and silica fume in the development of fiber-reinforced cement paste	**Ali Gabwr, Şevket Can Bostancı**	Materials	European University of Lefke	15:15–15:30
Assessment of waste glass powder and marble dust as supplementary cementitious materials in mortar	**Babatunde Olufunso Oluwole,** Mohammad Ali Mosaberpanah, Stephen Babajide Olabimtan	Materials	Cyprus International University	15:30–15:45
Assessment of large language models in cementitious composite engineering: a review of ChatGPT for design, prediction, and optimization	**Amira Sarbi Kabadzha,** Ayşe Pekrioğlu Balkıs	Materials	Cyprus International University	15:45–16:00
COFFEE BREAK				16:00–16:15

Daily Program

4th Civil Engineering Symposium

3 December 2026, Thursday

Parallel sessions 16:15–17:30

SESSION 2 BIG HALL 16:15–17:30				
Chair of Session: Prof. Dr. Ertuğ Aydın (European University of Lefke) and Gürkan Yağcıoğlu				
Topic	**Authors**	**Theme**	**Institution**	**Time**
Performance of mortar incorporating steel waste powder and limestone powder as partial cement replacement	Babatunde Olufunso Oluwole, **Mohammad Ali Mosaberpanah,** Stephen Babajide Olabimtan	Materials	Cyprus International University	16:15–16:30
Influence of early-age freezing duration on strength development and ultrasonic pulse velocity of cement mortar	Hafiz Sami Ullah, **Hamza Saeed,** Abdullah Ekinci	Materials	Middle East Technical University	16:30–16:45
Effect of curing temperatures and alkaline activators on the performance of ternary geopolymer mortars	**Stephen Babajide Olabimtan,** Mohammad Ali Mosaberpanah, Babatunde Olufunso Oluwole	Materials	Cyprus International University	16:45–17:00
Development of disaster-resilient concrete pavement blocks using optimized waste glass powder as a sustainable cement replacement	**Mohammad Ali Mosaberpanah,** Setare Ahmadi, Mohamed Fadul, Stephen Babajide Olabimtan	Materials	Cyprus International University	17:00–17:15
Influence of Mixing Techniques and Aggregate Type on the Mechanical and Durability Performance of Recycled Aggregate Concrete	**Enver Toker,** Özgür Eren	Materials	Famagusta District Governorship	17:15–17:30
COFFEE BREAK				17:30–17:45

SESSION 2 SALAMIS HALL 16:15–17:30				
Chair of Session: Prof. Dr. Mahmood Hosseini (Eastern Mediterranean University)				
Topic	**Authors**	**Theme**	**Institution**	**Time**
A machine learning approach for predicting the strengthening cost of reinforced concrete buildings	**Mohamad Abou Rajab,** Giray Özay	Structures	Eastern Mediterranean University	16:15–16:30
Generative Structural Design and Optimization Using ETABS API and Python	**Gofran Ali,** Shihab Ibrahim	Structures	Cyprus International University	16:30–16:45
An integrated structural assessment of a historical masonry structure	**Laury Cheista Gashimwe,** Şevki Öksüzoğulları, Rıfat Reşatoğlu	Structures	Near East University	16:45–17:00
The Comparative Analysis of Turkish Tank Design Regulations and Api 650 Standards with a Practical Case Study	**Samet Kılıç**	Structures	Istanbul Medipol University	17:00–17:15
Numerical assessment of blast-induced tunnel excavation effects on multistorey buildings	**Süleyman Burak Doğaroğlu,** Mehmet Cemal Geneş	Structures	Eastern Mediterranean University	17:15–17:30
COFFEE BREAK				17:30–17:45

