



المؤتمر الدولي السادس للهندسة الجيوتقنية العراق

CONFERENCE PROGRAM

Sixth International Conference on
Geotechnical Engineering-Iraq
6ICGE-Iraq 2026

7-8 October 2026

University of Baghdad
Baghdad, Iraq

Knowing the Ground... Securing the Future



Organizers





SIXTH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ (6ICGE - Iraq)

Sixth International Conference on Geotechnical Engineering-Iraq (6ICGE-Iraq)



University of Baghdad/Baghdad/Iraq
7-8, October 2026





SIXTH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ (6ICGE - Iraq)

About the Conference

The Sixth International Conference on Geotechnical Engineering – Iraq (6ICGE-Iraq 2026) will be held in Baghdad, Iraq, from October 7–8, 2026. This major event is jointly organized by the Iraqi Scientific Geotechnical Society (ISGS), in collaboration with the Department of Reconstruction and Projects/University of Baghdad, the Faculty of Engineering/Koya University, Komar University of Science and Technology, and Moscow State University of Civil Engineering. As one of the most prestigious scientific gatherings in the region, 6ICGE-Iraq 2026 will offer a vibrant platform for researchers, engineers, and industry professionals to exchange knowledge and share the latest advancements across a wide range of disciplines including geotechnical engineering, civil engineering, mechanical engineering, energy, architectural engineering, water resources, environmental engineering, and petroleum engineering.

Themes of Conference

- 1) Soil Mechanics and Geotechnical Engineering (SMGE)
- 2) Structural Engineering and Mechanics (SEM)
- 3) Construction and Sustainability (CS)
- 4) Mechanical Engineering and Energy Sciences (MEES)
- 5) Water Resources Engineering and Environment (WREE)
- 6) Urban Development and Architecture (UDA)

Advisory Committee

- 1) Prof. Dr. Alaa Abdul Hassan Atiya/President of Baghdad University
- 2) Prof. Dr. Mohammed Hasseb Sedeeq/President of Koya University/Iraq
- 3) Prof. Dr. Salahalddin Saeed Ali/President of Komar University of Science and Technology/Iraq
- 4) Prof. Dr. Akimov Pavel Alekseevich/Rector of Moscow State University of Civil Engineering/Russia
- 5) Prof. Dr. Wadood Taher Mohammed/Dean of Al-khwarizmi Engineering College/University of Baghdad/Iraq
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- 8) Prof. Dr. Marawan Shahien/Vice-President of ISSMGE for Africa/Egypt
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- 11) Prof. Dr. Anand J. Puppala/Texas A&M University/USA
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- 13) Prof. Dr. Yousif J. Al-Shakarchi/ISGS/Canada
- 14) Prof. Dr. Musa J. Al-Musawi/ISGS/Iraq
- 15) Prof. Dr. Mangushev A. Rasheed /SPBGASU/Russia
- 16) Dr. Omar al-Farouk Salem al-Damluji/ISGS/UAE
- 17) Dr. Essam H. Nashat/ISGS/Iraq





SIXTH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ (6ICGE - Iraq)

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| 3) Prof. Dr. Chelang Akram Omar Arslan | Dean College of Engineering/University of Kirkuk/Iraq |
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| 21) Prof. Dr. Ramli Nazir | Universiti Teknologi/Malaysia |
| 22) Prof. Dr. Ali Johari | Shiraz University of Technology/Iran |
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| 43) Asst. Prof. Dr. Abdulhussein Al-Askari | University of Baghdad/Iraq |





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| 49) Dr. Daniele Cazzuffi | IGS Italy President/Italy |
| 50) Dr. Anil Joseph | President of the Indian Geotechnical Society/India |

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- | | |
|--|---|
| 1) Asst. Prof. Dr. Basim Abdulrazzak Rasheed | University of Baghdad /Iraq |
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| 22) Mustafa M. Jasim | University of Baghdad /Iraq |
| 23) Marwa Razzaq Aya | University of Baghdad /Iraq |
| 24) Marwa Salim Abbas | Directorate of Health-Kirkuk/Iraq |
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| 26) Prof. Dr. Mahdi Karkush | President of Iraqi Scientific Geotechnical Society/Iraq |





SIXTH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ (6ICGE - Iraq)

📅 Day 1 | 7 October 2026 | ⌚ Time: 9:00-14:30 | 📍 Location: Al-Hakim Hall, University of Baghdad

9:00 - 10:00	Registration Al-Hakim Conference Hall
10:00 - 10:10	Opening Ceremony Iraqi National Anthem and Verses from Holly Quran
10:10 - 10:15	Speech Prof. Dr. Alaa Abdul Hassan Atiya, University of Baghdad, President.
10:15 - 10:20	Speech Prof. Dr. Salahalddin Saeed Ali, Komar University of Science and Technology, President.
10:20 - 10:25	Speech Prof. Dr. Mohammed Hasseb Sedeeq, Koya University, President.
10:25 - 10:30	Speech Prof. Dr. Akimov Pavel Alekseevich, Moscow State University of Civil Engineering, Russia, Rector.
10:30 - 10:35	Speech Dr. Anil Joseph, International Society of Soil Mechanics and Geotechnical Engineering, Asia, Vice President.
10:35 - 10:50	Speech Prof. Dr. Mahdi KarKush, Iraqi Scientific Geotechnical Society, President and Chair of Conference
10:50 - 11:30	Honoring and Certificates Organization and Scientific Committee Members
11:30 - 11:50	Coffee Break Al-Hakim Hall

Chair: Prof. Dr. Ala Aljorany | **Co-Chair: Assist. Prof. Dr. Suha Faleh Mahdi**

11:50 - 12:10	Keynote Speaker Dr. Rafael Sharafutdinov, Gersevanov Research Institute of Bases and Underground Structures (NIIOSP) - Research Center of Construction JSC (Russia) (Bearing Capacity of Pile Foundations Interacting with Rock Masses)
12:10 - 12:30	Keynote Speaker Prof. Dr. Dongsheng XU, Dean of the School of Civil Engineering and Architecture, Wuhan University of Technology, China (Geotechnical Health Monitoring Using Fiber Optic Sensors)
12:30 - 12:50	Keynote Speaker Prof. Dr. Fardin Jafarzadeh , Sharif University of Technology, President of the Iranian Geotechnical Society, Iran (Biological Stabilization of Wind-Erodible and Saline Dust-Source Soils; Regional Case Studies: Lake Urmia and Dust from Iraq into Iran)
12:50 - 13:10	Keynote Speaker Prof. Dr. Ako Rashed Hama, Department of Civil Engineering, Komar University of Science and Technology, Iraq (Treatment of Municipal Wastewater Using Natural Base Solution, Constructed Wetland in Sulaimania as a Case Study)





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13:10 - 13:30	Keynote Speaker Prof. Dr. Askar Zhussupbekov, L.N. Gumilyov Eurasian National University, Kazakhstan and President of Kazakhstan Geotechnical Society (Optimization of Foundations by GIS with Interpretation the Results of Laboratory and Field Tests)
13:30 - 14:30	Lunch Break (Al-Hakim Hall)

📅 Day 2 | 8 October 2026 | ⌚ Time: 9:00-14:30 | 📍 Location: University of Baghdad, Mahdi Hantoosh Hall

Chair: Prof. Dr. Hussein M. Ashour Al.Khuzai | **Co-Chair: Assist. Prof. Dr. Ghusoon S. Hammoodi**

9:00 - 9:15	Special Lecture 1 Dr. Ahmed A. Gheni, University of Tikrit, Iraq (Controlled Low Strength Materials with Zero Embodied CO ₂ as a Sustainable Alternative)
9:15 - 9:30	Special Lecture 2 Dr. Anil Joseph, International Society of Soil Mechanics and Geotechnical Engineering, Vice President, Asia (Risk Mitigation and Protective Measures for Gas Pipelines During High-Rise Structure Demolition Using the Delayed Detonation Technique)
9:30 - 9:45	Special Lecture 3 Tolaz Salah Hawez, Department of Civil Engineering, Koya University, Koya, Kurdistan Region-F.R., Iraq (Assessment of Wave Attenuation and Particle Displacement around Vibrating Machinery Foundations Rest on Layered Soil)
9:45 - 10:00	Special Lecture 4 Ahmed Al-Obaidi, University of Tikrit, Iraq (The Role of Geotechnical Engineering in Mitigating the Effects of High-Temperature Changes)
9:00 - 11:00	Research Sessions Halls as described in the detailed conference program (Presentation of Researches)
9:00 - 11:00	Posters of Researches Halls as described in the detailed conference program (Posters of Researches)
11:00 - 11:30	Coffee Break Session Halls
11:30 - 13:30	Research Sessions Halls as described in the detailed conference program (Presentation of Researches)
11:30 - 13:30	Posters of Researches Halls as described in the detailed conference program (Posters of Researches)
13:30 - 14:30	Lunch Break (As described in detailed program of 6ICGE)





THE 6TH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ

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Day 2 | 8 October 2026 Session 1-1 Building: Jamil Al-Malaika, College of Engineering

Session Chair: Prof. Dr. Makki Kamel Mohsen

Co-Chair: Dr. Bilal Jabbar Noman Session Topics: Soil Mechanics and Geotechnical Engineering

