



UAEGSRC2024
 مؤتمر أبحاث طلاب الدراسات العليا
 Graduate Students Research Conference

UAEU

جامعة الإمارات العربية المتحدة
 United Arab Emirates University



9TH UAE GRADUATE STUDENTS RESEARCH CONFERENCE

UAEGSRC 2024

APRIL 20, 2024
 UAEU, AL AIN, UAE

CONFERENCE PROGRAM



ORGANIZER AND HOST



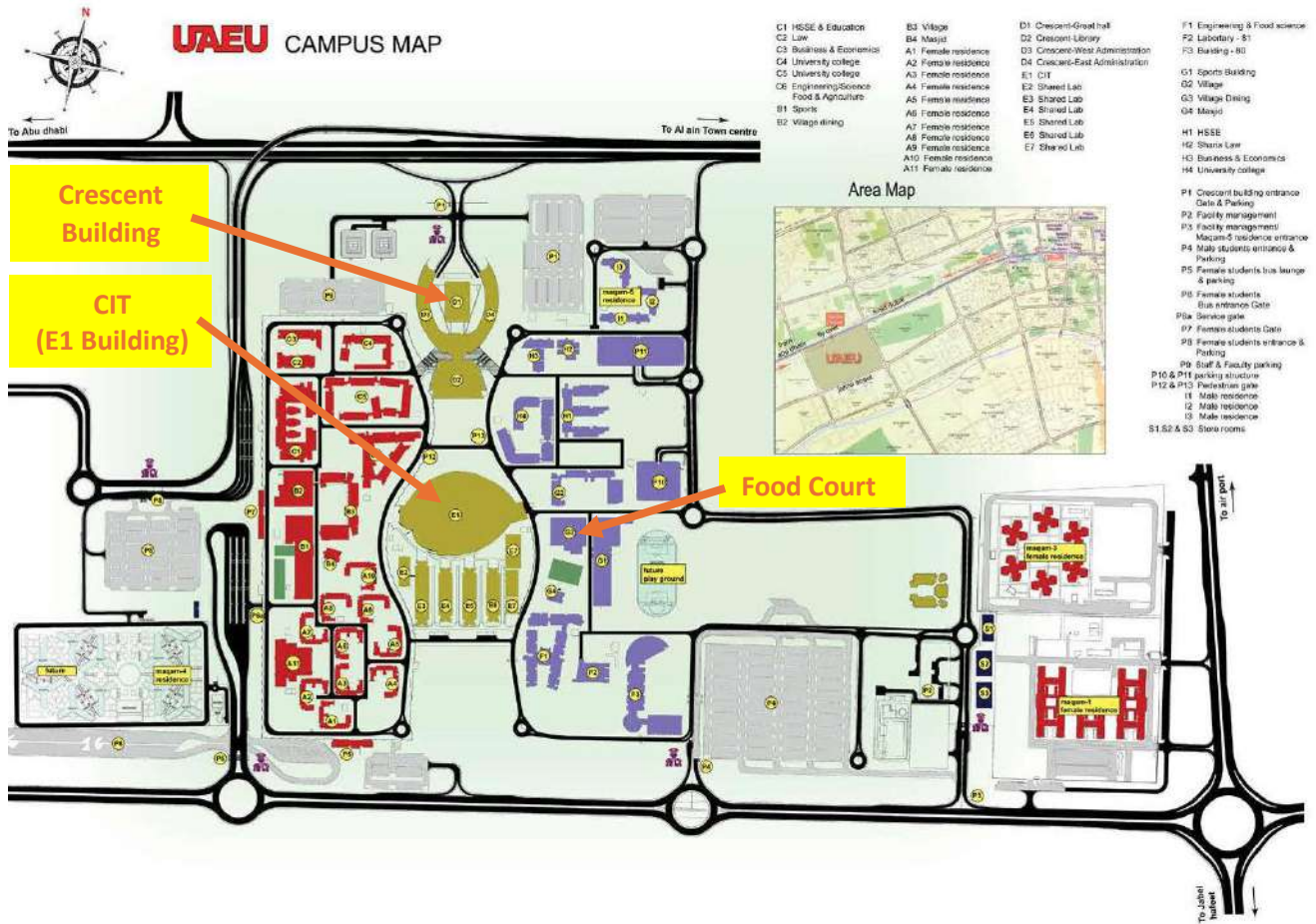
ORGANIZER





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Venue Location



ABOUT THE 9TH UAE GRADUATE STUDENTS RESEARCH CONFERENCE (UAEGSRC 2024)

Under the patronage of H.E. Zaki Nusseibeh, Chancellor of United Arab Emirates University (UAEU), the 2024 UAE Graduate Students Research Conference (UAEGSRC) is scheduled to take place on April 20, 2024 at the UAEU campus in Al Ain. This multidisciplinary conference offers graduate students from various fields a platform to present their research, receive academic feedback, share ideas, build professional connections, and interact with scholars and professionals from universities in the UAE and beyond. The 2024 UAEGSRC is organized in collaboration with the UAE Ministry of Education as part of a strategic partnership.

The UAEGSRC 2024 also offers graduate students the opportunity to showcase their innovative projects and ideas to various sectors of industry and government, receiving valuable feedback on practical aspects that can enhance the impact of their research. Participants will also gain insights into different research opportunities offered by the academic institutions involved in the conference.

The conference will include keynote speakers and panel discussions that focus on the importance of graduate education in cultivating the expertise needed to support the UAE's vision for a sustainable economy by 2072.

Message from Steering Committee Chair



Dr. ARIF SULTAN AL HAMMADI

Executive Vice President,
Khalifa University

Welcome to the 2024 UAE Graduate Students Research Conference.

Since its inception in 2015, the conference has provided a platform for scholars and researchers to engage in meaningful discussions and establish professional networks that transcend disciplinary boundaries. Each edition of the conference has consistently surpassed expectations, attracting participation from universities and research institutions across the UAE. As it evolves into a premier event for graduate students in the country, the present ninth edition has firmly established itself as a hub of intellectual exchange. It offers an unparalleled platform for an ever-growing community of participants to showcase their scholarly achievements, fostering a dynamic atmosphere of academic excellence.

A steady rise in the number of papers presented at the conference not only demonstrates its progress, but highlights the enthusiasm and ingenuity of our graduate students. In 2024 alone, the conference received an impressive influx of 841 papers, representing an impressive growth of over 180% since 2015, bearing testimony to the outstanding research and innovation taking place across the UAE.

Amidst this remarkable progress, our primary objective remains steadfast: to empower and prepare graduate students in the UAE to confidently submit their research papers to international conferences. By fostering connections between academia, industry, and government, we aim to facilitate collaborations that will drive innovation and shape the future of research in the UAE.