Daily Program

4th Civil Engineering Symposium

3 December 2026, Thursday

Parallel sessions 17:45–19:15

SESSION 3 BIG HALL 17:45–19:15				
Chair of Session: Asst. Prof. Dr. Bertuğ Akıntuğ (Middle East Technical University)				
Topic	**Authors**	**Theme**	**Institution**	**Time**
Performance of a solar persulfate-based system for emergency water treatment under flood-induced scenarios	Sylvia B. Kpange, **Şifa Doğan**	Hydraulics	Cyprus International University	17:45–18:00
Hydro-lift: a self-activating passive flood barrier system for flood protection in kanlıköy	Yara Kalame, Ali Bin Eshaq, Donatien Kavuala, Samuel Gbemi, Joudi Kalame, Shihab Ibrahim, **Mehrnoush Kohandel Gargari**	Hydraulics	Cyprus International University	18:00–18:15
Important morphologic parameters of a watershed	**Hüseyin Haksayar,** İbrahim Bay	Hydraulics	European University of Lefke	18:15–18:30
Integrating atmospheric river processes into groundwater modelling: a system dynamics approach	**Rouzbeh J. Tofighi,** Hüseyin Gökçekuş, Vahid Nourani, Farhad Bolouri	Hydraulics	Near East University University of Tabriz	18:30–18:45
An assessment of satellite data accuracy using innovative polygon trend analysis and rainfall indices	**Berkay Vaiz**	Hydraulics	Eastern Mediterranean University	18:45–19:00
Integrated sustainable greenhouse design: vertical photovoltaics, daylight optimization, and rainwater harvesting in tropical and Mediterranean climates	**Youssef Kassem**, Hüseyin Gökçekuş, Mamadi Jawo	Hydraulics	Near East University	19:00–19:15

SESSION 3 SALAMIS HALL 17:45–19:00				
Chair of Session: Assoc. Prof. Dr. Ayşe Pekrioğlu Balkıs (Cyprus International University)				
Topic	**Authors**	**Theme**	**Institution**	**Time**
Development of a Carbon Sequestration Efficiency Index for Sustainable and Resilient Ground Improvement	**Abiola Ayopo Abiodun,** Fooad Karimi Ghaleh Jough	Geotechnics	Final International University	17:45–18:00
Performance-based environmental optimization of thermally activated sewage sludge and ash in cement-stabilized clay	Muhammad Usama Haroon, **Hamza Saeed,** Abdullah Ekinci	Geotechnics	Middle East Technical University	18:00–18:15
Machine learning-based rapid assessment of waste glass powder-stabilized expansive soils for geotechnical disaster response	**Amir Yousefpoor,** Ayşe Pekrioğlu Balkıs	Geotechnics	Cyprus International University	18:15–18:30
Effect of silica fume on bottom ash-based geopolymer-stabilized clay soil	**Semedeton Simeon Mowhe,** Hamilton Mugisho Zigabe, Shihab Ibrahim	Geotechnics	Cyprus International University	18:30–18:45
Influence of mixing method on cement-treated clay reinforced with recycled ldpe and pet fibres	Sevilay Demir, **Hamza Saeed,** Abdullah Ekinci	Geotechnics	Middle East Technical University	18:45–19:00

Daily Program

4th Civil Engineering Symposium

4 December 2026, Friday

Parallel sessions 10:45–12:00

Coffee ready			09:30–10:00
KEYNOTE 5 BIG HALL			**10:00–10:30**
Chair of Session: Prof. Dr. Rıfat Reşatoğlu (Near East University)			
Technological Solutions for Earthquakes, Seismic Isolators, Dampers	**Prof. Dr. Uğurhan Akyüz**	**Structures**	10:00–10:30
COFFEE BREAK			10:30–10:45

SESSION 5 BIG HALL 10:45–12:00				
Chair of Session: Prof. Dr. Giray Özay (Eastern Mediterranean University)				
Topic	**Authors**	**Theme**	**Institution**	**Time**
Automating structural engineering: intelligent tools for design and real-time health monitoring	**Mohammad Reza B. Karimi**	**Structures**	**Cyprus International University**	**10:45–11:00**
Comparative Analysis of Timber Design Codes and Structural Restoration of A Historical Roof: Eurocode 5, and Turkish Timber Regulations	**Samet Kılıç**	**Structures**	**Istanbul Medipol University**	**11:00–11:15**
Seismic vulnerability assessment of RC buildings in Nicosia: a multi-method and pushover analysis approach	Halima H.S. Andaque, **Laury Cheista Gashimwe,** Rıfat Reşatoğlu	**Structures**	**Near East University**	**11:15–11:30**
Rapid Visual Assessment of RC Buildings Along Mehmet Akif Caddesi, Lefkoşa: A Comparative Three-Method Study	**Samy Mutoke Mwanza,** Laury Cheista Gashimwe, Rıfat Reşatoğlu	**Structures**	**Near East University**	**11:30–11:45**
Numerical modelling and verification of soil-pile-structure interaction under multi-directional seismic loading using STKO-OPENSEES	**Yahya A. M. Muaamar,** Serhan Şensoy, Ismail Safkan	**Structures**	**European University of Lefke Eastern Mediterranean University**	**11:45–12:00**
LUNCH BREAK				**12:00–13:00**