Time	Title	Authors	ID
9:00-9:10	Engineering Application of Vertical Electrical Sounding (VES) in Subsurface Characterization of Nile Secondary Station Site, Babylon, Iraq	Zainab M. J. Saify, Kadhim Naief Kadhim	IOP-EES-26-IRAQ-SMGE-001
9:10-9:20	Geophysical Identification of Subsurface Weak Zones Using Ground Penetrating Radar: A Case Study in Kirkuk City, Iraq	Amer A. Al-khalidy, Hind A. Al-Assadi, Kadhim Naief Kadhim,	IOP-EES-26-IRAQ-SMGE-002
9:20-9:30	Impact of Negative Battering on 3x3 Pile Group Behavior Subjected to Seismic and Static Lateral Load in Loose Sand	Qassim Ibrahim Hussain, Mohammed A. Al- Neami, Falah H. Rahil,	IOP-EES-26-IRAQ-SMGE-003
9:30-9:40	Impact of Earthquake Intensity on 1x2 Negative and Positive Batter Pile Group Behavior in Loose Sand	Qassim Ibrahim Hussain, Mohammed A. Al- Neami, Falah H. Rahil,	IOP-EES-26-IRAQ-SMGE-004
9:40-9:50	Effect of Reinforced Cushion Layer in Disconnected Piled-Raft Foundation Model with Geomembrane Material Due to Vertical Load	Dalya A. Abdul Hussein, Mahmood R. Mahmood, Saad F. A. Al-Wakel,	IOP-EES-26-IRAQ-SMGE-006
9:50-10:00	Experimental Study on the Dynamic Response of the Ordinary Skirted Foundation in Dry Sand Under Seismic Loads	Huda Khalis Kareem, Abdulazeez A. Al-Kifae,	IOP-EES-26-IRAQ-SMGE-007
10:00-10:10	Assessment of Wave Attenuation and Particle Displacement around Vibrating Machinery Foundations Rest on Layered Soil	Tolaz Salah Hawez, Zahraa Noori Rashid, Balén Z. Abdulsamad,	IOP-EES-26-IRAQ-SMGE-008
10:10-10:20	Theoretical Survey to Study the Hydraulic Characteristics of Saturated Sand Soils Using Buckingham Theory	Dhurgham Abdul-Jaleel Al-Hamdani, Zeena H. Hussain,	IOP-EES-26-IRAQ-SMGE-010
10:20-10:30	Comparative Analysis of Dynamic Response of Retaining Wall on Sandy Soil under High-Frequency Vibration	Noor Ali Thamer, Safa Hussain Abd Awn,	IOP-EES-26-IRAQ-SMGE-013
10:30-10:40	Hysteretic and Aging Effects of Cadmium Contamination on Elastic Wave Propagation in Unsaturated Soils	Aqeel Rwayyih Hasan, Riyadh Alsultani,	IOP-EES-26-IRAQ-SMGE-015
10:40-10:50	Improvement of Gypsum Soil Using Geopolymer Materials	Hamza A. Flayh, Jasim M. Abbas,	IOP-EES-26-IRAQ-SMGE-016
10:50-11:00	Experimental Determination of Pile Group Efficiency in Sandy Soil	Rahaf A. Saleh, Mahmood R. Mahmood, Khalid W. Abd Al-Kaream	IOP-EES-26-IRAQ-SMGE-017
11:00 - 11:30	Coffee Break Jamil Al-Malaika Hall/College of Engineering		





THE 6TH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ

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Day 2 | 8 October 2026 Session 1-2 Building: Discussion Hall/Al-Khwarizmi College of Engineering

Session Chair: Prof. Dr. Alaa Hussein Al-Rkaby

Co-Chair: Dr. Rana M. A. Al-Khadaar Session Topics: Soil Mechanics and Geotechnical Engineering

Time	Title	Authors	ID
9:00-9:10	Settlement Analysis of Shallow Foundations on Gypseous Soils Considering Stress-Dependent Collapse	Safaa N. Abdullah, Muayad A. Al-Sharrad,	Scientific.Net-26-IRAQ-SMGE-002
9:10-9:20	Cassava (Tapioca) Application for Improving the Geotechnical Properties of Sandy Subgrade Soil	Muntadher A. Sharrad, Alaa M. Shaban,	Scientific.Net-26-IRAQ-SMGE-004
9:20-9:30	MATLAB-Based Experimental Analysis of Recycled Concrete Aggregate and Reclaimed Asphalt Pavement in Sustainable Geotechnics	Mustafa M. Jasim, Maher M. Jebur, Sabah M. Khreef, Zakariya O. Ibrahim, Alaa D. Salman, Mahdi Karkush	Scientific.Net-26-IRAQ-SMGE-010
9:30-9:40	Comparative Seismic Analysis of the 6.9 Mw Kobe and 7.8 Mw Kahramanmaraş Earthquakes	Bilal Jabbar Noman, Khaled Ibrahim Qaddoori,	Scientific.Net-26-IRAQ-SMGE-011
9:40-9:50	A Review Study on the Performance of Skirted Foundations Under Earthquake Excitation	Huda Khalis Kareem, Abdulazeez A. Al-Kifae	CRC-26-IRAQ-SMGE-001
9:50-10:00	Statistical Correlation Between Atterberg Limits and Linear Shrinkage for Fine-Grained Soils in Chamchamal, Iraq	Rozhgar K. Muhammad, Younis M. Alshkane, Kamal A. Rashed	CRC-26-IRAQ-SMGE-003
10:00-10:10	Analysis of Disconnected Helical Pile-Raft System in Sandy Soil	Fatimah Thajeel, Alaa H. J. Al-Rkaby ,	CRC-26-IRAQ-SMGE-005
10:10-10:20	Numerical Analysis of a Footing Resting on Laterally Restrained Soil by Geopolymer Walls	Alaa H. J. Al-Rkaby, Noora Mohammed,	CRC-26-IRAQ-SMGE-006
10:20-10:30	Experimental Study and Numerical Analysis of Skin Friction of Unconnected Piled Raft Foundation in Sand under Static Loads	Dalya Abdul Hussein, Mahmood Mahmood, Saad al-Wakel , Amhed Ali	CRC-26-IRAQ-SMGE-007
10:30-10:40	Bearing Capacity of Geogrid-Reinforced Square Footings on Inclined Layered Soil	Ghufran A. Hameed, Hussein A. Shaia,	CRC-26-IRAQ-SMGE-009
10:40-10:50	The Effects of Loading and Moisture Content on the Permeability of Clay and Silt Soils	Muhj Molod, Mohammed K. Faris, Abdulrahman Aldaood	CRC-26-IRAQ-SMGE-011
10:50-11:00	Evaluation of Chemical Stabilization Using Cement, Silica Fume, and Sika Control®-3705 to Reduce Consolidation Settlement of Soft Clay Soil	Ammar Hazem Khudair, Qasim A. Aljanabi,	CRC-26-IRAQ-SMGE-012
11:00 - 11:30	Coffee Break Jamil Al-Malaika Hall/College of Engineering		



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Day 2 | 8 October 2026
 Session 1-2
 Building: Discussion Hall/Al-Khwarizmi College of Engineering
 Session Chair: Prof. Dr. Maki Jafar Mohammed Al-Waily
 Co-Chair: Dr. Mohamed Moafak Azizr
 Session Topics: Soil Mechanics and Geotechnical Engineering

Time	Title	Authors	ID
11:30-11:40	Seismic Hazard Maps for Iraq Based on Up to 2026 Seismic Catalogue	Nidhal A. Sultan, Ressol R. Shakir	CRC-26-IRAQ-SMGE-014
11:40-11:50	Strength and Compressibility Enhancement of High Plasticity Clay via Styrene–Acrylic Treatment	Walaa R. Al-Hussein, Khabeer A. Al-Awad, Hussein H. Al-Awadi	CRC-26-IRAQ-SMGE-015
11:50-12:00	Mechanical Behavior of Gypseous Sand Improved with CKD Under Consolidated Drained Triaxial Test	Mustafa J. Abraham, Mahmood R. Mahmood, Mohammed Sh. Mahmood	CRC-26-IRAQ-SMGE-016
12:10-12:20	Shear Strength and Volumetric Response of Gypseous Soils Stabilized with Nanoclay Under Triaxial Drained Condition	Mustafa J. Abraham, Mahmood R. Mahmood, Mohammed Sh. Mahmood	CRC-26-IRAQ-SMGE-017
12:20-12:30	Spatial and Probabilistic Seismic Hazard Analysis-Based Seismic Map for Nasiriyah Province	Nidhal A. Sultan, Ressol R. Shakir,	CRC-26-IRAQ-SMGE-018
12:30-12:40	Evaluating The Gypsiferous Subgrades Behavior When Mixed with Cement and Agricultural Waste Ash	Fadaeel M. M. Al-Amidi, Hayder A. Ashour,	CRC-26-IRAQ-SMGE-019
12:40-12:50	Gypsiferous Sand Stabilized with Cement, Palm Leaf Ash and Nano-Silica	Fadaeel M. M. Al-Amidi, Hayder A. Ashour,	CRC-26-IRAQ-SMGE-021
12:50-13:00	Geopolymer-Based Stabilization of Soft Soils Using Glass Powder and Metakaolin: A Sustainable Binder Approach	Baneen Ahmad Mhmood, Zaid Hameed Majeed,	CRC-26-IRAQ-SMGE-023
13:10-13:20	Classification of Expansive Soils Using Void Ratio Index: An Experimental Study of Bentonite-Sand Mixtures	Hayder M. Ziyara, Anwar L. Alobaidi, Sarah S. Mahdi	JRESM-EES-26-IRAQ-SMGE-001
13:20-13:30	Machine Learning Prediction of Seismically Induced Foundation Settlement on Interbedded Liquefiable Deposits: Model Development, Interpretation, and the Effect of Dense Granular Columns	Dhergham A. Al-Hamdani, Dina M. Abd, Salwan O. Waheed, Aymen Saad	JRESM-EES-26-IRAQ-SMGE-002
13:30 - 14:30	Lunch Jamil Al-Malaika Hall/College of Engineering		



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Day 2 | 8 October 2026 Session 2-1 Building: Smart Hall/Aeronautical Eng. Dept./College of Engineering

