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The 3rd International Conference on:

Environmental Design, Material Science, and Engineering Technologies (EDMSET)

12-14 MAY, 2026  ONLINE
CONFERENCE



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THE UNIVERSITY OF
LAHORE



ANDIJAN STATE
UNIVERSITY

DAY 1: 12 May 2026 – Tuesday

Delivery Mode: Online Conference co-organized with Abu Dhabi University
Program Time Zone: Dubai Time (GMT+4)

Online attendance Link: contact edmset@ierek-scholar.org for access

Download Latest Zoom Version: [Click here!](#)

Online Platform Guide: [Click here!](#)

Program Time Zone: Dubai, UAE (GMT+4)

10:00 – 10:30 | **Welcome all/ Online Registration**
Delivery of Information and Networking

10:30 | **Welcome Speeches**

IEREK's CEO Word & Presentation

10:30 – 10:35 | **Dr. Mourad Amer**, CEO and Founder of IEREK & ASTI' Series Editor by Springer.

10:35 – 10:45 | *A welcoming word & Introduction by IEREK Team.*

Words of the of Abu Dhabi University (ADU) Chancellor and EDMSET Chair

10:45 – 10:50 | **Prof. Ghassan Aouad**, Chancellor of Abu Dhabi University (ADU).

10:50 – 10:55 | **Dr. Mohamed El-Kaftangui**, EDMSET Chair & Associate Professor, Department of Architecture and Interior Design, Abu Dhabi University (ADU).

10:55 | **Introducing Keynote Speakers**

Keynote Speaker 1

10:55 – 11:15 | **Prof. Shams Eldin Naga**, Founder and Principal of NAGA Architects

Speech Title: **"TBA"**

In light of the Italian Design Day:

11:15 – 11:20 | Institutional Greetings by **Dr. Susanna Iacona Salafia**, Director of the Italian Cultural Institute of Abu Dhabi, Italian Minister of Foreign Affairs and International Cooperation.

11:20 – 11:40 | **Keynote Speaker 2: Ar. Alessandro Colombo**, Lecturer at Polytechnic University of Milan, Italy.

Speech Title: **"Architettura between Design and Branding"**

11:40 – 12:00 | **Keynote Speaker 3: Ar. Giovanni de Niederhäusern**, Senior Vice President of Architecture & Product Design at Pininfarina.

Speech Title: **"Pininfarina: ITALIAN DESIGN FOR BRANDED REAL ESTATE"**

12:00 – 12:15 | **Short Break**

Keynote Speaker 4

12:15 – 12:35 | **Mr. Shawn Meyers**, Associate and Middle East Masterplanning Director, DLR Group

Speech Title: **"More City, Less Diagram"**

Keynote Speaker 5

12:35 – 12:55 | **Ar. Nuno Fontarra**, Architect/Partner at Mecanoo Architects

Speech Title: “*Architecture of Belonging: Place, Identity, and Meaning*”

Keynote Speaker 6

12:55 – 13:15 | **Dr. Mark David Major**, Associate Professor of Architecture, College of Engineering, Abu Dhabi University

Speech Title: “*The Syntax of GCC City Space*”

"Branding, Architecture & Modern Heritage" Panel Discussion:

13:15 – 13:40 | Moderated by **Dr. Ahmed Agiel**, Founder & CEO, BRANDHAUS Architect and Assistant Professor of Architecture and Design, Abu Dhabi University.

Details: *The session will feature Ms. Fatima AlSuwaidi (Head of Cultural Heritage Legislation and Policy Section), Ar. Giovanni de Niederhäusern (Senior Vice President of Architecture & Product Design, Pininfarina), and Ar. Alessandro Colombo (Lecturer at Politecnico di Milano), with Dr. Ahmed Agiel serving as facilitator and panel contributor.*

14:00 / Parallel Sessions

*All authors must commit to the time allowed for each paper presentation (15 minutes)

*A brief discussion (Q&A) is to be allowed after each session (15 minutes)