Through this platform, students can continue to showcase their research work and receive scholarly feedback, fueling their ambitions. Moreover, the conference provides a valuable opportunity for networking, enabling graduate students to establish connections with professionals from various sectors of government and the broader industry.

Instrumental in the advancement of the conference is the efforts of the organizer, United Arab Emirates University (UAEU), this year's host. It gives us immense pride to collaborate and contribute to the conference's assured success and expansion.

Leading the way in augmenting knowledge, the UAE GSRC stands poised to remain the region's significant gathering for elevating scholarly graduate-level research. As we continue to foster a culture of excellence, collaboration, and innovation, I am confident the conference will continue to play a pivotal role in shaping the region's research landscape and that its influence will endure.

Have a fruitful and exciting conference,

Dr. Arif Sultan Al Hammadi
Executive Vice President, Khalifa University
UAEGSRC 2024 Steering Committee Chair



PROF. AHMED MURAD

Associate Provost for Research,
United Arab Emirates
University

The United Arab Emirates University is pleased to host the UAE Graduate Students Research Conference 2024 which is annually co-organized by 13 universities within UAE. Since its inception in 2015, the conference continued to grow and attract more participation from graduate students. This year, the conference has received significant number of submissions from international graduate students. We believe that the conference will provide a unique forum for interaction, constructive discussions, and future collaboration. The importance of this conference evolves from the fact that graduate students constitute the backbone of research, innovation, and creativity in all research universities and institutions.

More than 1100 submissions have been received from graduate students enrolled in graduate programs in national, regional, and international universities. Based on the recommendation of the scientific committee around 800 submissions have been accepted. The conference program is very rich. In addition to the keynote lecture, the program includes 80 oral and poster sessions. The participants are highly encouraged to share their knowledge and fully engage in the different sessions of the conference.

Finally, I would like to thank the collaborating universities, the organizing committee, the scientific committee, and the reviewers for their efforts to organize this conference. I look forward to the fruitful discussions and evolving of new research ideas during the different sessions of the conference.

Prof. Ahmed Murad

Associate Provost for Research, UAEU
UAEGSRC 2024 General Chair

Steering Committee

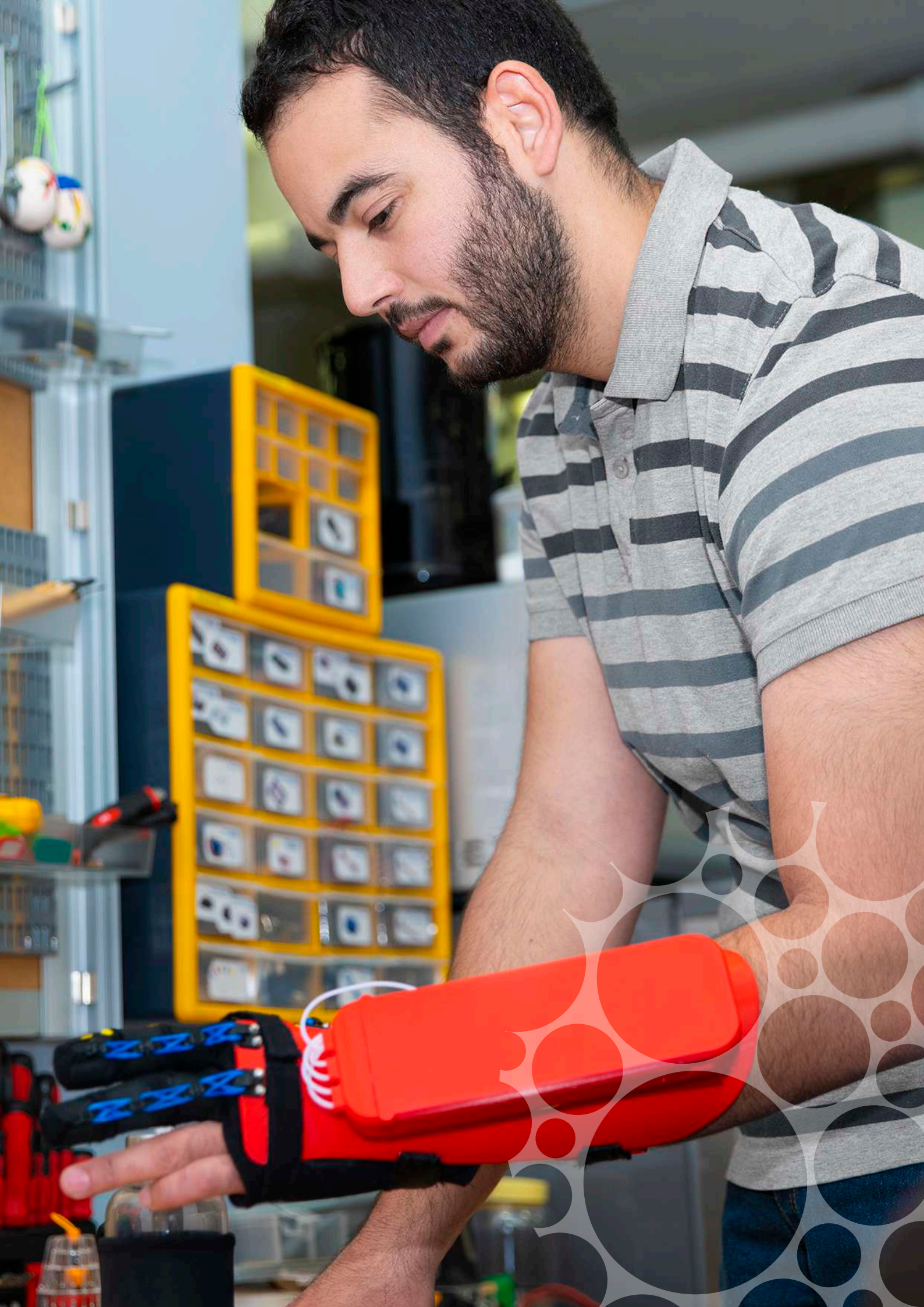
Arif Al-Hammadi, Khalifa University, (Chair)
Mohammed Al-Mualla, Ministry of Education
Mahmoud Al-Qutayri, Khalifa University
Mohamed El-Tarhuni, American University of Sharjah
Rafat El-Awady, University of Sharjah
Carol Genetti, NYU Abu Dhabi
Gaelle Picherit-Duthler, Zayed University
Kosmas Pavlopoulos, Sorbonne University Abu Dhabi
Khalid Al Marri, The British University in Dubai
Wathiq Mansoor, University of Dubai
Evan K. Paleologos, Abu Dhabi University
Hanan Al Darmaki, Mohamed Bin Zayed University of Artificial Intelligence
Kamran Arshad, Ajman University
Stephen Wilkinson, University of Wollongong in Dubai
Ali Al-Marzouqi, United Arab Emirates University