SESSION 5 SALAMIS HALL 10:45–12:00				
Chair of Session: Asst. Prof. Dr. Hasan Zaifoğlu (Middle East Technical University)				
Topic	**Authors**	**Theme**	**Institution**	**Time**
Bayesian Models for Frequency Analysis of Extreme Precipitation in Northern Cyprus	**Muzamil Usman,** Hasan Zaifoğlu	Hydraulics	Middle East Technical University	10:45–11:00
Assessment of climate-driven multi-hazard risks for coastal infrastructure under current conditions and future projections	**Efecan Ünal,** Umut Türker	Hydraulics	Eastern Mediterranean University	11:00–11:15
Understanding biodiversity loss and coastal erosion driven by mangrove decline: a case study of ecosystem degradation in coastal wetlands of Pakistan	**Dileep Kumar**	Hydraulics	Middle East Technical University	11:15–11:30
Resilience of modernized grid infrastructure to climate induced hazards in island systems	**Mohammad Mateen,** Mu**rat** Fahrioglu	Hydraulics	Middle East Technical University	11:30–11:45
Psychological misperception of water availability under climate extremes: implication for sustainable water resource management in Cyprus	**Mustaan Ullah,** Saqib Mir, Abdul Ahad Nazakat, Bertuğ Akıntuğ	Hydraulics	Middle East Technical University	11:45–12:00

Daily Program

4th Civil Engineering Symposium

4 December 2026, Friday

Parallel sessions 13:00–14:30

SESSION 6 BIG HALL 13:00–14:15				
Chair of Session: Prof. Dr. Huriye Bilsel (Cyprus International University)				
Topic	**Authors**	**Theme**	**Institution**	**Time**
Density-dependent strength, UPV response and freeze-thaw durability of hydrocarbon-contaminated fine-grained soil	Talha Naseer, Hafiz Sami Ullah, Usama Bin Mateen, **Hamza Saeed,** Abdullah Ekinci	Geotechnics	Middle East Technical University	13:00–13:15
Engineering bedrock analysis within the scope of earthquake regulations for specific sites in Cyprus	**Hilmi Dindar**	Geotechnics	Cyprus International University	13:15–13:30
Carbon Geotechnics: A New Framework for Sustainable and Resilient Ground Improvement	**Abiola Ayopo Abiodun,** Zalihe Nalbantoglu	Geotechnics	Final International University Eastern Mediterranean University	13:30–13:45
Waste-based ground improvement techniques and their role in disaster resilience: a review of recent studies	**Vahid Tabrizi,** Ayşe Pekrioğlu Balkıs	Geotechnics	Cyprus International University	13:45–14:00
Design of a mini compactor and a mini mold for cohesive soils	Hamilton Mugisho Zigabe, **Shihab Ibrahim**	Geotechnics	Cyprus International University	14:00–14:15
COFFEE BREAK				14:15–14:45