Session 1 – Room 1 Track: Digital Transformation in Engineering		Session 2 – Room 2 Track: Social Sustainability, Urban Livability, and Human-Centered Design		Session 3 – Room 3 Track: Sustainable Urban Systems, Policy, and Environmental Performance	
Moderated by: Dr. Mark David Major Associate Professor of Architecture, Architecture Department, Abu Dhabi University Ms. Anamika Mishra Lecturer of Architecture, Abu Dhabi University		Moderated by: Dr. Mohamed El Amrousi Associate Professor of Architecture Engineering, Department of Architecture, Abu Dhabi University Ms. Fida Isam Instructor of Architecture at Abu Dhabi University		Moderated by: Dr. Rim Meziani Associate Professor, Architecture & Design Department, Abu Dhabi University	
14:00 – 14:15	The Paradox of Connectivity in Smart Schools: “Spatial Solitude” as an Emergent Condition of Digitally Mediated Learning Environments (EDMSET-115) Elif Nadide Gür Akalm	14:00 – 14:15	Rule-Based Urbanism: Operationalizing Christopher Alexander’s Pattern Language through Computational Design (EDMSET-55) Mohamed Wahid, Maryam Shafiei	14:00 – 14:15	Valorization of High-Lime Calcined Clay as a Sustainable Supplementary Cementitious Material for Low-Carbon Mortar (EDMSET-35) Hamed Ali Alkindi

14:15 – 14:30	AI in Architectural Education: A Review of Applications and Limitations Involved (EDMSET-59) Raghad Mourad	14:15 – 14:30	Neurodivergent-Inclusive Transit Hubs: Sustainable Urban and Architectural Strategies to Reduce Sensory Stress for Autistic Commuters (EDMSET-196) Maha Salman, Shahd Ahmed Abdelfattah, Khalid Salah	14:15 – 14:30	Recognizing Globalisation Constraints to the Adoption of Earth Building: A Review Based on the Maastricht Globalisation Index (EDMSET-42) Negar Nazaralhouei
14:30 – 14:45	Agent Architects: Enhancing Architectural Design Review Process Using AI and Deep Learning Methods; Case Study: Australia (EDMSET-202) Hamed Hassani	14:30 – 14:45	In Consideration of the Human Dimension in Collective Housing (EDMSET-160) Thant Sin Linn Myint	14:30 – 14:45	Spatial Assessment of Urban Green Infrastructure and Its Thermal and Well-Being Impacts in Al Ain, UAE (EDMSET-215) Alyazia A. Almarzooqi, Nour A. Kh. Agiel, Mahra M. Alkarbi, Hamda Saeed Al Zaabi, Fatmaelzahraa Hussein, Ahmed Hassan Almurshidi
14:45 – 15:00	Sustaining Dialogue in AI Enabled Learning: Evidence from a Design Studio (EDMSET-81) Anamika Mishra, Mohamed El Amrousi, Fida Isam and Nour Abdunaser	14:45 – 15:00	The Machine and The Organism; On Architectural Functionalism (EDMSET-193) Jonathan Sarmiento	14:45 – 15:00	Toward Sustainable Housing Policy in Saudi Arabia: Aligning Urban Development with the SDGs (EDMSET-102) Waleed Alzamil
15:00 – 15:15	Short Break	15:00 – 15:15	Short Break	15:00 – 15:15	Short Break
15:15 – 15:30	Redefining Authenticity: Digital Fabrication, Authorship, and the Ethics of Making in Contemporary Architecture (EDMSET-62) Maya Abu Samra, Rana El-Dabaa	15:15 – 15:30	Physical Activity in Spatially Defined Urban Neighborhoods: A Review of Evidence (EDMSET-156) Nagabhoina Tejendra	15:15 – 15:30	From Vision to Action: A Stakeholder-Driven Blueprint for a Net-Zero Campus (EDMSET-194) Muhammad Azzam Ismail
15:30 – 15:45	Development of an Integrated Safety Assessment Framework for Airlines Using Multi-Criteria Decision-Making Methods (EDMSET-179) Alia Obaid Alhammadi	15:30 – 15:45	A Human-centered Approach to Mobility in a Superblock Model - Case of Dubai (EDMSET-52) Ayah Albaomy, Maryam Shafiei	15:30 – 15:45	Adapting the 15-Minute City Model to Extreme Climate Contexts: Case of the United Arab Emirates (EDMSET-185) Rim Meziani, Mohamed El-Kaftangui, Heba Al Sayyed, Malak Abuelezz, Amina Amer, Huda Alkaabi, Joudi Alshughri
15:45 – 16:00	A Rule-Based AI-Assisted Climate Interpretation Framework for Teaching Climate-Responsive Architectural Design (EDMSET-141) Khuloud Ali	15:45 – 16:00	Spatial Reconstruction of Identity: A Sociological and Anthropological Approach to the Syrian Community Courtyard (EDMSET-57) Charulatha Loganathan, Maryam Shafiei	15:45 – 16:00	Comparative GIS-Based Assessment of Mangrove Distribution and Coastal Development in Egypt, Saudi Arabia, and the UAE (EDMSET-248) Mohamed El-Kaftangui, Walid Mostafa, Kareem Aldali, Menna Shokeir
16:00 – 16:15	Vocabularies of Algorithmic Architecture: Computational Semiotics as an Interpretive Framework (EDMSET-50) Rana Hatmal	16:00 – 16:15	Designing Climate Mitigation: Integrating Environmental Design, Material Systems, and User Practices (EDMSET-240) Francesca Scalisi, Cesare Sposito	16:00 – 16:15	Embedding Occupational Safety in Sustainable Construction: A Comparative Study of Dubai and Australia's High-Rise Sectors 'Governance, and Hybrid WHS-EMS Safety Integration' (EDMSET-29) Janta Darshan