General Chair

Ahmed Murad, United Arab Emirates University

Technical Program Committee

Ali Al-Marzouqi, United Arab Emirates University
Mahmoud Al-Qutayri, Khalifa University
Lotfi Romdhane, American University of Sharjah
Rafat El-Awady, University of Sharjah
Carol Genetti, NYU Abu Dhabi
Gaelle Picherit-Duthler, Zayed University
Kosmas Pavlopoulos, Sorbonne University Abu Dhabi
Khalid Al Marri, The British University in Dubai
Wathiq Mansoor, University of Dubai
Evan K. Paleologos, Abu Dhabi University
Hanan Al Darmaki, Mohamed Bin Zayed University of Artificial Intelligence
Kamran Arshad, Ajman University
Vikash Ramiah, University of Wollongong in Dubai



Program at a Glance

Time	Program	Venue
8:00-9:00	Registration	Crescent Bldg. (Great Hall)
9:00-9:30	Opening Remarks <ul style="list-style-type: none"> ○ H.E. Zaki Nusseibeh, Chancellor of UAEU ○ H.E. Dr. Mohammad Al Mualla, Undersecretary for Higher Education Academic Affairs, Ministry of Education ○ Dr. Arif Sultan Al Hammadi, Executive Vice President, Khalifa University, and Chair of Steering Committee 	
9:30-10:00	Keynote Address <ul style="list-style-type: none"> ○ Prof. Suzanne Ortega, President of the Council of Graduate Schools, USA 	
10:00-10:45	Panel Session Role of Graduate Education in Building a Competitive and Sustainable Economy Panelists: <ul style="list-style-type: none"> ○ H.E. Dr. Mohammad Al Mualla, Undersecretary for Higher Education Academic Affairs, Ministry of Education ○ Prof. Ghaleb Albreiki, Acting Vice Chancellor, UAEU ○ Dr. Abdelqader Abusafieh, SVP Technology & Advanced Materials, Strata Manufacturing Moderator: Prof. Ahmed Murad, Associate Provost for Research, UAEU	
10:45-11:00	Honoring the Speakers and Organizing Universities	
11:00-11:30	Coffee Break	
11:30-13:00	Technical Paper Session 1 (Oral and Poster Presentations)	CIT (E1 Bldg.) Both Sides
12:30-14:00	Lunch	Food Court
14:00-15:30	Technical Paper Session 2 (Oral and Poster Presentations)	CIT (E1 Bldg.) Both Sides
15:30-15:45	Coffee Break	CIT (E1 Bldg.) Both Sides
15:45-17:15	Technical Paper Session 3 (Oral and Poster Presentations)	CIT (E1 Bldg.) Both Sides
17:15-17:30	Networking Break	CIT (E1 Bldg.) Both Sides
17:30-17:45	Closing Remarks	CIT Auditorium (E1 Bldg.) Male Side

Time	Program	Venue
11:30-13:00	Technical Paper Session 1 (Oral Presentations, CIT Male Side)	
	Room 1012 Computer & Information Sciences	Room 1027, 1028 Chemical Engineering
	Room 1013 Electrical & Electronic Engineering	Room 1020, 1021 Mechanical Engineering
	Room 1022 Aerospace Engineering	Room 1038 Petroleum Eng. & Geoscience, Energy & Fuels
	Room 1016 Artificial Intelligence	Room 1036 Civil Engineering
	Room 1023 Robotics, Mechatronics & Automation	Room 1024 Material Science & Engineering
11:30-13:00	Technical Paper Session 1 (Oral Presentations, CIT Female Side)	
	Room 1003 Chemistry	Room 1007 Mathematics and Statistics
	Room 1005 Environmental Eng., Sustainability	Room 1008 Physics
	Room 1052 Diabetes & Cardiovascular Disease, Pharmacology	Room 1055 Humanities and Social Sciences, Law, Language & Linguistics
	Room 1053 Agriculture, Fisheries & Food, Biology, Plant Sciences	Room 1048 Cancer & Oncology
11:30-12:15	Technical Paper Session 1 (Poster Presentations, CIT Male Side)	
	CIT Hallway Artificial Intelligence, Computer & Information Sciences, Data Science	
	Technical Paper Session 1 (Poster Presentations, CIT Female Side)	
	CIT Hallway Environmental Science & Eng., Sustainability, Geology	
12:15-13:00	Technical Paper Session 1 (Poster Presentations, CIT Male Side)	
	CIT Hallway Chemical Engineering, Chemistry, Water	
	Technical Paper Session 1 (Poster Presentations, CIT Female Side)	
	CIT Hallway Petroleum Eng., Energy & Fuels, Nuclear Eng., Biomedical Engineering	
12:30-14:00	Lunch	Food Court

Program at a Glance

Time	Program	Venue											
14:00-15:30	Technical Paper Session 2 (Oral Presentations, CIT Male Side)	CIT (E1 Bldg.) Male Side											
	<table border="1"> <tr> <td>Room 1012 Computer & Information Sciences</td> <td>Room 1027, 1028 Chemical Engineering</td> <td>Room 1013, 1016 Electrical & Electronic Eng., Communication Eng.</td> <td>Room 1020 Mechanical Engineering</td> <td>Room 1021 Aerospace Engineering</td> </tr> <tr> <td colspan="2">Room 1022 Artificial Intelligence, Bioinformatics</td> <td>Room 1036 Civil Engineering</td> <td>Room 1023 Industrial Engineering</td> <td>Room 1024 Material Science & Engineering</td> </tr> </table>		Room 1012 Computer & Information Sciences	Room 1027, 1028 Chemical Engineering	Room 1013, 1016 Electrical & Electronic Eng., Communication Eng.	Room 1020 Mechanical Engineering	Room 1021 Aerospace Engineering	Room 1022 Artificial Intelligence, Bioinformatics		Room 1036 Civil Engineering	Room 1023 Industrial Engineering	Room 1024 Material Science & Engineering	
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	Technical Paper Session 2 (Oral Presentations, CIT Female Side)												
	<table border="1"> <tr> <td>Room 1003 Chemistry</td> <td>Room 1044 Biomedical Engineering</td> <td>Room 1005 Environmental Science & Engineering</td> <td>Room 1007 Mathematics and Statistics, Operational Research</td> </tr> <tr> <td>Room 1057 Business and Management</td> <td>Room 1054 Education</td> <td>Room 1055 Language & Linguistics, Law, Humanities and Social Sciences</td> <td>Room 1008 Physics, Planetary science, Earth Science</td> </tr> <tr> <td colspan="2">Room 1053 Agriculture, Fisheries & Food, Biochemistry, Biotechnology, Nutrition</td> <td>Room 1045, 1048 Medical Sciences, Clinical, Health & Life Sciences</td> <td>Room 1052 Clinical and Pre-Clinical, Health</td> </tr> </table>	Room 1003 Chemistry	Room 1044 Biomedical Engineering	Room 1005 Environmental Science & Engineering	Room 1007 Mathematics and Statistics, Operational Research	Room 1057 Business and Management	Room 1054 Education	Room 1055 Language & Linguistics, Law, Humanities and Social Sciences	Room 1008 Physics, Planetary science, Earth Science	Room 1053 Agriculture, Fisheries & Food, Biochemistry, Biotechnology, Nutrition		Room 1045, 1048 Medical Sciences, Clinical, Health & Life Sciences	Room 1052 Clinical and Pre-Clinical, Health
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14:00-14:45	Technical Paper Session 2 (Poster Presentations, CIT Male Side)	CIT (E1 Bldg.) Male Side											
	CIT Hallway Electrical & Electronic Eng., Communication Eng., Micro/Nano Electronics												
14:00-14:45	Technical Paper Session 2 (Poster Presentations, CIT Female Side)	CIT (E1 Bldg.) Female Side											
	CIT Hallway Education												
14:45-15:30	Technical Paper Session 2 (Poster Presentations, CIT Male Side)	CIT (E1 Bldg.) Male Side											
	CIT Hallway Mechanical Engineering, Aerospace Engineering												
14:45-15:30	Technical Paper Session 2 (Poster Presentations, CIT Female Side)	CIT (E1 Bldg.) Female Side											
	CIT Hallway Agriculture, Pharmacy												
15:30-15:45	Coffee Break	CIT (E1 Bldg.) Both Sides											

