

Concurrent Technical Sessions

Based on The Technical Session Schedule

Session No.7

TRACK (1)

Auditorium 1, Ground floor, B105

Chair: Prof. Jamel Orfi

Sustainable Manufacturing and Industrial Ecology

Addressing the Water Crisis in Tunisia: Comparative Analysis of Sustainable Solutions. *Jamel Orfi, and Mokhtar Guizani*

Harmonizing Tradition and Innovation: Project Management Strategies for Saudi Sustainable Heritage in Architectural Design. *Najid Alkathiri, Ihab M. Katar, and Abdelhakim Abdelhadi*

Energy Auditing of a Plastic Manufacturing Facility: Methodology and Lessons Learned. *Khaled Musleh, and Ali Ahmed Al-Matouq*

Sustainable Design Optimization and Performance Analysis of a Femoral Head for Hip Implants Using Vertical Grooves. *Asarudheen Abdudeen, Jabber Abu Qudeiri Qudeiri, and Alhuda Muhammed Ismail Kunju*

Sustainable Coloration of Polyester Fabric Using Onion Peel Extract with Ultrasonic Energy. *Rimsha Kanwal, Muhammad Hashim, Saima Naz, Samander Ali Malik, Naveed Mengal, and Raja Fahad Ashraf*

An Integrated Approach to Resolving Construction Disputes: A Framework and AI-Based Solution with a Focus on Sustainability. *Noha Raslan, and Ayman Nassar*

Solar Radiation Forecasting using Attention-based Temporal Convolutional Network. *Damilola Olawoyin-yussuf, M. Mohandes, Bo Liu, and S. Rehman*

Designing High-Strength Aluminum Alloys by sustainable Thermomechanical Treatments. *Basim Nashri, and Muhammad Farzik Ijaz*

Session No.8

TRACK (2)

Auditorium 2, 2nd floor, B105

Chair: Dr. Mahmoud Nawar

Sustainable Construction and Resilient Infrastructure

A review on the influence of palm oil fuel ash as sustainable material on the properties of green geopolymer concrete. *Hussein Hamada, and Farid Abed*

Effect of Stainless-steel Fibers on Rubberized Concrete. *Ayman Elzohairy, Perry Moler, and Mohammad Nawar*

Reducing Carbon Footprint: The Role of Calcined Clay in Partially Replacing Portland Cement. *Mohammed Seddik Meddah*

Critical Success Factors for Enhanced Job Satisfaction in Building Sector Projects of Pakistan. *Qasim Hussain Khahro, Noor Yasmin Zainun, Shabir Hussain, and Haseeb Haleem Shaikh*

Diurnal variations of Surface temperature of varied building materials and their impacts to the summer out-door air temperatures: A Case Study Building 104 Prince Sultan University. *Sharifah Fairuz Syed Fadzil, Mohamed Ezzat, Humera Mughal, and Mansour Aloufi*

Implementing Non-linear Models and Classical Regression to Predict Ultimate Bearing Capacity of Soils. *Ahmad Idris*

Geopolymer Composites for 3D Printing Applications: A Statistical Analysis Approach. *Passant Youssef, Muhammad S. El-Feky, Ahmed M. Ragab, and Mohamed I. Serag*

Adaptation Technology for Humanitarian Architecture Facing Climatic Changes in Coastal Zones. *Donia Abdelgawad, Amal Abbas Abdelsattar, and Salma Dwidar*

Session No.9

TRACK (3)

Hall 1-A01, B 105, 1st Floor

Chair: Dr. Mourad Rizk

Innovations in Renewable Energy: Powering the Future

Nafion layer-enhanced anatase TiO₂ nanoparticles for photosynthetic CO₂ conversion. *Nurul Afiqah Mokri, and Pei Ching Oh*

Tuning the Physical Properties of Sprayed SnO₂ thin films by alkaline earth doping. *Imene Saoula*

Prospective of China's 2050 Sustainable Energy and Green Finance for Carbon Neutrality. *Muzzammil Hussain, and Misbah Rani*

Hybrid Vapor Absorption-Membrane Distillation System driven by Geothermal Energy. *Abdul Sayeed, and Jamel Orfi*

Investigation Of Pool Boiling Heat Transfer On Modified Copper And Aluminum Surfaces. *Mariam Khaled Galal, Fadi Alnaimat, Bobby Mathew, and Zafar Said*

Sulfonation of biopolymer chitosan-based composite membranes with silica from palm oil shell waste for direct methanol fuel cell applications.

Mochammad Purwanto, Faradillah Putri Ardi, Indah Putri Anggraeni, Dian Permana, Arif Priyangga, and Lukman Atmaja

The Effects of Solvent Evaporation Time on Polyvinylidene Fluoride/Chitosan Composite Membrane to Its Physicochemical Properties for Direct Methanol Fuel Cells. *Arif Priyangga, Lukman Atmaja, Mardi Santoso, Juhana Jaafar, Eko Santoso, Yohana Ivana Kedang, Dian Permana, and Mochammad Purwanto*

Analyzing a DC-DC Converter for Renewable Energy Applications: A Performance Assessment. *Sagar Bhaskar Mahajan, Seshagiri Rao Vemparala, Dhafer Almakhles, and Mahmoud F. Elmorshedy*

Fintech Innovations in the Renewable Energy Industry: Towards Sustainable Development. *Noura Metawa, Zahraa Tarek, and Rhada Boujill*

Session No.10

TRACK (4)

PS Hall, B 101, G Floor

Chair: AP Ir Dr. Zahiraniza Bt Mustaffa

Future Cities: Innovative Approaches for a Sustainable Tomorrow

Field Studies on the Application and Performance of Geothermal Energy Piles (GEP) in Buildings: An Over-view. *Zahiraniza Mustaffa, Abubakar Baffa Muhammad, Niraku Rosmawati Ahmad, and Mohamed Ezzat*

Abnormal Activity Monitoring using Kalman Filter with Adaptive Background Updation. *Mehre Munir*

Sustainable Intelligent Urban Transport System: Best Practice Benchmarking between EU and GCC Countries. *Ghazwan Al-Haji, Alaaeddine Ramadan, Chamseddine Zaki, and Abbas Nasser*

Assessing Rigid Inclusions Solution for Sustainable Soil Stabilization: A BS 8006 Evaluation. *Mohamed Ezzat, and Noran Edries*

Breaking Boundaries in Wastewater Treatment: Sustainable Solutions for Water Conservation. *Abdelrahman Khalil*

An Efficient Soil Image Classification Framework using Transfer Learning Models for Intelligent Geotechnical Applications. *Ezz Hemdan, and Mohamed Ezzat*

RFID as an IoT enabler for Smart Cities Innovation: a Comprehensive Guide to Demystify RFID Technologies Deployment. *Abderrazak Hachani*

An Intelligent Framework for Prediction of Ultimate Capacity of Large Diameter Bored Piles Using Machine Learning Models for Smart Geotechnical Engineering Systems. *Ezz Hemdan, and Mohamed Ezzat*

SDR Technology in Academia: Bridging Sustainable Education and Innovation. *Walid Dyab, and Mourad Rizk*