Session Chair: Prof. Dr. Hussein A. Shaia

Co-Chair: Asst. Lec. Zahraa Naseer Kadhim Jedi

Session Topics: Structural Engineering and Materials

Time	Title	Authors	ID
9:00-9:10	Structural behavior of concrete column tubes under concentric loads	Suroor Ali Hashim, Ali Hameed Naser, Ali Hadi Adhim	IOP-EES-26-IRAQ-SEM-002
9:10-9:20	Effect of Fire Exposure on the Mechanical Properties of Lightweight Concrete Made with Expanded Clay and Sustainable Hybrid Aggregates	Ali Anwan Hayder, Laith Shakir Rasheed, Awad Jadooe	IOP-EES-26-IRAQ-SEM-003
9:20-9:30	A Comprehensive Review of Numerical and Experimental Applications of External Post-Tensioning in Steel Girder Systems	Ramla Kadhim Hassan, Hussein Yosif Aziz,	IOP-EES-26-IRAQ-SEM-004
9:30-9:40	Experimental Investigation of the Effect of Waste Steel Fiber on the Mechanical Properties of Sustainable Reactive Powder Concrete	Zainab M. R. Abdul Rasoula, Awad Jadooe, Najah M. L. Al Maimuri, Abbas Jalal Kaishesh, Anmar Dulaimi	IOP-EES-26-IRAQ-SEM-005
9:40-9:50	Using GPR to Assess the Steel Reinforcement in the Concrete of the Al-Safarat Bridge Deck and the Standard Sample	Ali Ibrahim Saleh, Amjed Naser Mohsin	IOP-EES-26-IRAQ-SEM-006
9:50-10:00	Experimental Investigation of Stress–Strain Behavior of Reinforcing Bars Connected with Standard and Oversized Threaded Coupler	Fatima Mohammed Hussein, Amer M. Ibrahim, Mohamad Reza Shokrzadeh (Iran)	IOP-EES-26-IRAQ-SEM-007
10:00-10:10	Effect of Elevated Temperatures and Cooling Methods on Sustainable SLWSCC Containing Recycled Glass	Heba Monem, Rawaa K. Aboud,	IOP-EES-26-IRAQ-SEM-008
10:10-10:20	Behavior of Ferro-Geopolymer One Way Slab Panel: Experimental Study	Amna N. Abd, Wissam D. Salman, Mohamed A. Abdullah	IOP-EES-26-IRAQ-SEM-009
10:20-10:30	Effect of Utilization of Waste Tire Steel Fiber on Flexural Behavior of Functionally Graded RC Beams	Sajjad Tarek Abd Alrazaq, Zainab M. R. Abdul Rasoul, Mushtaq Sadiq Radhi	IOP-EES-26-IRAQ-SEM-010
10:30-10:40	Performance of Fly Ash–Based Geopolymer Concrete Incorporating Waste Glass Powder	Hawaa A. Obaid, Sheelan Mahmoud Hama, Ibrahim A. Sarhan	IOP-EES-26-IRAQ-SEM-011
10:40-10:50	Impacts of High Level of Waste Tire Rubber Replacement on Flexural Behavior of Functionally Graded RC Beams	Sajjad T. Abd Alrazaq, Zainab M. R. Abdul Rasoul, Mushtaq S. Radhi	IOP-EES-26-IRAQ-SEM-014
10:50-11:00	Behavior of Basalt Fiber Reinforced Recycled Aggregate Concrete Short Spiral Columns Strengthened with CFRP	Jafar N. Abdul Raoof, Ammar A. Ali, Dhiyaa H. Mohammed	IOP-EES-26-IRAQ-SEM-016
11:00 - 11:30	Coffee Break Jamil Al-Malaika Hall/College of Engineering		



THE 6TH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ

(6ICGE - Iraq)

Day 2 | 8 October 2026 Session 2-1 Building: Smart Hall/Aeronautical Eng. Dept./College of Engineering

Session Chair: Assist. Prof. Dr. Ali A. Abdulhameed

Co-Chair: Asst. Lec. Muntadher Abed Mohsin

Session Topics: Structural Engineering and Materials

Time	Title	Authors	ID
11:30-11:40	Enhancing the Performance of Lightweight Concrete Contain Diverse Recycled Coarse Aggregates	Suad Abbas Ali, Bahaa Al-Abbas, Sadjad Amir Hemzah, Ahelah A. Jawad	IOP-EES-26-IRAQ-SEM-019
11:40-11:50	A Review of Enhancing the Mechanical Properties of Expanded Polystyrene Concrete	Iba'a Jehad Hamdi, Abdulkader Ismail Al-Hadithi,	IOP-EES-26-IRAQ-SEM-021
11:50-12:00	Mechanical and Durability Performance of Cementitious Mortar Incorporating Nano Silicon Dioxide Powder	Sheelan M. Hama, Hussein Gh. Hasan, Mustafa M. Al-Ani, Mustafa M. Aljumaily, Huda M. Qhairr, Nebras M. Mhedi	IOP-EES-26-IRAQ-SEM-022
12:10-12:20	Comprehensive Seismic Performance Assessment of a Highway Bridge Using Multiple Analytical Approaches	Safa Muayad Naji, Ali Fadhil Naser	IOP-EES-26-IRAQ-SEM-024
12:20-12:30	Short-Term Flexural Performance of Reinforced Concrete Beams Incorporating Waste	Hussein Alaa, Hussam Ali Mohammed,	IOP-EES-26-IRAQ-SEM-025
12:30-12:40	Tensile Performance of a Hybrid Rubber-Enhanced Rebar Coupler	Fatima Mohammed Hussein, Amer M. Ibrahim, Mohamad Reza Shokrzadeh (Iran)	IOP-EES-26-IRAQ-SEM-026
12:40-12:50	Dynamic Response of Scaled and Prototype Steel Plates under Air Explosion: Comparative Study	Assal Hussein	IOP-EES-26-IRAQ-SEM-027
12:50-13:00	Field-Based Material Integrity and Durability Screening of Hilla–Kish Expressway Overpass Bridges Based on Visual Inspection and Non-Destructive Tests	Ali Sheheed Radhi, Ali Fadhil Naser	IOP-EES-26-IRAQ-SEM-028
13:10-13:20	Shake Table Study of Plastic Hinge Placement Effects in 3-Story Scaled Steel Frames with Soil–Structure Interaction	Mouhammed J. Lafta, Mohammed J. Hamood, Qais A. Hasan, Mohammed Y. Fattah	IOP-EES-26-IRAQ-SEM-029
13:20-13:30	Experimental Study of Reinforced Concrete Beams Strengthened with Carbon Fiber Reinforced Polymer Strips in Torsion	Doaa F. Jawad, Wissam D. Salman,	IOP-EES-26-IRAQ-SEM-031
13:30 - 14:30	Lunch Jamil Al-Malaika Hall/College of Engineering		



THE 6TH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ

(6ICGE - Iraq)

Day 2 | 8 October 2026 Session 2-2 Building: Discussion Hall/Environmental Eng. Dept. /College of Engineering

Session Chair: Asst. Prof. Dr. Mustafa M. AbdalHusein

Co-Chair: Assist. Lec. Evan Emad Mohammed

Session Topics: Sstructural Engineering and Materials

Time	Title	Authors	ID
9:00-9:10	Geopolymer Adhesive Paste in Strengthening of RC Beams in Torsion	Doaa F. Jawad, Wissam D. Salman, Qasim A. Hameed	IOP-EES-26-IRAQ-SEM-032
9:10-9:20	Effect of Cantilever Depth on Reinforced Concrete Deep Beams	Thalfaa R. Farhan, Khattab Saleem Abdul-Razzaq,	IOP-EES-26-IRAQ-SEM-033
9:20-9:30	Efficiency of Shear Strut Factor for Reinforced Concrete Continuous Deep Beams	Ali M. Jalil, Raad D. Khalaf, Khattab S. Abdul-Razzaq	IOP-EES-26-IRAQ-SEM-034
9:30-9:40	Influence of Additional Reinforcement Length on the Punching Shear Capacity of Flat Slabs: Experimental Study and Code Comparison	Mohammed M. Saeed, Ali I. Salahaldin, Wael R. Almakinachi	IOP-EES-26-IRAQ-SEM-035
9:40-9:50	Performance Assessment of RC Beams under Out of Plate Parts Effect Retrofitted with Steel Plates	Sarah H. Hameed	IOP-EES-26-IRAQ-SEM-038
9:50-10:00	Influence of Pier Height on the Seismic Behavior of Highway Bridges: A Numerical Investigation	Safa Muayad Naji, Ali Fadhil Naser,	IOP-EES-26-IRAQ-SEM-039
10:00-10:10	Fresh-State Behavior of Steel Fiber-Reinforced Recycled Aggregate HSC Under Optimized Packing and Mixing	Mariam K. Kamil, Ali A. Jaber, Ahmed Sh.J. Al-Zuheriy	IOP-EES-26-IRAQ-SEM-040
10:10-10:20	Experimental Investigation of High-Performance Hybrid Fiber Concrete: Achieving Superior Crack Resistance in Rigid Pavement Systems	Noor A. Ismaeel, Adel A. Al-Azzawi,	IOP-EES-26-IRAQ-SEM-041
10:20-10:30	Improvement of the Mechanical Properties of Engineering Cementitious Concrete (ECC) by Adding Polyvinyl Alcohol (PVA)	Laith A. Salem, Bahaa Al-Abbas, Wajde Alyhya,	IOP-EES-26-IRAQ-SEM-042
10:30-10:40	Particle Packing and Multi-Stage Mixing for Reinforced-High-Strength Recycled Coarse Aggregate Concrete Mechanical Properties	Mariam K. Kamil, Ali A. Jaber, Ahmed Sh.J. Al-Zuheriy	IOP-EES-26-IRAQ-SEM-043
10:40-10:50	Post-Damage Retrofitting and Seismic Performance of Lightweight High Strength Reinforced Concrete Columns	Suad A. Ali, Bahaa Al-Abbas, Sadjad A. Hemzah	IOP-EES-26-IRAQ-SEM-044
10:50-11:00	CFRP Strengthening of Reinforced Concrete Beams: Influence of Advanced Surface Preparation Techniques on Bond Performance and Flexural Response	Shahad M. Madhlom, Hussam A. Mohammed,	IOP-EES-26-IRAQ-SEM-045
11:00 - 11:30	Coffee Break Jamil Al-Malaika Hall/College of Engineering		





THE 6TH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ

(6ICGE - Iraq)

Day 2 | 8 October 2026 Session 3-1 Building: Khaled Shaker /Civil Eng. Dept. /College of Engineering

Session Chair: Asst. Prof. Dr. Shaimaa Hasan Fadhil

Co-Chair: Dr. Mohamed Moafak Aziz Session Topics: Construction Management and Sustainability