Time	Program	Venue
15:45-17:15	Technical Paper Session 3 (Oral Presentations, CIT Male Side)	
	Room 1012 Computer & Information Sciences, Data Science	Room 1027, 1028 Chemical Engineering
	Room 1013, 1016 Electrical & Electronic Eng., Communication Eng., Micro/Nano Electronics	Room 1020, 1021 Mechanical Engineering
	Room 1022, 1023 Robotics, Mechatronics & Automation, Micro/Nano Systems	Room 1024 Material Science & Engineering
15:45-17:15	Technical Paper Session 3 (Oral Presentations, CIT Female Side)	
	Room 1003 Chemistry, Water	Room 1008 Biomedical Engineering
	Room 1005 Environmental Science & Eng., Sustainability, Geology	Room 1007 Physics, Planetary science, Earth Science
	Room 1048 Immunology, Radiology, Virology	Room 1052 Business and Management
15:45-16:15	Technical Paper Session 3 (Poster Presentations, CIT Male Side)	
	CIT Hallway Material Science & Engineering, Physics	
	Technical Paper Session 3 (Poster Presentations, CIT Female Side)	
	CIT Hallway Cancer & Oncology, Diabetes & Cardiovascular Disease	
16:15-16:45	Technical Paper Session 3 (Poster Presentations, CIT Male Side)	
	CIT Hallway Industrial Eng., Robotics, Mechatronics & Automation, Mathematics and Statistics	
	Technical Paper Session 3 (Poster Presentations, CIT Female Side)	
	CIT Hallway Business and Management	
16:45-17:15	CIT Hallway Civil Eng., Urban Studies, Biomedical Engineering	CIT (E1 Bldg.) Male Side
17:15-17:30	Networking Break	CIT (E1 Bldg.) Both Sides
17:30-17:45	Closing Remarks	CIT Auditorium (E1 Bldg.) Male Side

Saturday, 20 April 2024

Room Number: 1012, E1 (Male Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Computer & Information Sciences.

Conference Chair: Zein Sami Altawil and Sani Umar, Khalifa University

11.30 Brain-Computer Interface Illiteracy and Its impact on the Quality of Motor Imagery Classification

Zaid Shuqfa , United Arab Emirates University

11.40 Enhanced Contraband Identification in Baggage with Advanced Class Imbalance Solutions

Abdelfatah Hassan Ahmed and Naoufel Werghi, Khalifa University

11.50 Proof of Sustainability of Clothing in the Fashion Industry using Blockchain

Zein Sami Altawil and Shamma Alwheibi , Khaled Salah and Raja Jayaraman, M. Jamal Zemerly, Zeyar Aung and Jiju Antony, Khalifa University

12.00 A Framework for Visual Question Answering

Nadya Abdel Madjid , Khalifa University

12.10 Machine Learning-based Smart Traffic Management System

Huda Abualola , Khalifa University

12.20 Machine Learning - based Sensor Fault Detection in Wireless Sensor Networks

Sani Umar, Khalifa University

12.30 TRACE: Transformer-based Continuous Tracking Framework

Shahmir Khan Mohammed , Khalifa University

Room Number: 1027, E1 (Male Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Chemical Engineering

Conference Chair: Omnya Al Yafiee, Khalifa University

11.30 The feasibility of energy recovery from oilfield produced water employing reverse electrodialysis (RED)

Randa Ibrahim Fathy, Emad Alhseinat, Khalifa University

11.40 Hierarchically Porous PAN-based Beads with Ultrahigh MOF Loading for CO₂ Capture from Flue Gas using Vacuum/Pressure Swing Adsorption (V/PSA) process

Solomon Kahsay Gebremariam, Anish Mathai Varghese, Ahmed Al Hajaj, Georgios Karanikolos, Ludovic Dumée, Khalifa University; Yasser Al Wahedi, Abu Dhabi Maritime Academy

11.50 Design of Carbon Dioxide Capture Plant Using Ternary Amine Based Deep Eutectic Solvents: Simulation and Optimization

Mohamed Ibrahim Alhammadi, Inas Alnashef, Ismail I.I. Alkhatib, Khalifa University & Research and Innovation Center on CO₂ and H₂ (RICH), Ahmed Al Hajaj, Khalifa University

12.00 Vapor Phase Synthesis of ZIF-8 Membranes For Propylene/Propane Separation

Taofeeqah Abimbola Agbaje, Maryam Khaleel, Khalifa University; Georgios N Karanikolos, University of Patras

[12.10 Low carbon concentration effluent capture strategies with membranes](#)

Omnya Al Yafiee, Ludovic Dumée, Priyanka Kumari, Khalifa University; Georgios N Karanikolos, University of Patras

[12.20 Thermo-Catalytic Methane Decomposition to Hydrogen and Carbon nanomaterials over Novel Materials](#)

Rizwan Ali, Khalid Al Ali, Cheng Kui, Mohammad Abu Haija, Khalifa University

[12.30 Techno-economic and Environmental lifecycle scale-up assessment of a novel process for low-carbon hydrogen Production from H₂S](#)

Sawsan Ali, Ismail I.I. Alkhatib (Khalifa University & Research and Innovation Center on CO₂ and H₂ (RICH), Ahmed Al Hajaj, Lourdes Vega, Khalifa University