16:15 – 16:30	<i>Discussions and Q&A</i>	16:15 – 16:30	<i>Discussions and Q&A</i>	16:15 – 16:30	<i>Discussions and Q&A</i>
<i>End of Day 1 Sessions</i>					

DAY 2: 13 May 2026 – Wednesday

Delivery Mode: Online Conference co-organized with Abu Dhabi University

Program Time Zone: Dubai Time (GMT+4)

Online attendance Link: contact edmset@ierek-scholar.org for access

Download Latest Zoom Version: [Click here!](#)

Online Platform Guide: [Click here!](#)

Program Time Zone: Dubai, UAE (GMT+4)

10:30 – 11:00 / Welcome all/ Online Registration

Delivery of Information and Networking

11:00 / Parallel Sessions

*All authors must commit to the time allowed for each paper presentation (15 minutes)

*A brief discussion (Q&A) is to be allowed after each session (15 minutes)

Session 4 – Room 1		Session 5 – Room 2		Session 6 – Room 3	
Track: Continue: Sustainable Urban Systems, Policy, and Environmental Performance		Track: Continue: Social Sustainability, Urban Livability, and Human-Centered Design		Track: Health and Safety in Engineering Practices	
Moderated by: Dr. Ahmed Agiel Assistant Professor of Architecture and Design, Department of Architecture, Abu Dhabi University		Moderated by: Dr. Nadia Mounajjed Associate Professor of Architecture Engineering, Department of Architecture, Abu Dhabi University		Moderated by: Prof. Ioannis Zuburtikudis Professor & Department Chair at the Chemical Engineering Department, Abu Dhabi University Prof. Omar Chaalal Professor at the Chemical Engineering Department, Abu Dhabi University	
11:00 – 11:15	Transport Mode Classification Using Pretrained ResNet-18 with GIS-Derived Maps: Effects of Image Resolution and Basemap Type (EDMSET-190) Raden Muhammad Azhar Ardlin Syah	11:00 – 11:15	Residential Form and Infrastructure Performance: Parent Perceived Barriers to Children’s Outdoor Play (EDMSET-61) V.P.Priya, Anitha Suseelan	11:00 – 11:15	Special Speech about: “The Biological Foundation of Industrial Resilience: Integrating Natural Bio-Innovations with Occupational Safety in Modern Engineering” by Prof. Ioannis Zuburtikudis