Time	Title	Authors	ID
9:00-9:10	Identification and Analysis of Critical Factors Affecting Time Overrun in Residential Buildings	Sajjad Z. Abdulzahra, Tareq A. Khalee	IOP-EES-26-IRAQ-CS-001
9:10-9:20	Identification and Analysis of Critical Factors Affecting Cost Overrun in Dwelling Buildings	Sajjad Z. Abdulzahra, Tareq A. Khalee	IOP-EES-26-IRAQ-CS-002
9:20-9:30	Factors Affecting Road Maintenance Costs in Karbala Governorate	Ali Saad Ahmed, Gafel Kareem Aswed	IOP-EES-26-IRAQ-CS-003
9:30-9:40	Three Urban Highway Corridors in Baghdad: Functionally Reclassified Using Integrated AASHTO and HCM Frameworks	Ishraq M. Lateef, Alaa H. Abed, Noor M. Asmael	IOP-EES-26-IRAQ-CS-004
9:40-9:50	Evaluation of Traffic Flow Performance at a Freeway Entrance: A Case Study of Al-Dora Expressway, Baghdad	Wafaa Khudhair Luaibi, Samiyaa Yaseen Mohammad, Marwah Mohammed Al-helli, Nagham Rajaa, Lee Vien Leong, Safaa Khudair Leabi, Hamid Athab Al-Jameel	IOP-EES-26-IRAQ-CS-005
9:50-10:00	Study of The Effect of Adding Polyvinyl Alcohol on Ceramic Tile Adhesive	Sarmad Abbas Hussein, Aseel B. AL-Zubaidi, Layth Wadhah Ismael	IOP-EES-26-IRAQ-CS-006
10:00-10:10	Assessing the Contractual Readiness of Waste-to-Energy Projects in Iraq: An Expert-Based Empirical Study	Ghassan Ali Ahmed, Meervat R. Altaie	IOP-EES-26-IRAQ-CS-007
10:10-10:20	The Effect of Risk Management Practices on Execution Time of Residential Complexes in Iraq	Doaa Saab Jasim, Mustafa Abdullah Hilal	IOP-EES-26-IRAQ-CS-009
10:20-10:30	Assessing Road Network Connectivity in Al-Haydariyah District Using GIS and Graph-Based Indices	Murtada K. Khussaf, Hamid A. Al-Jameel	IOP-EES-26-IRAQ-CS-010
10:30-10:40	Durability Evaluation of Hybrid Polymer-Modified Tack Coats for Enhancing Interlayer Bond Strength in Asphalt Pavements	Samer Muayad Alsadik, Hasan Al-Mosawe, Nick Thom	IOP-EES-26-IRAQ-CS-011
10:40-10:50	Multi-criteria Evaluation of Tram Alignment Alternatives for Improving Accessibility between Wadi Al-Salam Cemetery and the Old City of Najaf using GIS Software	Renaz Yousif Mohammed Ali, Hamid Athab Eedan Al-Jameel	IOP-EES-26-IRAQ-CS-012
10:50-11:00	Multi-objective Optimization of Sustainable RCC Pavement Incorporating High-Volume POFA, Crumb Rubber, and Nano-Silica	Noorance Al-Mukaram, Said Jassim Mohsen Alsaady, Abbas Abdulhssein Abd Noor, Haider Araby Ibrahim	IOP-EES-26-IRAQ-CS-014
11:00 - 11:30	Coffee Break Jamil Al-Malaika Hall/College of Engineering		



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Day 2 | 8 October 2026 Session 2-2 Building: Khaled Shaker /Civil Eng. Dept. /College of Engineering

Session Chair: Asst. Prof. Dr. Ahmed A. Al-Obaidi

Co-Chair: Assist. Lec. Ahmed Shakir Ali Session Topics: Construction Management and Sustainability

Time	Title	Authors	ID
11:30-11:40	5S Technique Application in Earthworks Phase to Enhance Sustainability in Construction Projects: A Case Study in Kurdistan Region	Gzing Adil Mohammed, Dilshad Kakasor Jaf, Ahmet Öztaş	IOP-EES-26-IRAQ-CS-015
11:40-11:50	Optimized SC-ANFIS Model for Road Maintenance Cost Prediction in Karbala Governorate	Ali Saad Ahmed, Gafel Kareem Aswed	IOP-EES-26-IRAQ-CS-017
11:50-12:00	GIS-Based Multi-Criteria Evaluation of Public Transport Accessibility and Service Coverage in Baghdad	Othman Qays Khaleefah, Oday Zakariya Jasim, Muthanna Mohammed Abdulhameed	IOP-EES-26-IRAQ-CS-018
12:10-12:20	Impact of Built-up Areas and Barren Soil on Land Surface Temperature Using GIS and Remote Sensing Techniques: A Case Study of Baghdad Province	Muataz Abdulkareem Hanoon, Amjad Naser Mohsen, Mustafa N. Hamoodi	IOP-EES-26-IRAQ-CS-019
12:20-12:30	Analysis of Road Networks of Old Al-Qasaba Area in Samawah City Using QGIS Software	Zainab A. Mahmood, Noorance Al-Mukaram	IOP-EES-26-IRAQ-CS-021
12:30-12:40	Marshall Properties and Moisture Susceptibility of Asphalt Mixtures Modified with Recycled GFRP Tubes Powder	Salah Adnan Jaafer, Ahlam K. R. Alzerjawi	IOP-EES-26-IRAQ-CS-022
12:40-12:50	Integration of Risk Management and Sustainability for Investment Projects	Khamael R. Obead, Hatim A. Rashid	IOP-EES-26-IRAQ-CS-024
12:50-13:00	Strengths and Weaknesses of Pedestrian Simulation Software	Mohammed Hadi Kadhim, Noorance Al-Mukaram	IOP-EES-26-IRAQ-CS-025
13:10-13:20	Expected Pavement Performance of Developed Climatic Input for M-E Pavement Design in Iraq	Tabarek H. Salim, Abbas F. Jasim	IOP-EES-26-IRAQ-CS-027
13:20-13:30	Spatial Analysis Approaches for Evaluating the Current Distribution of Healthcare Centers in Al-Karkh Side of Baghdad	Hawazin Duraaid Faak, Maythm Al Bakri, Oday Zakariya Jasim	IOP-EES-26-IRAQ-CS-028
13:30 - 14:30	Lunch Jamil Al-Malaika Hall/College of Engineering		



THE 6TH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ

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Day 2 | 8 October 2026 Session 3-2 Building: Fawzi Al-Khalisi /Surveying Eng. Dept. /College of Engineering

Session Chair: Prof. Dr. Ikram Al-Mulla

Co-Chair: Assist. Prof. Dr. Rowedah Hussain ali Sustainability

Session Topics: Construction Management and

Time	Title	Authors	ID
9:00-9:10	Thermal-Assisted Self-Healing Performance of Asphalt Concrete Incorporating Recycled Plastic under Microwave and External Heating	Athraa Falih Wali, Husham M. Al Tuwayyij	IOP-EES-26-IRAQ-CS-030
9:10-9:20	Improvement of Operational Efficiency of Al-Warda Signalized Intersection in Samawah City	Ahmed Al-Medath, Noorance Al-Mukaram	IOP-EES-26-IRAQ-CS-033
9:20-9:30	Towards Sustainability: The Role of Urban Planning and Sustainable Transport in Developed City Centers	Zainab A. Mahmood, Noorance Al-Mukaram	IOP-EES-26-IRAQ-CS-035
9:30-9:40	An Integrated Activity-Based Delay Penalty Model for Construction Projects in Iraq	Bariq Wifad Abdulmajeed, Kadhim Raheim Erzaij	IOP-EES-26-IRAQ-CS-036
9:40-9:50	A Hybrid Deep Learning-Assisted Evolutionary Framework for Multi-Objective Optimization of Typical Project Portfolios	Majid Hameed Yahya, Kadhim R. Erzaij	IOP-EES-26-IRAQ-CS-038
9:50-10:00	Cohesion Performance of Crumb Rubber-Modified Bitumen under Wide Temperature Ranges	Mustafa A. Kadhim, Sadjad A. Hemzah, Mahdi Al-Naddaf, Shakir Al-Busaltan, Muna Al-kafaji	IOP-EES-26-IRAQ-CS-040
10:00-10:10	GIS-Based Weighted Road Network Modeling for Optimizing Public Bus Routes in Baghdad	Othman Qays Khaleefah, Oday Zakariya Jasim, Muthanna Mohammed Abdulhameed	IOP-EES-26-IRAQ-CS-041
10:10-10:20	Explainable Ensemble Machine Learning Approach for Predicting the Indirect Tensile Strength of Hot Mix Asphalt	Manar A. Kareem, Shakir Al-Busultan, Humam M. Abdulsahib	IOP-EES-26-IRAQ-CS-042
10:20-10:30	Exploring Studies on Public-Private Partnership for Sustainable Development Attainment in Infrastructure Projects	Jinan Kata'a Hassan, Ahmed M. Raoof Mahjoob	IOP-EES-26-IRAQ-CS-043
10:30-10:40	Building a Bayesian Model to Predict the Effective Parameters on the Cost and Duration of Construction Smart Projects	Yerevan A. Ali, Abbas M. Burhan	IOP-EES-26-IRAQ-CS-045
10:40-10:50	A Decision Support Framework for Bridge Maintenance Prioritization Using a Fermatean Fuzzy AHP-MARCOS Approach	Salsabeel S. Jafar, Sawsan R. Mohammed	IOP-EES-26-IRAQ-CS-046
10:50-11:00	Designing a Bus Network for Hilla City, Iraq	Zaid A. Shakir, Ali F. Naser	IOP-EES-26-IRAQ-CS-047
11:00 - 11:30	Coffee Break Jamil Al-Malaika Hall/College of Engineering		



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Day 2 | 8 October 2026 Session 3-2 Building: Fawzi Al-Khalisi /Surveying Eng. Dept. /College of Engineering

Session Chair: Prof. Dr. Nada Mahdi Fawzi Aljalawi

Co-Chair: Dr. Sara Hamid Shahatha

Session Topics: Construction Management and Sustainability

Time	Title	Authors	ID
11:30-11:40	Comparative Study of Spatial Accuracy of Artificial Intelligent-Generated Features in Relation to Manually Verified Data in OpenStreetMap	Maythm Al-Bakri	Scientific.Net-26-IRAQ-CS-006
11:40-11:50	Comparative Evaluation of the Conventional Iraqi Delay Penalty Method and a Proposed Activity-Based Penalty Model for Construction Projects	Bariq W. Abdulmajeed, Kadhim R. Erzaij	Scientific.Net-26-IRAQ-CS-007
11:50-12:00	Impact of Lacking Green Infrastructure Practices in Iraqi Recommended Standards to Deal with Stormwater on Roads in Al-Muthanna Governorate	Mustafa Falih, Isam Alyaseri	Scientific.Net-26-IRAQ-CS-008
12:10-12:20	Investigation the Properties of Cement Treated Cold Asphalt Emulsion Mixtures with Supplementary Cementitious Fillers	Hiba Abd-Alzahra, Abbas Al-Hdabi, Hassan Al-Nageim	Scientific.Net-26-IRAQ-CS-012
12:20-12:30	Artificial Intelligence in Iraqi Construction Project Management: A Comparative Review with Global and GCC Perspectives	Laith Shakir, Abbas M. Burhan	Scientific.Net-26-IRAQ-CS-018
12:30-12:40	A Comparative Marshall Performance of Sasobit-Modified Warm and Hot Mix Asphalt	Haneen S. Khwayyir, Ahlam K. R. Alzerjawi	Scientific.Net-26-IRAQ-CS-019
12:40-12:50	Balancing the Tensile Strength and Rutting Performance of Sasobit-Modified Warm Mix Asphalt	Ameer Falah Dakhil, Shakir Al-Busaltan	Scientific.Net-26-IRAQ-CS-020
12:50-13:00	Effect of Traffic Volume Growth on the Performance of Some Intersections of Najaf City	Wassan Ali Numan, Khawla H. H. Shubbur	Scientific.Net-26-IRAQ-CS-023
13:10-13:20	Durability of Self-Compacting Concrete Containing Recycled Concrete Aggregate (RCA) and Reclaimed Asphalt Aggregate (RAP)	Mustafa K. Oliwi, Ali T. Jasem	Scientific.Net-26-IRAQ-CS-025
13:20-13:30	Autonomous Crew Intelligence: A Multi-Agent Reinforcement Learning System for Construction Crew Scheduling	Zaid Kh. Noori, Meervat R. Altaie	Scientific.Net-26-IRAQ-CS-027
13:30 - 14:30	Lunch Jamil Al-Malaika Hall/College of Engineering		