Room Number: 1028, E1 (Male Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: **Chemical Engineering**

Conference Chair: Noran Mousa, United Arab Emirates University and Malak M AbuZaid, Khalifa University

[11.30 Surrogate Modeling of Methanol Production Process Using Machine-Learning](#)

Nabeel Sultan, Ali Almansoori, Khalifa University; Ali Elkamel, University of Waterloo

[11.40 Artificial intelligence-based soft sensor model for incinerator in sulfur recovery units to predict SO₂ emissions](#)

Muhammed Thameem U. V, Abdallah Sofiane Berrouk, Maguy Abi Jaoude, Ali Al Hammadi, Khalifa University; Abhijeet Raj, IIT

[11.50 A Predictive Molecular Model for DBU based CO₂ Binding organic liquids Solvents for CO₂ Capture](#)

Safique Answer, Ismail I.I. Alkhatib, Lourdes Vega, Inas Alnashef, Khalifa University

[12.00 Enhancement of the Viscoelastic Behaviour using Ionic Liquids for Enhanced Oil Recovery](#)

Noran Mousa, Basim Abu-Jdayil, Abdulrazag Zekri, United Arab Emirates University

[12.10 Enhancement of DCMD Performance via Innovative TPMS Spacer Design](#)

Balsam T. Swaidan, Mohamed Ibrahim Ali, Rashid Abu Al-Rub, Hassan Arafat, Khalifa University

[12.20 Prediction of the optical properties and photovoltaic potential of iron disulfide using variable angle spectroscopic ellipsometry](#)

Awais Zaka, Saeed Alhassan, Ammar Nayfeh, Khalifa University

[12.30 Free-standing Two Dimensional GO/Ti₃C₂T_x Membrane with Lamellar Structure for Effective Removal of Tetracycline from Wastewater](#)

Malak M AbuZaid, Ravi Pandey, Shadi Wajih Hasan, Khalifa University

[12.40 Enhancing antibiotics removal from aqueous solutions using a novel adsorbent: Graphene oxide-based deep eutectic solvent](#)

Anjali Goyal, Tarek Lemaoui, Inas Alnashef, Shadi Wajih Hasan, Hassan Arafat, Khalifa University

Room Number: 1013, E1 (Male Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: **Electrical & Electronic Engineering**

Conference Chair: Muhammad Noman Ashraf, Khalifa University and Ayodele Benjamin Esan, United Arab Emirates University

[11.30 Study of UWB Propagation in homogenous body tissues for Wireless Capsule Endoscopy](#)

Sruthi Krishnan, Mohammed Abdel Hafez, United Arab Emirates University

[11.40 Decentralized Power Management in PV-BESS Islanded DC Microgrid with Thermostatic Loads](#)

Ahmedalmamoun Ahmed, Tarek EL-Fouly, Khalifa University

[11.50 LC Filter design for Standalone PV based Single-Phase AC Supply](#)

Muhammad Noman Ashraf, Mohamed Shawky El Moursi, Khalifa University

12.00 Power Quality Improvement in Power Systems by Utilizing Renewable Energy Conversion Systems: An Advanced Control Technique Approach

Mahdi Debouza, Rachid Errouissi, United Arab Emirates University

12.10 Enhancing Protection Characteristics in Islanded Inverter-Dominated Hybrid AC/DC Microgrids through Virtual Impedance Fault Current Limiters

Ahmed M Abdelmnam, Hatem H Zeineldin, Ahmed Al Durra, Ehab El-Saadany, Khalifa University

12.20 Medium Voltage HVDC VSC Without Collection Platform

Abass Afolabi Yahaya, Khalifa University

12.30 Optimizing FCL Placement for Secure Power Systems with Uncertain Renewable Generations

Shraf Eldin Sati, Ahmed Al Durra, Hatem H Zeineldin, Tarek EL-Fouly, Ehab El-Saadany, Khalifa University

12.40 Multi-Objective Energy Management System for Isolated Solar Microgrids using Pareto Q-learning

Ayodele Benjamin Esan, Hussain Shareef, United Arab Emirates University

Room Number: 1020, E1 (Male Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Mechanical Engineering

Conference Chair: Mohamed ElKhodbia, Shahzaib Ilyas, Khalifa University

11.30 Macroscopic Yielding Criterion for Sheet-based Triply Periodic Minimal Surface Lattices

Nareg Baghous, Imad Barsoum, Rashid Abu Al-Rub, Khalifa University

11.40 Mechanical characteristics of TPMS based metamaterials

Hafiz Muhammad Abubaker, Imad Barsoum, Rashid Abu Al-Rub, Khalifa University

11.50 Quasi-static compressive response of geometrical tailored stacked pyramidal lattice structures

Mohammed Ayaz Uddin, Khalifa University

12.00 Ductile Damage Model of the Reinforcement of a Composite Pipe

Mohamed ElKhodbia, Imad Barsoum, Akram Alfantazi, Khalifa University

12.10 Mechanical Properties of Annealed MXene Films

Abdallah Kamal Hamouda, Kin Liao, Lianxi Zheng, Khalifa University

12.20 Numerical Prediction of The Collapse Stress of A Hierarchical Honeycomb

Omar El Khatib, Khalifa University

12.30 Impact Energy Absorption of Interpenetrating Phase Composites with Architected Nitinol Cellular Cores

Rami Alagha, Fahad Almaskari and Wael Zaki, Khalifa University

12.40 Finite Element Prediction of Effective Mechanical Behavior of Interpenetrating Phase Composites Comprising Smart Architected Nitinol as Reinforcement Cores

Shahzaib Ilyas and Wael Zaki, Khalifa University

Room Number:1021, E1 (Male Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Mechanical Engineering.

Conference Chair: Abdallah Mohammed Nouala, III, British University Dubai and Ahmed Hassan Hafez, Khalifa University

11.30 Cylinder Dynamics in High Reynolds Number Flow: Exploring Vortex-Induced Vibrations

Ahmed Salih, Imran Afgan, Saeed Alameri, Ahmed Al Kaabi, Khalifa University

[11.40 Development of Parallel Mechanism for Small Satellite Launching Emulation](#)

Suhaila F Al Ali, Khalifa University

[11.50 A Preliminary Finite Element Investigation of the Behavior of a C4-C5 Cervical Spine Segment](#)

Ahmed Hassan Hafez, Marwan El-Rich, Kinda Khalaf Andreas Schiffer, Khalifa University

[12.00 Dynamic Fragmentation of Explosively Loaded Cylinders](#)

Mohamad Yassine, Khalifa University

[12.10 Low carbon steel making through iron ore direct reduction by hydrogen: process modeling](#)

Sherif Ahmed Yehya, Valerie Eveloy and Ali Al Hammadi, Khalifa University; Abhijeet Raj (IIT)