SESSION 6 SALAMIS HALL 13:00–14:30				
Chair of Session: Asst. Prof. Dr. İbrahim Bay (European University of Lefke)				
Topic	**Authors**	**Theme**	**Institution**	**Time**
How Well Does a Common Climate Change Factor Represent Design Precipitation Projections in Northern Cyprus?	**Hasan Zaifoğlu**	Hydraulics	Middle East Technical University	13:00–13:15
Spatiotemporal Hydroclimatic Trend Analysis in Northern Cyprus Using Classical and Innovative Statistical Methods	**Muzamil Usman,** Hasan Zaifoğlu	Hydraulics	Middle East Technical University	13:15–13:30
Uncertainty-Aware Weather Prediction Models for Natural Hazard Mitigation	Ebad Ul Haq, **Ihtisham Ahmad,** Murat Fahrioglu, Saliha Ozdemir	Hydraulics	Middle East Technical University	13:30–13:45
Urban flooding problem and remedial measures for Soylu Sokak, Gönyeli	**Bertuğ Akıntuğ**	Hydraulics	Middle East Technical University	13:45–14:00
Integrating FAHP, HEC-RAS 2D, and nature-based solutions for comprehensive flood risk assessment and mitigation in the Dead Sea region, Jordan	**Youssef Kassem**, Hüseyin Gökçekuş, Nour Alijl	Hydraulics	Near East University International Designers Company (Amman, Jordan)	14:00–14:15
Towards Disaster-Resilient Structures: An Explainable Hybrid Deep Learning Framework for Structural Crack Detection, Classification, and Severity Assessment	**Nathan Mpinga Malamba,** Laury Cheista Gashimwe, and Rıfat Reşatoğlu	Structures	Near East University	14:15–14:30
COFFEE BREAK				14:30–14:45

Daily Program

4th Civil Engineering Symposium

4 December 2026, Friday

Parallel sessions 14:45–16:15

SESSION 7 BIG HALL 14:45–16:15				
Chair of Session: Prof. Dr. Tahir Çelik (Cyprus International University)				
Topic	**Authors**	**Theme**	**Institution**	**Time**
Cost overrun determinants in internationally financed road projects	**Iman Youssefi**	Management	Near East University	14:45–15:00
Post-earthquake emergency action planning for active construction sites: a conceptual comparison of traditional and digital approaches	**Efkan Efekan,** Tolga Celik	Management	Eastern Mediterranean University	15:00–15:15
Germany's new framework after the Fukushima disaster to reshape the nuclear energy as main component of energy security	**Noshaba Afzal,** Hayriye Kahveci	Management	Middle East Technical University	15:15–15:30
The blue mind hypothesis: exploring the psychological benefits of water bodies and their role in promoting sustainable water resource management	**Saqib Mir,** Bertuğ Akıntuğ	Management	Middle East Technical University	15:30–15:45
Sustainability communication in Pakistan's energy sector: a discourse study of environmental and social concerns of thar coal project	**Dileep Kumar**	Management	Middle East Technical University	15:45–16:00
Evaluating the effectiveness and obstacles of integrating the agile methodology into construction project management compared to the traditional approach	**Mohammed Amer Tami,** Zahraa Mohammed Ali	Management	Al-Shaab University	16:00–16:15

SESSION 7 SALAMIS HALL 14:45–16:15				
Chair of Session: Asst. Prof. Dr. Shihab Ibrahim (Cyprus International University)				
Topic	**Authors**	**Theme**	**Institution**	**Time**
Strength and freeze-thaw durability of silica-fume cement-stabilised clay prepared with freshwater and seawater	Melisa Cosgun, **Hamza Saeed,** Abdullah Ekinci	Geotechnics	Middle East Technical University	14:45–15:00
A monitoring-assisted case study on field-calibrated assessment and structural verification of a distressed anchored pile wall in clayey marl	**Hamza Saeed,** Abdullah Ekinci	Geotechnics	Middle East Technical University	15:00–15:15
Effects of groundwater rise and seismic loading on the performance of shallow foundations: an analytical multi-hazard assessment	**Eriş Uygar,** Ece Çelik	Geotechnics	Eastern Mediterranean University	15:15–15:30
From waste diversion to functional performance in marble-dust cementitious composites using a retention-based evaluation framework	Cemaliye Özverel, **Hamza Saeed,** Ertuğ Aydın	Geotechnics	European University of Lefke Middle East Technical University	15:30–15:45
Effects of polypropylene fibre incorporation on synthesized silica fume and bottom ash-based geopolymer-stabilized soil	**Semedeton Simeon Mowhe,** Shihab Ibrahim	Geotechnics	Cyprus International University	15:45–16:00
Characterization of mechanical properties of expansive soil stabilized by brick dust with polypropylene addition	**Maimaje Musa,** Mowhe Simeon, Reem Houssein, Huriye Bilsel	Geotechnics	Cyprus International University	16:00–16:15