THE 6TH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ

 Day 2 | 8 October 2026 Session 3-3 Building: Ihsan Yahya / Mechanical Eng. Dept. /College of Engineering

Time	Title	Authors	ID
9:00-9:10	Experimental and Microstructural Investigation of Moisture Damage Resistance in Sustainable Asphalt Pavement Modified with RPVC and Nano-SiO ₂	Samah A. Wahab, Alaa H. Abed	Scientific.Net-26-IRAQ-CS-029
9:10-9:20	Development and Expert Validation of a Proposed Contractual Guideline for Waste-to-Energy Projects in Iraq	Ghassan Ali Ahmed, Meervat R. Altaie	Scientific.Net-26-IRAQ-CS-031
9:20-9:30	Examining the Long-Term Performance and Mechanical Properties of Interlocking Concrete Pavement	Laith Hussein Ali, Asma Thamir Ibraheem	Scientific.Net-26-IRAQ-CS-032
9:30-9:40	Developing a Sustainability Index for Sustainable Investment Projects in Iraq Using Likert Scale and Pairwise Comparison	Khamael R. Obead, Hatim A. Rashid	CRC-26-IRAQ-CS-002
9:40-9:50	Identifying the Safety Factors in Iraqi Irrigation Projects	Abbas A. Hameed, Hatim A. Rashid	CRC-26-IRAQ-CS-003
9:50-10:00	Optimal Route Selection Using Geographic Information Systems and Analytic Hierarchy Process (AHP)	Noor A. AL-Hassan, Yousif A. Mousa	CRC-26-IRAQ-CS-005
10:00-10:10	Optimal Road Route Corridor Selection based on GIS and MCDM: A Review	Noor A. AL-Hassan, Yousif A. Mousa	CRC-26-IRAQ-CS-006
10:10-10:20	Route Optimization and Spatial Connectivity Between Al-Haydariya District and Babil Governorate Using GIS	Murtada Kamel, Hamid Athab	CRC-26-IRAQ-CS-007
10:20-10:30	Using Biochar from Tea Waste as a Filler to Enhance the Asphalt Mixture	Fatima S. Zia, Miami M. Hilal, Shatha Sadiq Hasan	CRC-26-IRAQ-CS-008
10:30-10:40	Accessibility and Traffic Safety Along Urban Corridors: Implications for Sustainable Mobility in Ramadi City	Nisreen A. Abbas, Thaer Sh. Mahmood	CRC-26-IRAQ-CS-014
10:40-10:50	Assessment of a Sustainable Asphalt Mixtures Enhanced with Aluminum Shavings	Rassul AL-Emmara, Rasha H. Al-Rubaei, Ammar A. M. Shubber	CRC-26-IRAQ-CS-015
10:50-11:00	Performance of Sustainable PGAC Mixture Made with the ABS-Modified Binders	Zainalabidine Nihad, Abdul-Rahim I. Al Hadidy	CRC-26-IRAQ-CS-017
11:00 - 11:30	Coffee Break Jamil Al-Malaika Hall/College of Engineering		



THE 6TH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ

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Day 2 | 8 October 2026 Session 3-3 Building: Ihsan Yahya / Mechanical Eng. Dept. /College of Engineering

Session Chair: Asst. Prof. Dr. Lamyaa Najah Snodi

Co-Chair: Dr. Taghreed Ali Abbas Session Topics: Construction Management and Sustainability/Structural Engineering and Materials

Time	Title	Authors	ID
11:30-11:40	Assessment of a Sustainable Asphalt Mixtures Enhanced with Iron Shavings	Rassul AL-Emmara, Rasha H. Al-Rubae, Ammar A. M. Shubber	CRC-26-IRAQ-CS-018
11:40-11:50	Evaluation and Modeling of Cohesion Performance Indices of Polymer-Modified Bitumen: Effects of Single and Hybrid CR/SBS Modification	Mustafa A. Kadhim, Sadjad A. Hemzah , Mahdi Al-Naddaf, Shakir Al-Busaltan	CRC-26-IRAQ-CS-022
11:50-12:00	Spatial Multi-Criteria Analysis for Establishing a New Landfill Site in Baghdad	Doaa Abdulrazzak, Othman Adel Lilo, Abdul Razzak T. Ziboon	CRC-26-IRAQ-CS-024
12:10-12:20	Evaluating Wind Effects on TROPOMI Carbon Monoxide over Iraq for Sustainable Cities	Mohammed H. Salim, Othman Adel Lilo, Abdul Razzak T. Ziboon	CRC-26-IRAQ-CS-026
12:20-12:30	Mechanistic Evaluation of Rutting Performance in Flexible Pavements Using Traffic ESAL Analysis and KENPAVE Modeling	Amjed S. H. Al-Abadi, Mohammed A. H. Al-Jumaili	CRC-26-IRAQ-CS-027
12:30-12:40	Dynamic Modulus-Based Assessment of Rutting in Flexible Pavements Under HighTemperature Traffic Conditions: Application to Najaf Test Roads	Amjed S. H. Al-Abadi, Mohammed A. H. Al-Jumaili	CRC-26-IRAQ-CS-028
12:40-12:50	Identifying and Assessing Risks in Iraqi Bridge Construction Projects	Zahraa Ali Jalil, Hatim Abd. Rashid	CRC-26-IRAQ-CS-029
12:50-13:00	Nanomaterials in Asphalt Pavement Engineering: A Systematic Review of Performance, Sustainability, and Implementation Challenges	Sozan S. Rasheed, Entesar J. Irshayid, Fadak M. Almousawi	CRC-26-IRAQ-CS-030
13:10-13:20	Performance assessment of RC beams under out of plate parts effect retrofitted with steel plates	Sarah H. Hameed	JRESM-EES-26-IRAQ-SEM-004
13:20-13:30	Experimental Investigation of Composite Hollow Steel-Concrete Double Corbels	Ruqaya Saeed Mankhi, Nasser Hakeem Tu'ma	JRESM-EES-26-IRAQ-SEM-006
13:30 - 14:30	Lunch Jamil Al-Malaika Hall/College of Engineering		



THE 6TH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ

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Day 2 | 8 October 2026 Session 4 Building: Munther Al-Daroubi/Mechanical Eng. Dept. /College of Engineering

Session Chair: Prof. Dr. Abdulkhaliq A. Jaafer

Co-Chair: Dr. Ahmed Taifor Azeez

Session Topics: Mechanical Engineering and Energy Sciences

Time	Title	Authors	ID
9:00-9:10	A Hybrid Experimental, CFD, and ANN Study on the Influence of Temperature on Cavitation Characteristics	Saba A. Othman, Hashim A. Hussein, Abduljabbar O. Hanfesh	IOP-EES-26-IRAQ-MEES-001
9:10-9:20	Enhancement of Ti13Nb13Zr Alloy Osseointegration and Corrosion Characteristics by Coating with α -Alumina Nano Powder Using Pyrolysis Spray Technique (in Vitro Study)	Ahmed Q. Hussien, Ayad N. Jasim, Alaa A. Atiyah	IOP-EES-26-IRAQ-MEES-002
9:20-9:30	Optimizing Graphene – Alumina Nanocomposite Coatings on Titanium Alloy via Spin Coating for Dual Corrosion Resistance and Antimicrobial Functionality in Dental Implants	Mohammed H Abd Ali, Layth W. Ismael, Shams N Almutalabi, Tabarak S kadhém, Mousa A Hussein, Mayada S Mohammed, Alameer H Alhasan, Mohammed N Abdullatef, Ali M Abd	IOP-EES-26-IRAQ-MEES-003
9:30-9:40	Chemical Depolymerization of Waste Polyethylene Terephthalate for the Production of Carbonaceous Precursors	Othman A. Ismael, Sarmad I. Ibrahim Mohammed A. Alzuhairi	IOP-EES-26-IRAQ-MEES-004
9:40-9:50	Advances in Photocatalytic Materials for Organic Pollutant Degradation: From Perovskite Oxides to Perovskite@MOF Composites	Rabab I. Ahmed, Doaa S. EL-Desouki, Mostafa E. Aboul-Fetouh, Tarek M. Aboul- Fotouh, Samira M. Abdel-Azim	IOP-EES-26-IRAQ-MEES-006
9:50-10:00	Single-Slope Solar Enhancing by Electrical Heater and Solar Photovoltaic System	Tamarah Sameer, Ali Asaad Nadhim	IOP-EES-26-IRAQ-MEES-007
10:00-10:10	Preparation and Evaluation of PVA/Glycerol/Agar Biocomposite Films Loaded with ZnO Nanoparticles for Sustainable Packaging	Reham Salam Rahemm, Alaa Abed Mohammed, Wafaa Mahdi Salih	IOP-EES-26-IRAQ-MEES-008
10:10-10:20	Enhancement of the Properties of PMMA Polymer Reinforced Fiberglass and Wheat Straw	Hiba Kh. Mahmood, Wafaa M. Salih, Alaa A. Mohammed	IOP-EES-26-IRAQ-MEES-009
10:20-10:30	Influence of Environmental Exposure on the Corrosion–Mechanical Performance of Aluminum Composites Reinforced with Natural Waste Particulates at Varying Weight Fractions	Ahmed M. Abed, Awatif M. Ali, Layla M. Naser	IOP-EES-26-IRAQ-MEES-010
10:30-10:40	Study the effect of Crack Angle on the Mechanical and Vibrational Properties of a Nanomaterial Reinforced Composite in Oil Pipes Application	Salah K. Mohammed	IOP-EES-26-IRAQ-MEES-011
10:40-10:50	Optimization of Specific Energy Consumption in Electrochemical Turning (ECT) on a Conventional Lathe Machine Using Taguchi Method and ANOVA	Zainab K. Mohammed, Waqass S. Khudhir, Baqer A. Ahmed	Scientific.Net-26-IRAQ-MEES-002
10:50-11:00	Effect of Mist Eliminator Type on the Gas Outlet of a Three-Phase Separator	Zahraa Y. Al-Moosawim Adnan A. Ateeq, Maher T. AlShamkhani	CRC-26-IRAQ-MEES-001
11:00 - 11:30	Coffee Break Jamil Al-Malaika Hall/College of Engineering		