[12.20 Estimating the dispersion curves of orthotropic composite plate mathematically and comparing with Dispersion software](#)

Abdellah Mohammed Nouala, III, Faez Aziz Masurkar, British University Dubai

[12.30 Enhancement Of Microscale Energy Transport In DASC Systems Using Nanoparticles](#)

Ahmad Ali Chehade, Khalifa University

Room Number: 1022, E1 (Male Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Aerospace Engineering

Conference Chair: Noora Mohamed Alahmed, Khalifa University

[11.30 Graphene-Based Laser Propulsion for Space Application](#)

Omnia Mahmoud Khattab, Rami Elkaffas, Basel AlTawil, Sean Swei, Yarjan Abdulsamad, Khalifa University; Carlo Iorio, University Libre de Bruxelles

[11.40 Calculation of Aerodynamic Characteristics of Hypersonic Vehicles Based on the Surface Element Method](#)

Tianqiang Huang, Khalifa University; Guoyi He, Nanchang Hangkong University

[11.50 The Stress Relaxation Response Of Graphene-Based Multifunctional Composites](#)

Noora Mohamed Alahmed, Kamran Khan and Rehan Umer, Wesley James Cantwell, Khalifa University

[12.00 Effect of surface treatment and GNPs on adhesion characteristics of aluminium joints](#)

Muzafar Hussain and Rehan Umer, Khalifa University

[12.10 Numerical Analysis on the Whirl Orbit with Inner Loop in a Cracked Rotor System](#)

Rafath Abdul Nasar and Mohammad A AL-Shudeifat, Khalifa University

[12.20 Evaluation of Flexural Property of Glass and Carbon Fiber-reinforced Polymer Composite](#)

Muhammad Yasir Khalid Rehan Umer, Khalifa University

[12.30 Large eddy simulation of bi-stability in the turbulent air wake of a simplified frigate](#)

Tauha Khan, Imran Afgan, Vladimir Parezanovic, Khalifa University

[12.40 Finite element study for flexible elastomeric skins](#)

Omar Mamoun, Rafic Ajaj, Khalifa University

Room Number: 1016, E1 (Male Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Artificial Intelligence.

Conference Chair: Mohammad AlShurbaji, Abu Dhabi University and Yuchen Li, Zayed University

[11.30 Daily Dialogue ASL Gloss-to-Text Corpus](#)

Hamdan Hamid Al-Ali, Hanan Aldarmaki, Zayed University

[11.40 Brain Stroke Lesions Segmentation using Transformers](#)

Mohammad AlShurbaji, Naoufel Werghi, Mohamed Lamine Seghier, Khalifa University; Taimur Hassan, Abu Dhabi University

[11.50 Enhancing Plant Disease Detection: A Benchmark Study on the FieldPlant Dataset](#)

Muhammad Shafay, Irfan Hussain, Naoufel Werghi, Khalifa University

[12.00 Uniform Appearance People and Crowd Monitoring Using Drones](#)

Mohamad Alansari, Sajid Javed, Yahya Zweiri, Naoufel Werghi, Khalifa University

[12.10 Personalized 3D Generation: Integrating MVDream with Dreambooth Technologies](#)

Yuchen Li, Zayed University

[12.20 Advancing Anomaly Detection in Surveillance Videos: A Vision-Language Model Approach](#)

Moshira Ali Abdalla, Sajid Javed, Naoufel Werghi and Majid Khonji, Khalifa University

[12.30 Time Series Analysis in Agriculture: A Multilayered LSTM and FNN Approach for Accurate Food Production Forecasting](#)

Nouf Salem Alkaabi, Khalifa University

[12.40 Imbalanced Baggage Threat Segmentation via Transformers](#)

Divya Velayudhan, Naoufel Werghi, Khalifa University

Room Number: 1036, E1 (Male Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: [Civil Engineering](#).

Conference Chair: Gul Jokhio, The British University in Dubai and Abdelaziz Younes, American University of Sharjah

[11.30 Assessment of Seismic Upgrade Strategies for Improving the Performance of RC Buildings](#)

Roshen Joseph, Aman Mwafy, United Arab Emirates University

[11.40 Buckling Analysis of Piles in Elastic Soil](#)

Shahd Kasas, George Mylonakis, Khalifa University

[11.50 Comparative Study of the Structural Behaviour of Cast Acrylic & Laminated Glass Under the Impact of Dynamic Loading in Aquatic Applications](#)

Gul Jokhio, Mohameed Abuzour, The British University in Dubai

[12.00 Flexural Behavior of Concrete Beams Reinforced with Steel Welded Wire Reinforcement](#)

Abdelaziz Younes, Sami Tabsh, American University of Sharjah

[12.10 Vulnerability of RC Bridges under the Combined Effect of Scour and Earthquakes](#)

Aya Ragab Abouelhamd, Andreas Kappos, Khalifa University

[12.20 A Framework for Research on Reinforced Concrete Columns Embedded with PET Bottles](#)

Sadiq Al Bayati, Sami Tabsh, American University of Sharjah

[12.30 Behaviour of Reinforced Concrete Members Made with 100 % Recycled Materials and No Cement](#)

Abdelrahman Hazem Hindieh, Sami Tabsh, American University of Sharjah

[12.40 Bond slip behaviour for CFRP- to-concrete joints at room temperature](#)

Aseel K Salameh, Rami Hawileh, American University of Sharjah

[12.50 Exploring Urban Form: Spatial Analysis of Open Public Spaces in Diverse Dubai Urban Contexts](#)

Alaa Omar Kordi and Khaled Galal Ahmed, United Arab Emirates University

Room Number: 1023, E1 (Male Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Robotics, Mechatronics & Automation.

Conference Chair: Oussama Abdul Hay, Khalifa University and Henry Alexander, United Arab Emirates University

11.30 A Novel Mobility Concept for Terrestrial Wheel-Legged Lunar Rover

Mubarak Yakubu (Khalifa University), Laith Abu Assi (Advance Research and Innovation Center, United Arab Emirates), Rana Azzam and Yahya Zweiri, Khalifa University

11.40 3D manipulation of Linear Deformable Objects in Complex Environments

Ahmad Almasri, Anup Mathew and Federico Renda, Khalifa University

11.50 Dynamic Object Grasping Through Deep Reinforcement Learning

Oussama Abdul Hay and Yahya Zweiri, Khalifa University

12.00 A Novel Data Fusion Framework to Enhance Contextual Awareness in Autonomous Vehicles for Accurate Decision Making

Henry Alexander and Hesham El-Sayed, United Arab Emirates University

12.10 Reinforcement Learning Generalization Through Dual-Scale Homogeneity Transformations

Abdel Gafoor Haddad and Yahya Zweiri, Khalifa University

12.20 Enhancing Underwater Imaging for Robot through Embedded Polarization Neural Network

Yuanzheng Ma (Tsinghua University, China); Shu Pan (Harbin Institute of Technology Shenzhen, China); Peter Marsh and Xun Guan (Tsinghua University, China)