11:15 – 11:30	Assessing Thermal Performance of Meher Library Using Predicted Mean Vote (PMV) Model (EDMSET-25) Kamran Husain Jafri, Mukhtar Haider Aghariya	11:15 – 11:30	From Clearance to Rehousing: Architectural and Social Impacts of Urban Renewal (EDMSET-200) Mohamed Elkaftangui, Rim Meziani, Mariam Hani, Faris Firas, Ahmed Matarid	11:15 – 11:30	Development And Investigation of Cream-Soap Based On Grape Seed And Pomegranate Seed Oils For Engineering Industry Personnel (EDMSET-86) Yuldashev Shukhratbek
11:30 – 11:45	Quantifying the Cooling Penalty of Thermal Bridges in Reinforced Concrete Structured Residential Buildings in Hot-Arid Climates (EDMSET-106) Ramy Mahmoud	11:30 – 11:45	Therapeutic and Transformative Equestrian Facilities as Models of Sustainable Environmental Infrastructure: Comparative Analysis and Application to the Campalto Equestrian Centre in Pisa, Italy (EDMSET-169) Giovanni Santi, Ludovica Verricelli	11:30 – 11:45	Quantification of Selected Bioactive Compounds in Ficus carica and Ziziphus jujuba Fruits and Their Potential Relevance to the Health of Engineering Personnel (EDMSET-124) Obidjon Sh. Abdulloev
11:45 – 12:00	Biomimetic LDPE-Seashell Composite for Sustainable Construction (EDMSET-87) Leena Tatan	11:45 – 12:00	A Bibliometric Analysis of Urban Livability and Quality of Life in the Built Environment (EDMSET-180) Sara Abdulkawsoud	11:45 – 12:00	The Antiradical Properties and Bioactive Compounds of C-1, C-2, and Sirol Ointments Developed from Natural Sources (EDMSET-79) Obidjon Sh. Abdulloev
12:00 – 12:15	Revitalizing Dubai’s Coastal Edges: Integrating Ecological and Landscape Urbanism in Beachfront Development (EDMSET-56) Azhaan Kalim, Maryam Shafiei	12:00 – 12:15	Re-Thinking Belonging in Transnational Urban Spaces: Evidence from Dubai’s Multicultural Communities (EDMSET-53) Zahra Ahmadpour, Maryam Shafiei	12:00 – 12:15	Chemical Element Composition of the “ASSHAN” Food Supplement and Its Effects on the Health of Engineering Personnel (EDMSET-83) Ikromova Nodirakhon
12:15 – 12:30	Design and Prototyping of a Sun-Tracking Kinetic Facade System (EDMSET-189) Vivek Jain, Saptarshi Kolay	12:15 – 12:30	Gated Communities and Urban Fragmentation: Spatial, Social, and Governance Dynamics Shaping Decision-making in Dubai (EDMSET-54) Elyazia Almurr, Maryam Shafiei	12:15 – 12:30	AS-ZIYOD, a Natural Food Additive with Antimicrobial and Antifungal Properties for Preventing and Managing Oral Inflammatory Diseases in Chemical Engineers (EDMSET-89) Ziyodulloh Razzakov
12:30 – 12:45	<i>Q&A and Discussions</i>	12:30 – 12:45	<i>Q&A and Discussions</i>	12:30 – 12:45	<i>Q&A and Discussions</i>
12:45 – 13:00	<i>Short Break</i>	12:45 – 13:00	<i>Short Break</i>	12:45 – 13:00	<i>Short Break</i>