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Day 2 | 8 October 2026 Session 4 Building: Munther Al-Daroubi/Mechanical Eng. Dept. /College of Engineering

Session Chair: Asst. Prof. Dr. Hussein Jabbar Khadim

Co-Chair: Dr. Haneen Adil Mohammed
Sciences/Structural Engineering and Materials

Session Topics: Mechanical Engineering and Energy

Time	Title	Authors	ID
11:30-11:40	Effect of Aluminum Powder Content and Manufacturing Method on The Mechanical Properties of HDPE/Al Composites	Ali T. Abd Ali, Niveen J. Abdulkader, Ahmed A. Zainulabdeen	CRC-26-IRAQ-MEES-002
11:40-11:50	Smart Wear Monitoring and AI-Driven Parameter Optimization in EDM: A Cyber-Physical Framework for Intelligent Manufacturing	Eihab Asaad Hameed, Ali Abbar Khleif	CRC-26-IRAQ-MEES-003
11:50-12:00	Artificial Intelligence Applications in Electrical Discharge Machining: A Systematic Review of Prediction, Optimization, and Intelligent Monitoring	Eihab Asaad Hameed, Ali Abbar Khleif	CRC-26-IRAQ-MEES-004
12:10-12:20	Mitigating GAN-Based Poisoning Attacks in Federated Learning Using a Decentralized Multi-Layer Security Framework with Blockchain	Muthana R. Alsultan, Shivan A. Mohammed, Fidha Ezzaldin Aslan	JRESM-EES-26-IRAQ-MEES-001
12:20-12:30	Deep Learning-Based Prediction of Myocardial Ischemia from ECG Signals Using a Fully Convolutional Network and Explainable AI	Fidha Ezzaldin Aslan, Muthana R. Alsultan, Shivan A. Mohammed	JRESM-EES-26-IRAQ-MEES-002
12:30-12:40	Improvement of Bearing Capacity and Settlement Behavior of Expansive Soil Using Ground Granulated Blast Furnace Slag (GGBFS)	Hassan Falah Hassan, Jawad K. Thajeel	JRESM-EES-26-IRAQ-SMGE-004
12:40-12:50	Evaluation of Shear Strength, Hydraulic Conductivity, Bearing Capacity and Settlement Characteristics of Soft Clay for Shallow Foundations	Maher M. Jebur, Mustafa M. Jasim, Faris S. Mustafa, Mahdi Karkush	JRESM-EES-26-IRAQ-SMGE-005
12:50-13:00	Thermo-Structural Response of Concrete Box-Sections to AASHTO Thermal Actions	Noora K. Jebur	CRC-26-IRAQ-SEM-005
13:10-13:20	Concrete Columns Under Lateral Impact Load, Finite Element Investigation Using Abaqus	Amna khaery khudhair, Othman Hameed Zinkaaha	CRC-26-IRAQ-SEM-006
13:20-13:30	Predicting Shear Strength of RC Beam-Column Joints Using Gradient Boosted Tree Learner: Comparison with Empirical and Code-Based Models	Aya Qays Ahmed, Amer M. Ibrahim	CRC-26-IRAQ-SEM-008
13:30 - 14:30	Lunch Jamil Al-Malaika Hall/College of Engineering		



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 Co-Chair: Dr. Monketh Mohammed Session Topics: Water Resources and Environmental Engineering

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THE 6TH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ

(6ICGE - Iraq)

📅 Day 2 | 8 October 2026 ⌚ Session 5- 2 📍 Building: Euphrates/Water Res. Dept. /College of Engineering

👤 Session Chair: Prof. Dr. Suzan Abed Hassan

👤 Co-Chair: Dr. Haval Rostam Session Topics: Water Resources and Environmental Engineering

Time	Title	Authors	ID
9:00-9:10	Numerical Simulation of Seepage Through Hemren Zoned Earth Dam under Different Reservoir Water Levels and Limited Piezometric Data	Sarah A. Nassir, Mohammed R. Al-Juhaishi	IOP-EES-26-IRAQ-WREE-031
9:10-9:20	Application of Weighting Optimization for Afforestation of the Western Desert in Iraq	Reman J. Abid Ali	Scientific.Net-26-IRAQ-WREE-001
9:20-9:30	Piping Resistance of Sand Randomly Mixed with Waste Plastic	Ahmed Obaid Ahmed, Saleh Issa Khassaf	Scientific.Net-26-IRAQ-WREE-003
9:30-9:40	Estimating the Abundance of Microplastic Particles in the Tigris River Sediments	Abdullah Mohammad Makki, Ghayda Yaseen Al-Kindi	Scientific.Net-26-IRAQ-WREE-007
9:40-9:50	Detection and Distribution of Microplastics in Surface Water-Tigris River	Abdullah Mohammad Makki, Ghayda Yaseen Al-Kindi	Scientific.Net-26-IRAQ-WREE-008
9:50-10:00	A Comparative Study of Computational Modeling in ANSYS and Experimental Data	Miaad B. H. AL-Timimi, Riyadh Z. Azzubaidi, Hayder Q. Majeed	Scientific.Net-26-IRAQ-WREE-011
10:00-10:10	Hydrological and Reservoir Capacity Assessment for the Proposed Darwesh Khider Small Dam Using GIS, DEM, and Watershed Modeling	Anwer Hazim Dwood	Scientific.Net-26-IRAQ-WREE-013
10:10-10:20	Detection of Plastic Debris in River Using Remote Sensing Data	Hassan Alshamary, Shaimaa T. Alnasrawy, Nadia A. Aziz	Scientific.Net-26-IRAQ-WREE-015
10:20-10:30	Effects of Explosive and Phosphorus-Based Munitions on Soil Chemical Properties and Microbial Communities in Agricultural Lands of Post-Conflict Fallujah, Iraq	Haneen Sh. Sharqi, Awon Y. A. Al-Nuaimi, Hasan A. Hussein Qanat H. Abdulhadi, Jabbar Sh. E. Al-Esawi, Ahmed A. Enad, Salem M. A. AL-Ani Mahdi Karkush	Scientific.Net-26-IRAQ-WREE-021
10:30-10:40	Modeling the Performance of the Reverse Osmosis System (RO) For Desalination Using SPSS Software	Mohammed A. Naser Waleed A. Rzaij, Hayder R. Shakir	CRC-26-IRAQ-WREE-003
10:40-10:50	Hydraulic Performance, Irrigation Efficiency, and Water Productivity of Two Center Pivot Irrigation Systems under Arid Conditions	Nora Amer Hussein Alaa Mahdi Akol, Kareem Radhi	CRC-26-IRAQ-WREE-010
10:50-11:00	Climate Change and Global Warming in Iraq Implications for Climate Trends, Hydrology, and Potential Influence on Earthquake Frequency	Humam Kh. Taher Zuhair K. Jahanger	CRC-26-IRAQ-WREE-011
11:00 - 11:30	Coffee Break Jamil Al-Malaika Hall/College of Engineering		



THE 6TH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ

(6ICGE - Iraq)

Day 2 | 8 October 2026 Session 5-2 Building: Euphrates/Water Res. Dept. /College of Engineering

Session Chair: Assist. Prof. Dr. Sara Mahmood Hubaiter

Co-Chair: Asst. Prof. Dr. Duaa A. Muhammad Session Topics: Water Resources and Environmental Engineering/Structural Engineering and Materials

Time	Title	Authors	ID
11:30-11:40	Seasonal Characterization of Municipal Solid Waste at the Southern Transfer Station in Najaf City, Iraq	Zaid Hassan Jaber, Hussein Abdulmuttaleb Alikhan	CRC-26-IRAQ-WREE-014
11:40-11:50	Urbanization and Hydraulic Stress in an Intermittently Supplied Water Distribution Network: A Field-Calibrated Assessment	Ridhaa Mahdi Kadhim, Musa Al-Shammari, Layth Abdulameer	CRC-26-IRAQ-WREE-015
11:50-12:00	Reducing the Cavitation Phenomenon in the Bell-Mouth Spillway by Several Modifications to the Inlet Geometry	Laila B. Hashim Ameen, Mohammed Salih Ameen	CRC-26-IRAQ-WREE-016
12:10-12:20	The Impact of Adding a New Pumping Unit on The Hydraulic Characteristics of an Existing Pumping Station	Sara K. Radhi Ameen, Mohammed Salih Ameen, Zuhair K. Jahanger	CRC-26-IRAQ-WREE-017
12:20-12:30	NaOH-Activated Biochars from Sawdust and Peat Moss for Efficient Moxifloxacin Removal from Water: A Comparative Study	Shahad S. M. Al-Zaidy, Faris H. Al- Ani, Abdul Hameed M. J. Al-Obaidy	CRC-26-IRAQ-WREE-019
12:30-12:40	Seasonal Variation of Plastic Debris in Diyala River Using Remote Sensing and Field Validation	Hassan Alshamary, Shaimaa Taleb Alnasrawy, Nadia A. Aziz	CRC-26-IRAQ-WREE-020
12:40-12:50	Morphological, Structural and Chemical Characterization of Cast and Injection-Molded Aluminum-Filled HDPE Composites	Ali T. Abd Ali, Ahmed A. Zainulabdeen, Niveen J. Abdulkader	CRC-26-IRAQ-SEM-009
12:50-13:00	Nonlinear FE Analysis of Hybrid and Fully Wrapped CFRP Strengthening Square RC Columns under Eccentric Loading	Liqaa S. Mahdi, Ali H. Adheem,	CRC-26-IRAQ-SEM-014
13:10-13:20	Shear Behaviour of Pre-loaded Reinforced Concrete Beams Strengthened with Different CFRP Configurations	Ammar A. Alasadi, Wasan Q. Fayyadh, Ali K. AL-Asadi, Abdullah Khalaf	CRC-26-IRAQ-SEM-015
13:20-13:30	Optimization of Mechanical and Thermal Properties of Hybrid Lightweight Aggregate Foam Concrete Using Central Composite Design	Ghasak A. Mohammed, Ameer A. Hilal,	JRESM-EES-26-IRAQ-SEM-002
13:30 - 14:30	Lunch Jamil Al-Malaika Hall/College of Engineering		



THE 6TH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ

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Day 2 | 8 October 2026 Session 6 Building: Mohammad Makiya/Architecture Dept. /College of Engineering

Session Chair: Prof. Dr. Qais Sahib Kareem

Co-Chair: Dr. Ammar Sabah Al-Rihimy Session Topics: Urban Development and Architecture

