

Concurrent Technical Sessions

Based on The Technical Session Schedule

Session No.1

TRACK (1)
Hall 1-A01, B 105, 1st Floor

Chair: Prof. Tamer Sebaey**Sustainable Manufacturing and Industrial Ecology**

Evaluation of the Physical and Mechanical Properties of Omani Marble Waste as A Sustainable Sand Replacement in Cement Mortars. *Amira Al Shereiqi, Khalifa Al-Jabri, Mohammed Seddik Meddah, and Kazi Abu Sohail*

Numerical approach for 3D moldboard plow design. *Imen Lahmar*

Scheduling Parallel Machine Robotic Cells with Energy Consumption Objective. *Hakan Gultekin, Riyadh Zaier, and Amur Al-Yahmedi*

Chemically Modified Rice Husk as a Green Filtration Media for Chemical Oxygen Demand Removal from Pulp and Paper Effluents. *Ahmad K. Badawi, Randa Osman, and Raouf Hassan*

A Green-Magnetic Approach to Textile Wastewater Decolorization Using Nickel Ferrite-Enhanced Activated Carbon from pistachio shells. *Raouf Hassan, Reda Salama, Bushra Ismail, and Ahmad K. Badawi*

Assessment of electricity production using organic Rankine cycle (ORC) activated by a combined gas turbine and flare waste heat recovery. *Hamza semmari, Sofiane ABERKANE, and Jamel Orfi*

Utilizing Waste Expanded Polystyrene for Cleaning Fuels. *Adnan Mujahid, Tajamal Hussain, and Adeel Afzal*

Sustainable Synthesis of ZnO NPs Via Nonthermal Plasma and Its Corrosion Inhibition Activity on X60 API 5L in 1M HCl Media. *Nourelhouda Bounedjar*

Multidisciplinary Optimisation of Power Device Sizing to Improved Flight Duration and Weight Reduction of Solar-Powered Aircraft. *Bashir Safyanu Danjuma*

Session No.2

TRACK (2)
Auditorium 2, 2nd floor, B105

Chair: Prof. Zubair Ahmed**Sustainable Construction and Resilient Infrastructure**

Optimizing Transitional Season Comfort: A Case Study on Thermal Performance of Open Courtyard and Walk-way Plaza Designs at Prince Sultan University Women's College, Riyadh. *Sharifah Fadzil, Siti Aisyah Binti Muhammad, and Mansour Aloufi*

Secure Accident Detection and Monitoring Systems - An Arduino based Case Study. *Anees Ara, Sarah Algadi, Reema Albattah, and Jood Bajouda*

Material passports for the End-of-life stage of buildings: A study on the challenges of material passports adoption in GCC. *Sabreen Dar Ame, Israa Al Khaffaf, Fatin Samara, and Salwa Albeheiry*

Economic Analysis of Machine Welded Wire Rebar Mat and Deformed Bar for Construction of RC Slabs: A Case Study. *Foysal Ahmed, Muhammad Rafiul Mahdi, Ishiaque Ahmed, and Nazrul Islam*

Assessing the Benefits and Perceptions of Indoor Farming in Hot Climates. *Daniel Atfoye and Kheira Tabet Aoul*

Potential for Utilization of Sachet Water Plastic Waste for Rural Road Construction in Nigeria. *Ahmad Idris, Aminu Suleiman, Gamba Haruna Yunusa, and Awaisu Shafiu Ibrahim*

Enhancing Tensile Strength of Asphalt Concrete through Rock Wool Inclusion for Sustainable Solution. *Nasir Shafiq*

From Scraps to Soil Enrichment: Rethinking Food Waste and Sludge for a Greener Agriculture. *Muhammad Faseeh Memon, and Zubair Ahmed Memon*

Policy Development For Sustainable Smes: A Case From Kingdom Of Bahrain. *Laaleh Alalali*

Predicting stage-discharge relationship for sharp-crested Triangular Labyrinth weir. *Muhammad Danish Mustafa*

Session No.3

TRACK (3)
Auditorium 1, Ground floor, B105

Chair: Dr. Walid Dyab**Innovations in Renewable Energy: Powering the Future**

Advancing Sustainable Defense Research with Polarimetric Radar Innovations. *Mourad Rizk, and Walid Dyab*

Feasibility Study of Wind Energy Project in Dhahran Area. *Samar Demayka, and Saidur Chowdhury*

Modeling of Power Flow Systems of Medium Electric Bus to Estimate the Energy Consumption. *Metha Islameka, Muhammad Axel Dhiya, and Bentang Arief Budiman*

Co-firing characteristic of wood bark with coal blends in 110 MWe Circulating Fluidized Bed Boiler: An Experimental Study. *Nur Cahyo, Desy Sulistiyowati Hidayat, and Muhamad Iqbal Felani*

Thermal and electrical performance of a floating Mono PERC solar panel on artificial water bodies: An experimental investigation. *Muthu Manokar Am*

Design of Wind Energy Harvester Using Piezoelectric Elements. *Ali Al Diwani, Mohammed Al-Suhayyih, Nassar Alshawareb, Hamza Altaha, and Hussain Altammar*

Efficient and Sustainable Energy Storage Materials for Meeting Future Power Needs. *Tajamal Hussain, Muniba Aslam, Adnan Mujahid, and Adeel Afzal*

Supercritical Carbon Dioxide Based Power Generation Using Solar Parabolic Trough Collector. *Mohammed Raihan, Hassan Alshehri, and Jamel Orfi*

Advancing Solar Efficiency: A Novel Tandem DSSC/Perovskite Design for Optimized Performance in Dye-Sensitized Solar Cells. *Hamna Siddiqui, Samander Ali Malik, Raja Fahad Ashraf, Kyung Chul Sun, Iftikhar Ali Sahito, and Naveed Mengal*

Session No.4

TRACK (4)
PS Hall, B 101, G Floor

Chair: Dr. Monica Moscatelli**Future Cities: Innovative Approaches for a Sustainable Tomorrow**

Biophilic Urbanism for Sustainable and Resilient Neighborhood. The case of Al Murabba, Riyadh. *Monica Moscatelli, Njoud Albrahim, and Razan Aldawood*

The Future of Healthcare: On Designing 5G & Beyond Indoor Neutral-Host for Smart City Medical Facilities. *Alhanouf Alshahrani, Eman Alqartas, Maha Almutairi, Ghaida Alessa, and Yazan Allawi*

Mechatronic Design and Development of Autonomous Mobile Robotics System for Road Marks Painting in Smart Cities. *Chao Ma, Mohammed A. H. Ali, Yusoff Nukman, and Bushroa Abd Razak*

Enabling Smart Sensing Systems with Thread Protocol for IoT Connectivity and Cloud Integration. *Khalid Dahyan, Sohaib bin Altaf Khattak, Moustafa Nasralla, Maged Abdullah Esmail, and Muddesar Iqbal*

Designing of Meta-barriers Using a Novel Cloaking Method to Attenuate Strong Ground Motion. *Mohamed Ezzat, Umer Waqas, and Mariya Iqbal*

Exploring Gender-Based Disparities in Roadway Safety Perception: Affecting Factors and Policy Implications. *Asim Alogaili*

Smart City Analytics. *Mohammed Seliaman, and Reem Alhamam*

The Role of Artificial Intelligence in Reducing Waiting Times and Crown Management in A & E Future Cities. *Mamta Sharma, Parisa Saadati, Nurha Yingta, Laden Husamaldin, and Ikram Ur Rehman*