Session 7 – Room 2

Track: Geospatial Engineering and Digital Innovation for Climate Adaptation

Continue Session 6 – Room 3

Track: Health and Safety in Engineering Practices

<p style="text-align: center;">Moderated by:</p> <p style="text-align: center;">Dr. Fatmaelzahraa Hussein Assistant Professor Geography and Urban Sustainability Department, College of Humanities and Social Science, UAEU</p>		<p style="text-align: center;">Moderated by:</p> <p style="text-align: center;">Prof. Ioannis Zuburtikudis Professor & Department Chair at the Chemical Engineering Department, Abu Dhabi University</p> <p style="text-align: center;">Prof. Omar Chaalal Professor at the Chemical Engineering Department, Abu Dhabi University</p>	
13:00 – 13:15	Evaluating the Role of Deflection of the Vertical in Improving the Reliability of Geodetic Networks (EDMSET-41) Hiba Moussa	13:00 – 13:15	Physico-Chemical Determination of the Antiradical Activity of Compositions Based on Tomato, Red Beetroot, Garlic, and Carrot (EDMSET-138) Guloyim Olimjonova Dilshodbek Qizi
13:15 – 13:30	Smart Green and Blue Infrastructure for Climate Adaptation in Public Spaces: A Case Study of the Abu Dhabi Corniche Waterfront (EDMSET-60) Vigisha Gopalakrishnan, Asidha Sidhik	13:15 – 13:30	Physico-Chemical Evaluation of the Antiradical Activity of Marrubium vulgare Leaf and Maclura pomifera Fruit Samples in Various Ratios Using the DPPH Method (EDMSET-133) Roziya Nazirtashova
13:30 – 13:45	Passive Energy Reduction Strategies in Residential Buildings for Semi-Arid Climates (EDMSET-142) Ayesha Mehmood Malik	13:30 – 13:45	Physico-Chemical Analysis of the Quantitative Distribution of Proteins and Amino Acids in the Leaves and Roots of Allium ramosum L. and Rheum maximowiczii L. (EDMSET-134) Xolmatova Marhabo Axmadaliyevna
13:45 – 14:00	GIS-Based Flash Flood Susceptibility Mapping for Land-Use Planning in Ras Al Khaimah, UAE (EDMSET-198) Alyazia A. Almarzooqi, Fatmaelzahraa Hussein	13:45 – 14:00	Determination of the Number of Phenolic Compounds in the Food Additive “As-Bo’g‘im” and “As-Quvvat” (EDMSET-135) Ziyoda Axmedova Kaxxorovna
14:00 – 14:15	Harnessing Data Analytics and Visualization Platforms for Climate Resilience Planning (EDMSET-205) Syeda Faiza Nasim	14:00 – 14:15	Physico-Chemical Analysis of the Biological Activity Assessment Results of the Food Additive “As-Orom” (EDMSET-137) Tursunoy Usmanova Erkinovna
14:15 – 14:30	AI and Climate Data-Enhanced Crop Prediction System for Resilient Agriculture in Pakistan (EDMSET-222) Syeda Faiza Nasim	14:15 – 14:30	Physicochemical and Biological Characterization of the Natural Product “As-Sulton” for Industrial Applications (EDMSET-111) Dilnoza S. Xojimatova
14:30 – 14:45	<i>Discussions and Q&A</i>	14:30 – 14:45	<i>Discussions and Q&A</i>
14:45 – 15:00	<i>Short Break</i>	14:45 – 15:00	<i>Short Break</i>

Session 8 – Room 2		Session 9 – Room 3	
Track: Preservation and Conservation of Architectural Heritage		Track: Sustainable Interior Design	
<p>Moderated by:</p> <p>Dr. Fehmi Dogan Assistant Professor at the Department of Architecture, Abu Dhabi University</p>		<p>Moderated by:</p> <p>Ms. Zeina Bashnak Lecturer of Interior Design at Abu Dhabi University</p>	
15:00 – 15:15	Online Mapping Cultural Heritage Monument with Leaflet (EDMSET-01) Efthymios Spyridon Georgiou	15:00 – 15:15	Biophilic Design and Occupant Comfort: Enhancing Indoor Environmental Quality and Creativity in Art and Design Education (EDMSET-34) Ruba Jadallah
15:15 – 15:30	Inclusive Design for the Social Activation of Heritage (EDMSET-101) Mariem Bennour	15:15 – 15:30	Integrating Biophilic Design Principles and Human-Centered Strategies for Enhancing Psychophysiological Wellbeing in Higher Education Environments: MSA University Case Study (EDMSET-121) Asma Awad Aly, Sadeka Shakour
15:30 – 15:45	Exploring the Art of Integrating Image-Generated Platforms into Minaret Conceptual Design in Islamic Mosque Architecture (EDMSET-208) Malak Juan Abdalla	15:30 – 15:45	Simulation-Based Lighting Retrofit for Underground Metro Stations Incorporating Indoor Environmental Quality Design Considerations (EDMSET-78) Aya Ibrahim Baghdady
15:45 – 16:00	The Heritage of Etna's Palmenti to be Recovered, Enhanced and Strengthened in the Etna Area UNESCO (EDMSET-107) Fernanda Cantone	15:45 – 16:00	Humanization of Care Homes: Human Parameters in the Multi-Scale Design Process (EDMSET-163) Ludovica Verricelli, Giovanni Santi
16:00 – 16:15	Cultural Assets as Catalysts for Community-Based Urban Development: The Role of Urban Art in Covilhã, Portugal (EDMSET-223) Rita Gomes, Marina Peres	16:00 – 16:15	Beyond Smartness: Rethinking IoT-Enabled Interior Sustainable Workspaces in Higher Education (EDMSET-174) Sarah M. Abdelhaleem, May Gamal Mostafa
16:15 – 16:30	AI-Assisted Digital Twin Framework for Heritage Preservation in Amman (EDMSET-227) Zaid.M. Al-Zrigat, Ruba Seiseh, Islam M. Athamneh, Ismaiel Abuamoud, Mohannad al-Mubaidin	16:15 – 16:30	<i>Discussions and Q&A</i>
16:30 – 16:45	<i>Discussions and Q&A</i>		
End of Day 2 Sessions			