Time	Title	Authors	ID
9:00-9:10	Prediction of Future Land Cover Using Machine Learning Algorithms Using Remote Sensing: Case Study of Baghdad	Kamil Saad Kamil, Othman Adel Lilo, Abdul Razzak T. Ziboon	IOP-EES-26-IRAQ-UDA-001
9:10-9:20	Structural Performance in Natural Systems and Its Impact on the Generation and Organization of Contemporary Hybrid Structures	Dhay H. Majeet, Ali M. J. Al-Khafaji	IOP-EES-26-IRAQ-UDA-003
9:20-9:30	Development of the Craft Industry of Baghdadi Shanashil: Integrating Smart Mechanical Systems as a Bridge between Architectural Heritage and the Requirements of Contemporary Smart Architecture	Zahraa Ahmed Kadhim, Susan Abed Hassan, Muhammad Sabri Salem	IOP-EES-26-IRAQ-UDA-004
9:30-9:40	Architectural Flexibility and Its Impact on Students' Social Interaction in School Spaces	Noor Haider Kamil, Saad Fawzi Tuma	IOP-EES-26-IRAQ-UDA-005
9:40-9:50	Urban Spatial Connectivity as a Proxy for Resilience: A Quantitative Analysis of Central Karkh, Baghdad	Noor Haider Kamil, Saad Fawzi Tuma	IOP-EES-26-IRAQ-UDA-006
9:50-10:00	Assessing Passive Cooling Efficiency in Traditional Caravanserais for Modern Urban Resilience	Hussein A. Medhat, Husam S. Senah	IOP-EES-26-IRAQ-UDA-007
10:00-10:10	Sacred Geometry and Proportional Systems as Generative Mechanisms in Islamic Architecture: An Approach Between Traditional Architecture and Contemporary Architecture	Rasha Hussein Hassan, Shatha Abbass	IOP-EES-26-IRAQ-UDA-008
10:10-10:20	Toward an Indicator Matrix for Subjugating Construction Pillars: Primary Application to the Council of Ministers Building, Baghdad	Ameer Haider Hameed, Ali M. Jaafar	IOP-EES-26-IRAQ-UDA-009
10:20-10:30	The Integration of Human and Artificial Neural Networks in Shaping Urban Systems	Hiba J. Ahmed, Mohammed Q. Abdul Ghafoor Al-Ani	IOP-EES-26-IRAQ-UDA-010
10:30-10:40	Digital Models as a Tool to Solve the Crises of Heritage Areas: A Comparative Conceptual Study	Mohanad M. H. Al Taweel, Mohammed Q. Abdul Ghafoor Al-Ani	IOP-EES-26-IRAQ-UDA-011
10:40-10:50	Architecture and Innovation Creative Responses to the Challenges of Scarcity in Modern Times	Sundus M. Abed, Abbas A. H. Al greiza	IOP-EES-26-IRAQ-UDA-012
10:50-11:00	The Role of Architectural Reproduction (Ideological Taming) in Reshaping the Identity of Contemporary Architecture	Ameer H. Abed, Basem H. Hashem, Suad Kh. Ibrahim	Scientific.Net-26-IRAQ-UDA-001
11:00 - 11:30	Lunch Jamil Al-Malaika Hall/College of Engineering		



THE 6TH INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING - IRAQ

(6ICGE - Iraq)

Day 2 | 8 October 2026 Session 6 Building: Mohammad Makiya/Architecture Dept. /College of Engineering

Session Chair: Assist. Prof. Dr. Ali Majid Naser Al-Kinani

Co-Chair: Assist. Prof. Dr. Manar Nazar Ahmed
Architecture/Structural Engineering and Materials

Session Topics: Urban Development and

Time	Title	Authors	ID
11:30-11:40	Value Structure Formation in Contemporary Architecture under Ideological Influence and Its Impact on Human Identity	Ameer H. Abed, Basem H. Hashem, Suad Kh. Ibrahim	Scientific.Net-26-IRAQ-UDA-002
11:40-11:50	Integrating Surveillance Cameras into Human Surveillance Systems in Urban Planning: A Comparative Study of Baghdad and Najaf within the Framework of Smart Security Transformation	Alhareth Fadhel Hawi, Abbas Hashim Sahan	CRC-26-IRAQ-UDA-003
11:50-12:00	Urban Security and 24-Hour Activity in Najaf's Old City	Osama J. Al-Mosherefawi Reza Kheyroddin, Ahmed Almusawi	CRC-26-IRAQ-UDA-005
12:10-12:20	The Role of Urban Management in Spatial Competitiveness: A Comparative Study	Fatima Q. Hasan, Hussain A. S. AL-Shadidi	CRC-26-IRAQ-UDA-008
12:20-12:30	GIS-Based Spatial Analysis for Preliminary Screening of Nature-Based Solutions in Al-Faw Coastal City, Iraq	Lujain A. Resen, Susan A. Hassan	CRC-26-IRAQ-UDA-010
12:30-12:40	The Role of Semiotic Codes in Shaping Urban Memory: A Case Study of the Historic Center of Baghdad	Riyadh F. Najat, Inaam A. Al-Bazzaz	CRC-26-IRAQ-UDA-012
12:40-12:50	Urban Palimpsest as an Urban Design Tool: A Framework for Intervening in Historic Urban Environments	Riyadh F. Najat, Inaam A. Al-Bazzaz	CRC-26-IRAQ-UDA-013
12:50-13:00	Spatial Indicators of Sustainable Urban Development Using GIS: An Educational Service Analysis (A Case Study of Central Karbala)	Ehsaan J. Al-Shebillawy, Sergey Korniyenko, Suaad J. Laffta, Burak A. Al-Mossawy	CRC-26-IRAQ-UDA-015
13:10-13:20	Readiness for Smart Sustainable Urban Development in Iraq Using Environmental, Economic, and Social Indicators	Zainab Khalid, Tamara Mutaz	JRESM-EES-26-IRAQ-UDA-002
13:20-13:30	Eco-Friendly Cementitious Materials: Development and Durability Evaluation	Zainab Abdulrdha Thoeny Luís F. A. Bernardo	JRESM-EES-26-IRAQ-SEM-003
13:30 - 14:30	Lunch Jamil Al-Malaika Hall/College of Engineering		

POSTERS

Place:  Al-Hakim Hall and Al-Khwarizmi College of Engineering

Title	Authors	ID
 Session Chair: Assist. Prof. Dr. Lamyaa Najah Snodi and Assist. Prof. Shaimaa M. Abdulrhman		
 Co-Chair: Ayat M. Alqudsi, Rania A. A. Rajab,		
Effect of Separation Layer Thickness on Drag Force of Unconnected Piled Raft Subjected to Vertical Loads	Dalya A. Abdul Hussein, Mahmood R. Mahmood, Saad F. A. Al-Wakel	IOP-EES-26-IRAQ-SMGE-005
Geospatial Maps of Bearing Capacity of Shallow Foundation for Diyala Governorate, Iraq	Abeer Jasim Fehan, Hassan Obaid Abbas	IOP-EES-26-IRAQ-SMGE-009
Experimental Investigation of Spacing Effects on the Pullout Capacity of Screw Pile Group in Sand Under Oblique Loading	Safa Adnan Qais, Hassan Obaid Abbas	IOP-EES-26-IRAQ-SMGE-011
Performance of Batter Piles Supported Sheet Wall Subjected to Seepage and Cyclic Loading Adjacent Strip Footing	Shaimaa Ahmed Abdulhadi, Hassan Obaid Abbas	IOP-EES-26-IRAQ-SMGE-012
Assessment of Pile Group Response Under P-Delta Effects Subjected to Seismic Load Using FEM	Omar K. Ali, Laith k. Al-Hadithy, Jasim M. Abbas	IOP-EES-26-IRAQ-SMGE-014
Variation of Cone Tip Resistance with Some Soft Soil Characteristics at Selected Sites in Basrah Governorate	Salah A. Saleem, Haider S. Aljubair, Ahid Z. Hamoodi	IOP-EES-26-IRAQ-SMGE-019
Effect of Electrokinetic Treatment on the Geotechnical Properties of Sewage Sludge	Afaq H. Malleh, Mohammed Y. Fattah, Hussein H. Karim	IOP-EES-26-IRAQ-SMGE-021
Dynamic Behavior of Soaking Saline Soil Under the Influence of Dynamic Loads	Tabarak Sami Zaidan, Safa Hussain Abd Awn	IOP-EES-26-IRAQ-SMGE-023
Parametric Study of Pullout Resistance of Anchored Pile Group under Inclined Loading in Dense Sand	Safa Adnan Qais, Hassan Obaid Abbas	IOP-EES-26-IRAQ-SMGE-025
Application of Guar Gum Biopolymer for Improving the Geotechnical Properties of Sandy Subgrade Soil	Muntadher A. Sharrad, Alaa M. Shaban	IOP-EES-26-IRAQ-SMGE-026
Performance of Helical Group Piles in Crude Oil Contaminated Sand under Compression Load	Roaa K. Oudha, Makki K. Mohsen, Alaa H. Al-Rkaby	IOP-EES-26-IRAQ-SMGE-029
Prediction of Friction Resistance of Pile load using ANNs based on the Results of Experimental Modeling of Piles in Medium Dense Sand	Ali Hashim Alzaki, Husain A. Abdul-Husain	IOP-EES-26-IRAQ-SMGE-032
Experimental Investigation of Load Sharing for Steel Model Piles Embedded in Medium Sandy Soil	Ali H. Alzaki, Husain A. Abdul-Husain	Scientific.Net-26-IRAQ-SMGE-003
Axial Load Response of Single Helical Pile in Crude Oil-Impacted Sand	Roaa K. Oudha, Makki K. Mohsen, Alaa H. Al-Rkaby	Scientific.Net-26-IRAQ-SMGE-005
Experimental Investigating the Effect of Mixing Method of Waste Brick-Based Geopolymer on the Strength of High-Plasticity Soil	Ahmed H. Kadhim, Majid Hamed	Scientific.Net-26-IRAQ-SMGE-006
Performance of Secant Piles Subjected to Perpendicular Cyclic Loading from an Adjacent Pile Group in Sandy Soil	Sarah A. Kadom, Jasim M. Abbas	Scientific.Net-26-IRAQ-SMGE-007
The Effect of Fly Ash, Silica Fume and GGBS on Unconfined Compressive Strength of Soft Soil	Shahad Fadhil Abass, Zaid Hameed Majeed	Scientific.Net-26-IRAQ-SMGE-008
Numerical Analysis of Combined Sheet Pile-Rigid Raft Foundations in Sand	Teeba Eidan Jameel, Ibtehaj Taha Jawad	Scientific.Net-26-IRAQ-SMGE-009
Experimental Determination of Pile Group Efficiency in Clayey Soil	Rahaf A. Saleh, Mahmood R. Mahmood, Khalid W. Abd Al-Kaream	CRC-26-IRAQ-SMGE-002
Effect of Electrokinetic Treatment Combined with Zeolite on the Behavior of Sewage Sludge	Afaq H. Malleh, Mohammed Y. Fattah, Hussein H. Karim	CRC-26-IRAQ-SMGE-004
Effect of Silica Fume Incorporation on Cement-Stabilized Clay Soil	Abdulaziz J. Al-Maamori, Alaa H. Abed, Haider M. Mekkiyah	CRC-26-IRAQ-SMGE-008
Performance of Under-Reamed Piles in Sand under Different Degrees of Saturation	Haider S. Abdullah, Abdul Aziz A. Al-kifae	CRC-26-IRAQ-SMGE-010
Investigation of the Influence of Adding Bentonite on the Engineering Properties of Collapsible Soils	Sarah M. Abduladheem, Qassun S. Mohammed Shafiqu	CRC-26-IRAQ-SMGE-013
Stabilization of Sulfate Soils Using Pulsed Electric Fields (PEF) Assisted Electrokinetics	Saif S. Hussein, Noor A. Abdul Jabbar, Musaab F. Hasan	CRC-26-IRAQ-SMGE-020