12.30 Factor Graph Based Pose Graph Optimization for Pose Estimation in SLAM: A Comprehensive Study

Vidya S Sudevan and Sajid Javed, Hamad Karki (Khalifa University), Giulia De Masi (Technology Innovation Institute, Italy); Jorge Dias (Khalifa University)

12.40 Real-Time Event Detection in Exoskeleton: Adaptive Algorithm Design and Open Source Implementation

Xing Liu (Tsinghua University, China); Yifan Liu (Tsinghua University Graduate School at Shengzhen & Tsinghua University, China); Xingjun Wang (Tsinghua University, China)

Room Number: 1024, E1 (Male Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Materials Science & Engineering

Conference Chair: Asma Al Ghaithi, United Arab Emirates University

11.30 Circular Economy of Producing Green Nano Composites from Date Palm Nanoparticle to Reinforce Recycled Polymers

Mahmoud M.M. Alsafy, Mahmoud Alsafy, Nasr Al-Hinai and Khalid Alzebeid, Sultan Qaboos University

11.40 Morphological analysis of V2O5 sputtering time on Fe2O3 nanorods

Mubinu Islam and Nilesh Rajaram Chodankar (Khalifa University, United Arab Emirates)

11.50 Fly ash-slag based geopolymers optimization using Taguchi method for lead (Pb2+) sorption

Ebtesam Mohammed Al Ghafri, Mohamed Hamouda, Hilal ElHassan, Munjed Maraqa, United Arab Emirates University

12.00 Fly ash-slag based Geopolymer optimization for compressive strength using Taguchi method

Noura B. Al Tamimi, United Arab Emirates University

12.10 Tailoring Nitrogen Vacancy centers in high growth rate synthesis of CVD Diamonds

Mohammed Bin afif, Daniel Choi, Khalifa University

12.20 Exploring the Impact of Hf and Ag Incorporation in Ga2O3 Thin Films

Asma Al Ghaithi, Haila AlDosari, United Arab Emirates University

12.30 The Structural and Electronic Properties of Ultrathin Borophene on Graphene: Accuman from DFT

Narender Kumar, Nacir Tit, United Arab Emirates

Room Number: 1038, E1 (Male Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Petroleum Engineering, Petroleum Geoscience, Energy & Fuels

Conference Chair: Sanad Thurakkal Puthan Purayil, United Arab Emirates University and Waheed Adeosun, Khalifa University

11.30 On the effect of mixed salts formation brine on CO₂-brine interfacial tension: application for CO₂ geo-storage

Johny Mouallem, Muhammad Arif, Khalifa University

11.40 Pore-scale characterization and simulation of SCAL properties of multiphase flow in porous media

Faisal Aljaberi, Khalifa University

11.50 Multiscale Modelling of Fluid Flow Through Fractured Porous Media

Omar Mohamad Chaabi, Mohammed Al Kobaisi, Khalifa University

12.00 Generalized recursive convolution method for 3-D time-domain seismic wave modeling in composite viscoelastic media

Chao Jin, Mohamed Riahi, Khalifa University; Bing Zhou, Mohamed Jamal Zemerly, Khalifa University

12.10 Global early Aptian carbon-isotope perturbations (OAE1a) and validity of the isotopic record

Margherita Denaro, Thomas Steuber, Khalifa University

12.20 Influence of hydrogen addition on the performance and emission of gasoline fueled SI engine

Sanad Thurakkal Puthan Purayil, Emad Elnajjar, Salah Al Omari, United Arab Emirates University

12.30 Fabrication of High Temperature Resistant Electrolytes for Lithium ion Battery

Waheed Adeosun and Ahsan UI Haq Qurashi, Khalifa University

Room Number: 1003, E1 (Female Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Chemistry

Conference Chair: Sara Saada, United Arab Emirates University and Dina A Gaber, Khalifa University

11.30 Synergistic Interfacial Engineering: ZnS and ZnO Decorated 2D MoS₂ Supported on MXene for Enhanced Hydrogen Evolution Reaction

Faisal Ghulam Rasool, Ahsan UI Haq Qurashi, Khalifa University

11.40 Fe Foam supported FeVO₄ nanoparticles for electrochemical nitrogen fixation at ambient conditions

Abdulmalik Aminu, Khalifa University

11.50 Porous spinel nickel ferrite nanorods for thermal-assisted photocatalytic conversion of toluene

Anifat Adenike Bankole, Kaisar Ahmad Hajam, Maguy Abi Jaoude, Mohammad Abu Haija, Kyriaki Polychronopoulou, Khalifa University

12.00 Can Rare Earth Metal Ion Doping Suppress Corrosion in Seawater Electrolysis?

Mohammed Misbah Uddin, Ahsan UI Haq Qurashi, Khalifa University

12.10 Controlled Electrochemical Synthesis of Bimetallic Cobalt-Manganese Borate (CoMnBi) Thin Layer for Enhanced Clean Oxygen Generation Reaction: Experimental and Theoretical investigation

Ahamad Irfan, Bilal Masood Pirzada, Shamraiz Hussain, Sharmarke Mohamed, Ahsan UI Haq Qurashi, Khalifa University

12.20 Synthesis-Property Relationships of Ni-impregnated CeO₂-TiO₂-Cu_xO Catalysts Targeting the Dry Reforming of Methane

Rama Samer Al Masalmeh, Kyriaki Polychronopoulou, Dinesh Shetty, Maguy Abi Jaoude, Khalifa University

12.30 Solvent-Controlled Regioselective Catalytic Route to Highly Bioactive Imidazolidineiminodithiones

Sara Saada, Ziad Moussa, United Arab Emirates University

12.40 One-Pot Electrospinning Synthesis of Ni/MgO-Al₂O₃ Nanofibrous Catalysts

Tasnim M Bayomi, Dinesh Shetty, Kyriaki Polychronopoulou, Maguy Abi Jaoude, Khalifa University

[12.50 Tunable iron oxide nanoparticles via a template-free ionothermal synthesis in Deep Eutectic Solvents: Effect of hydrogen bond donor type](#)

Dina A Gaber, Giovanni Palmisano, Maguy Abi Jaoude, Khalifa University; Georgios N Karanikolos, University of Patras

Room Number: 1044, E1 (Female Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Biomedical Engineering.