DAY 3: 14 May 2026 –Thursday

Venue: Online Conference co-organized with Abu Dhabi University
Program Time Zone: Dubai (GMT+4)

Online attendance Link: contact edmset@ierek-scholar.org for access
Download Latest Zoom Version: [Click here!](#)
Online Platform Guide: [Click here!](#)
Program Time Zone: Dubai, UAE (GMT+4)

09:30 – 10:00 / Welcome all/ Online Registration

Delivery of Information and Networking

Keynote Speaker 7

10:00 – 10:20 | **Dr. Ihsanullah Obaidullah**, Associate Professor in the Department of Chemical and Water Desalination Engineering at the College of Engineering, University of Sharjah

Speech Title: “**TBA**”

10:30 / Parallel Sessions

*All authors must commit to the time allowed for each paper presentation (15 minutes)

*A brief discussion (Q&A) is to be allowed after each session (15 minutes)

Session 10 – Room 1		Session 11 – Room 2	
Track: Environmental Policy, Innovation, and Resource Engineering		Track: Renewable Energy Solutions and Innovations	
<p>Moderated by:</p> <p>Prof. Osama Mohamed Professor of Civil Engineering, Civil Engineering Department, Abu Dhabi University</p>		<p>Moderated by:</p> <p>Prof. Sharul Sham Dol Director of the Research Institute for Sustainable Futures Assistant Dean for Research & Innovation Professor of Mechanical Engineering, Abu Dhabi University</p>	
10:30 – 10:45	<p>Special Speech about:</p> <p>“The Influence of Graphene Derivatives on the Durability and Mechanical Performance of Sustainable Concrete: A Path Toward Reducing the Environmental Footprint of the Construction Industry” by Prof. Osama Mohamed</p>	10:30 – 10:45	<p>Special Speech about:</p> <p>“Application of Vortex Bladeless Turbines at the Offshore Platform for Sustainable Energy” by Prof. Sharul Sham Dol</p>
10:45 – 11:00	<p>Porter Hypothesis and Pollution Havens Hypothesis via Imitation and Corruption in an R&D Based North-South Model (EDMSET-02) Yoshihiro Hamaguchi</p>	10:45 – 11:00	<p>Development of Hydraulic Pipe Turbines with Spherical and Oval Blades (EDMSET-30) Aliev Rayimjon, Saida Saidullaeva</p>
11:00 – 11:15	<p>A Life Cycle Assessment Framework for Optimizing Material Distribution Based on Structural Redundancy (EDMSET-94) Nader M. Okasha</p>	11:00 – 11:15	<p>Design And Development of a 3d Format Prism-Shaped Rotating Photovoltaic Energy Device (EDMSET-98) Navruzбек Mirzaalimov</p>