POSTERS

Place:  Al-Hakim Hall and Al-Khwarizmi College of Engineering

Title	Authors	ID
 Session Chair: Assist. Prof. Dr. Lamyaa Najah Snodi and Assist. Prof. Shaimaa M. Abdulrhman		
 Co-Chair: Ayat M. Alqudsi, Rania A. A. Rajab,		
Experimental Investigation of the Effect of Raffanite Oil Contamination on the Geotechnical and Shear Strength Properties of High-Plasticity Clay	Zainab S. Al-Khalidi, Maki Jafar Mohammed Al-Waily	CRC-26-IRAQ-SMGE-022
Influence of Eggshell Powder on the Unconfined Compressive Strength and Compressibility Behavior of Clay Soil	Mustafa J. Abraham, Reem S. Nazar, Rula F. Ibrahim, Zahraa M. Mudher, Samer Almashhadi	JRESM-EES-26-IRAQ-SMGE-003
Experimental Study on Hybrid and Double-Skin Concrete-Filled Tubes	Suroor Ali Hashim, Ali Hameed Naser, Ali Hadi Adhim	IOP-EES-26-IRAQ-SEM-001
A Comparative Study on Normal- and High-Strength RC Beams with Vertical Openings Strengthened by Steel Tubes: An Experimental Study	Naz Ali Hussein, Mohammed Kamal Ali,	IOP-EES-26-IRAQ-SEM-012
Fresh and Hardened Properties of Self-Compacting Concrete Incorporating Expanded Polystyrene as Partial Replacement of Coarse Aggregate	Mohammed Hamdi Kahlaf, Abdulkader Ismail Al-Hadithi,	IOP-EES-26-IRAQ-SEM-013
Behavior of Basalt Fiber Recycled Aggregate Concrete Short Tied Columns Strengthened with CFRP	Jafar N. Abdul Raoof, Ammar A. Ali, Dhiyaa H. Mohammed	IOP-EES-26-IRAQ-SEM-015
Investigation of Sealing Materials for Sewer Pipe Connections to Concrete Manholes	Haneen K. Al-Oqaili, Hussein Al-Quraishi, Faaeza A. Abdulkareem	IOP-EES-26-IRAQ-SEM-017
Experimental Investigation of Post-Fire Residual Capacity of Composite Columns under Fire Exposure	Mohammed Khalid Hameed, Wael Shawky Abdulsahib, Marwa Sami Abduljabbar	IOP-EES-26-IRAQ-SEM-018
Fire Performance of Composite Columns Using Normal and Lightweight Concrete	Mohammed Khalid Hameed, Wael Shawky Abdulsahib, Marwa Sami Abduljabbar	IOP-EES-26-IRAQ-SEM-020
Effect of Binder and Lightweight Aggregate Types on Strength of Lightweight Aggregate Concrete	Ghasak A. Mohammed, Ameer A. Hilal,	IOP-EES-26-IRAQ-SEM-023
Effect of Soil-Foundation Interaction on the Behavior of RC Buildings	Hussein Ali Faisal, Mohamad Alyounis, Thaer M Saeed Alrudaini	IOP-EES-26-IRAQ-SEM-030
Enhancing Punching Shear Capacity of Flat Slabs Using Reactive Powder Concrete Drop Panels	Alaa Nozad Faeq, Ali I. Salahaldin,	IOP-EES-26-IRAQ-SEM-036
Mechanical Performance and Stability of Sustainable Foamed Concrete Incorporating Different Mineral Additives	Mohamed M. Yassen, Ameer A. Hilal, Sheelan M. Hama	IOP-EES-26-IRAQ-SEM-037
Optimization and Prediction of Lightweight Self-Compacting Concrete Mix Design Using Taguchi Optimization Method	Mustafa S. Hamdi, Ali H. Nahhab, Mohammed J. Kadhim	IOP-EES-26-IRAQ-SEM-046
Structural Performance of Steel Fiber-Reinforced Geopolymer Concrete Beams under Elevated Temperatures	Asseel M. Alwan, Hussam A. Mohammed,	Scientific.Net-26-IRAQ-SEM-001
Effect of Chloride-Based Curing on Load-Deflection Response and Failure Morphology of Reinforced RPC Beams at 28 Days	Akeel G. Majeed, Hussain K. Sultan,	Scientific.Net-26-IRAQ-SEM-003
Investigation of Crack Propagation Rate and Post-Peak Behavior of Hybrid Fiber Reinforced Stress-Absorbing Membrane Interlayer (SAMI)	Ghadeer H. Hadi, Hayder AlAraza, Shakir Al-Busaltan	Scientific.Net-26-IRAQ-SEM-008
Effect of Extended Stiffeners on Structural Performance of Steel I-Section Beams Under Different Loading and Support Conditions	Rafal Najem Aboud, Sa'ad Fahad Resan,	Scientific.Net-26-IRAQ-SEM-011
The Effect of Steel Fiber Type on Mechanical Concrete Performance: A Review	Muntadher A. M. Alameri, Agusril Syamsir, Zarina Itam	CRC-26-IRAQ-SEM-004
Improvement of the Mechanical and Physical Properties of Autoclaved Aerated Concrete (AAC) Incorporated with Sisal Fibers and AAC Waste	Hawraa Hamza, Aqil Mousa,	CRC-26-IRAQ-SEM-007
Path Length Measurement Effect on the Consistency of Indirect Ultrasonic Wave Velocity	Ali F. Aldujaily, Ali A. Altameemi,	CRC-26-IRAQ-SEM-010
Thermo-Mechanical Properties of Green Foamed Concrete Using Waste Materials	Aqeel S. A. Al-Asadey, Ameer G. T. Alqadhi,	CRC-26-IRAQ-SEM-012

POSTERS

Place:  Al-Hakim Hall and Al-Khwarizmi College of Engineering

Title

Authors

ID

 **Session Chair:** Assist. Prof. Dr. Lamyaa Najah Snodi and Assist. Prof. Shaimaa M. Abdulrhman

 **Co-Chair:** Ayat M. Alqudsi, Rania A. A. Rajab,

Thermal Behavior of Square Concrete-Filled Steel Tubular Columns Subjected to ISO and Parametric Fire Curves: Finite Element Analysis	Dhafar S. Mahdi, Ali A. Zuhaira,	CRC-26-IRAQ-SEM-013
Mechanical, Microstructural, and Load–Displacement Performance of Sustainable Concrete Incorporating Recycled Brick Waste Coarse Aggregate	Rehab H. Obead, Sheelan M. Hama, Firas Al-Mahmoud	JRESM-EES-26-IRAQ-SEM-001
Structural Behavior of Composite Hollow Steel-Concrete Double Corbels	Ruqaya Saeed Mankhi, Nasser Hakeem Tu'ma,	JRESM-EES-26-IRAQ-SEM-005
Time–Cost Effects of Extensions of Time in Iraqi Road and Bridge Projects	Zainab Saad Falih, Kadhim Raheim Erzaij,	IOP-EES-26-IRAQ-CS-008
Assessing Traffic Volume Variations for Selected Streets in Al-Najaf City Using GIS	Wafaa H. Al-Ghazali, Hamid A. Al-Jameel,	IOP-EES-26-IRAQ-CS-013
Determining Construction Companies' Digital Transformation Readiness Indicators: Findings from an Initial Delphi Study in Iraq	Noorah Nazar Mohammed, Sawsan Rashid Ali,	IOP-EES-26-IRAQ-CS-016
Enhancing the Mechanical Performance of Asphalt Pavement Using Waste Tire Rubber Nanomaterial: An Experimental Study	Humam H. Mohammed, Hasan H. Joni,	IOP-EES-26-IRAQ-CS-020
Rutting–Fatigue Performance Balance of Hot Mix Asphalt Modified with Recycled Glass Fiber Reinforced Polymer (GFRP) Tube Powder	Salah Adnan Jaafer, Ahlam K. R. Alzerjawi,	IOP-EES-26-IRAQ-CS-023
Towards Sustainable Cement Production in Iraq: Life Cycle Assessment and the Impact of Clinker Substitution	Alyaa M. Alaqeeli, Ghufraan F. Jumaah, Ayat H. Mahdi, Husam Sameer,	IOP-EES-26-IRAQ-CS-026
Influence of Polypropylene Fiber on Tensile Strength and Moisture Resistance of Warm Mix Asphalt	Ameer Falah Dakhil, Shakir Al-Busaltan,	IOP-EES-26-IRAQ-CS-029
Urban Street Level of Service Mapping Using Waze Travel-Time Data and GIS: Al Najaf City	Wafaa H. Al-Ghazali, Hamid A. Al-Jameel,	IOP-EES-26-IRAQ-CS-031
Performance Evaluation of MSE Walls Using Reclaimed Asphalt Pavement (RAP) as Sustainable Backfill Material	Maryam H. Mohammed, Qais S. Banyhussan, Hanan A. Hassan,	IOP-EES-26-IRAQ-CS-032
A Land Readiness Index (LRI) for Pre-Contract Risk Assessment in Mega Construction Projects: Evidence from Iraq	Hamzah Hamzah Noori, Abbas M. Burhan,	IOP-EES-26-IRAQ-CS-034
Assessing the Adverse Effects of Traffic Congestion on Air Pollution at Signalized Intersections in Baghdad City	Ghassak Th. Abdul-Alamir, Ali M. Al-Dahawi, Rasha H. Al-Rubaei,	IOP-EES-26-IRAQ-CS-037
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