11:15 – 11:30	From Ambition to Enforcement: The Legislative Framework for Industrial Energy Efficiency in the UAE Under the Paris Agreement (EDMSET-120) Sana Rawaqa	11:15 – 11:30	Integrating Interval Forecasting Facility into Power System (EDMSET-103) Nosirbek Abdurazakov
11:30 – 11:45	Sustainability in UAE Universities: A Critical Analysis of the UI GreenMetric Ranking System (EDMSET-119) Bushra Al Jaberi	11:30 – 11:45	An Economic Feasibility Study to Manufacture a 1,200 Nm ³ /Hour Alkaline Hydrogen Production Unit (EDMSET-144) Aisha Saif Alketbi
11:45 – 12:00	Effect of Dissolved Coagulant Mass on Clarification and By-Product Formation During Electrocoagulation of Car Wash Wastewater (EDMSET-113) Farkhod Murtazaev	11:45 – 12:00	Experimental Evaluation of Thermal Performance and Embodied Carbon of a Bio-Insulation Based on Mango Seed Fibers (EDMSET-216) Amal Mabrook Gumaan Al Askari
12:00 – 12:15	Exploring the Relationship between Organizational Contextual Factors & Firm Performance; Through the Mediating Role of Sustainable Innovation (EDMSET-225) Mohamed Arif AlKarrani	12:00 – 12:15	Evaluation of Hydrogen Storage Systems in the UAE Using Multi-Criteria Decision-Making Approaches (EDMSET-75) Humaid Alawadhi
12:15 – 12:30	Short Break	12:15 – 12:30	Short Break
12:30 – 12:45	Multi Criteria Decision Support Framework for Enabling Sustainable Desalination in the UAE (EDMSET-228) Ahmed Ibarra Abboudi	12:30 – 12:45	Fin Optimizing in Vertical Tube for PCM Melting and Solidification Enhancement: An Integrated Experimental and RSM Approach (EDMSET-232) Zahra Obaid Alblooshi
12:45 – 13:00	Circular Material Innovation in Product Design (EDMSET-226) Sara Calati	12:45 – 13:00	Ambient temperature Impact on PCM Integrated Five Hollow Fin Heat Sink Performance Under Natural and Forced Convection: A numerical approach for thermal management perspective (EDMSET-165) Sandeep Sambhaji Ohol
13:00 – 13:15	Hierarchical Porous Carbon Derived from Palm Leaf Waste for Efficient CO ₂ Capture (EDMSET-187) Hemant Mittal	13:00 – 13:15	Performance Evaluation of Sand as a Sensible Heat Storage Medium: Experimental Analysis (EDMSET-229) Shahad Saeed Saif Alzaabi
13:15 – 13:30	Optimization of the Calcium Carbonate Level in Polypropylene Composites Considering Profit Maximization and Environmental Effects (EDMSET-221) Mehdi Seifbarghy, Suat Kasap	13:15 – 13:30	Techno-Economic Analysis and Optimization of a Standalone PV-BESS for Green Hydrogen Production in the UAE for Aluminum Production (EDMSET-246) Mariam Alansari
13:30 – 13:45	Quantifying Greenwashing Risk in ESG Disclosures in the Built Environment through AI-Assisted KPI Auditing: An Anonymized Comparative Disclosure Analysis (EDMSET-140) Khuloud Ali	13:30 – 13:45	Experimental Comparison of Rooftop and South-Facing BIPV Façade in Hot-Arid Climates: Energy and Thermal Performance (EDMSET-211) Sherifa Alharyas

13:45 – 14:00	Strategic Pathways and Policy Enablers for Advancing Net-Zero 2050 in the UAE Construction Sector: A Qualitative Exploration (EDMSET-66) Than'a Alsaoudi	13:45 – 14:00	<i>Discussions and Q&A</i>
14:00 – 14:15	Assessment of Awareness, Satisfaction, and Willingness Toward Bio-Based Insulation Materials in the UAE Construction Sector (EDMSET-161) Abeer Dar Saleh, Osama Ahmed Mohamed		
14:15 – 14:30	<i>Discussions and Q&A</i>		
End of Day 3 Sessions			

14:30 – 14:40 | *EDMSET 2026 Closing Remarks*



15:00 – 17:30 | Conference Workshop (Online)

With the support of the Ministry of Culture (UAE), the workshop is organized by:

- EDMSET 2026 & IEREK
- Abu Dhabi University (ADU)
- BRANDHAUS Design & Architectural Engineering Consultancy
- Italian Design Day 2026

Workshop Presenters

- **Dr. Ahmed Agiel** – ADU & Founder of Brandhaus
- **Alessandro Colombo** – Politecnico di Milano
- **Fatima Al Suwaidi** – Ministry of Culture

Workshop Title: “AI Generative Design for Modern Architectural Heritage: Reimagining Identity Through Technology”

Online attendance Link: contact edmset@ierek-scholar.org for access
Time Zone: Dubai, UAE (GMT+4)

“This Workshop has a Separate Access Link”

15:00 – 17:30

NOTE:

Includes 15 Mins Break

This workshop explores the integration of AI generative design tools in reinterpreting modern heritage architecture, with a focus on balancing innovation and cultural identity. Designed for university students, the workshop offers an interactive platform to experiment with emerging technologies while critically reflecting on how heritage informs contemporary design. Participants will engage in a guided process that combines cultural understanding, creative exploration, and AI-driven design, supported by an interactive AI-based dashboard for real-time collaboration and visualization.

Workshop Experience

Participants will:

- Engage with selected modern heritage case studies.
- Reflect on identity, preservation, and transformation.
- Use AI generative tools to develop design concepts.
- Contribute to a shared digital platform for real-time input.
- Participate in guided discussions and critique sessions.

Discussion, Q&A and Workshop Closing