Conference Chair: Likun Zhang, Tsinghua University and Nada Zahour, American University of Sharjah

[11.30 Identification of abdominal ECG lead location over fetal development for non-invasive single channel W-NETR fetal ECG extractor](#)

Murad Almadani, Leontios Hadjileontiadis, Ahsan Khandoker, Khalifa University

[11.40 Fetal ECG-based analysis reveals the impact of fetal behavioural states on maternal-fetal heart rate synchronization](#)

Amna Samjeed, Ahsan Khandoker, Khalifa University

[11.50 A 3.55- \$\mu\text{m}\$ ultrathin, skin-like, compliant, and seamless ionic conductive electrode for epidermal electrophysiological signal acquisition and healthcare](#)

Likun Zhang, Zhenglin Chen, Peiwu Qin, Tsinghua University

[12.00 EEG-Based Brain Source Localization of Mental Stress in the workplace](#)

Nada Zahour, Hasan Mir, Malik Nasir Afzal Khan, Hasan Al-Nashash, American University of Sharjah

[12.10 EEG-based Emotion Recognition Using Bi-directional Brain Rhythm Interactions](#)

Feryal A Alskafi, Ahsan Khandoker, Herbert F Jelinek, Khalifa University; Faezeh Marzbanrad, Monash University, Australia

[12.20 Investigating automated regression models for estimating left ventricular ejection fraction levels in heart failure patients using circadian ECG features](#)

Sona Alyounis, Leontios J. Hadjileontiadis, Ahsan Khandoker, Aamna Alshehhi, Mohanad Alkhodari, Khalifa University; Cesare Stefanini, Dean, Italy

[12.30 Care4MyHeart \(C4MH\): Home-Based Cardiac Rehabilitation System Using Wearables and Serious Game](#)

Mohd Khalil Abu Hantash, Aamna Alshehhi, Ahsan Khandoker, Leontios Hadjileontiadis, Khalifa University

Room Number: 1005, E1 (Female Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Environmental Engineering & Sustainability.

Conference Chair: Hanan Saleh Hussein, Zayed University and Marwa Sakr, United Arab Emirates University

[11.30 Transparent Wood - An emerging sustainable material for future](#)

Priji Biju and Gul Jokhio, British University in Dubai

[11.40 MXene/rGO nanocomposite electrodes in capacitive deionization](#)

Rahat Alam and Linda Zou, Khalifa University

[11.50 Screening of Deep Eutectic Solvents for Valuable Metals Extraction from Wasted Lithium-ion Batteries](#)

Hussein K Amusa, Ahmad Darwish, Hassan Arafat, Enas M. Nashef, Khalifa University

12.00 Generation of Air Micro-Nanobubbles and their Special Properties for Water and Wastewater Treatment

Marwa Sakr , Mohamed Kizhisseri , Mohamed Mohamed , Munjed Maraqa and Mohamed Hamouda ,United Arab Emirates University

12.10 Smarter Farms, Greener Planet: Unlocking Energy Efficiency through Agricultural IoT

Hanan Saleh Hussein, Zayed University

12.20 Estimation of groundwater and contaminant flux using down-hole system

Qasim Khan, Mohamed Mohamed , United Arab Emirates University

12.30 Impact of water salinity and particle size on soil evaporation through non-destructive NMR characterization

Abdelhamid Khaled Ads , Tiejun Zhang and Maryam Rashed AlShehhi, Khalifa University

Room Number: 1007, E1 (Female Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Mathematics & Statistics.

Conference Chair: Marwa Emad Al Refai, Khalifa University and Hadeel A Kittaneh, American University of Sharjah

11.30 Reability of Numerical Rogue Wave Simulation

Abrari N Hasmi, Hadi Susanto, Khalifa University

11.40 Stability of Threshold Boolean Networks

Hadeel A Kittaneh, Abdul Salam Jarrah, American University of Sharjah

11.50 Examining the interaction dynamics between oral microbiome, metabolic activity and psychological traits

Siti Maghfirotul Ulyah, Khalifa University

12.00 Study of SIR Model through Quadratic Stochastic Processes: Mathematical Insights into Epidemic Dynamics

Taimun Qaisar, United Arab Emirates University

12.10 Fractional Calculus: An Exposition

Muhammad Rizki Fadillah, Khalifa University

12.20 Relative Range Approach for Detecting Outliers

Dania Dallah, Hana Sulieman, Ayman Alzaatreh, American University of Sharjah

12.30 Discrete Waveform Relaxation Algorithms for RLC Transmission Line Circuits

Marwa Emad Al Refai, Mohammad Al-Khaleel, Khalifa University

Room Number: 1048, E1 (Female Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Clinical, Pre-Clinical, Health & Life Sciences

Topic: Cancer and Oncology

Conference Chair: Sedq Ahmad Moutraji, Al Ain University and Shamaa Abdul Samad, United Arab Emirates University

11.30 Alpha-mangostin inhibits viability, migration, and spheroidogenic ability of tumorigenic mouse gastric stem cells and human gastric cancer cell lines

Ziad Sabry Khalaf and Sherif Karam, United Arab Emirates University

11.40 Development of an in vitro cell-based model for assessment of hENT1 transport: Implication for novel hENT1 inhibitor Drug discovery

Sedq Ahmad Moutraji , Azza Ramadan and Nour Sammani, Al Ain University

11.50 Acute Myeloid Leukaemia Biomarkers Discovery Using Proteomics Approaches

Safa Al Amrani, Jalila Alshekaili and Murtadha Al-Khabori, Sultan Qaboos University

12.00 Anti-breast cancer potential of Haplophyllum tuberculatum ethanolic extract

Aesha Rahma, United Arab Emirates University

[12.10 Determine the function of MYD88 gene in resistant triple negative breast cancer cells](#)

Fatma Mohamed Fouad Hassan and Sirin Adham, Sultan Qaboos University

[12.20 Unrevealing the role of long non-coding RNA, PRMT5-AS1 in pancreatic ductal adenocarcinoma](#)

Neha Mehra, United Arab Emirates University

[12.30 Anti-Cancer Activity of Capparis spinosa Against HCT-116 Colorectal Cancer Cells](#)

Shamaa Abdul Samad and Yusra Al Dhaheeri, United Arab Emirates University

Room Number: 1052, E1 (Female Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Clinical, Pre-Clinical, Health & Life Sciences

Topic: Diabetes & Cardiovascular Disease, Pharmacology, and Other topics in Clinical, Pre-Clinical & Health

Conference Chair: Samer O. Alalalmeh, Ajman University and Harun Rashed Toumi, United Arab Emirates University

[11.30 Predictive, Preventative, Personalized, And Participatory \(P4\) Medical Practices Can Positively Impact The Health Status Of An Individual \(OMICs and Bariatric Surgery\)](#)

Balqees Saeed Almazrouei (Khalifa University & Biotechnology Centre, United Arab Emirates); Habiba Alsafar (Khalifa University of Science, Technology and Research, United Arab Emirates); Juan S. Barajas-Gamboa and Carlos Abril (Cleveland Clinic Abudhabi, United Arab Emirates)

[11.40 Development of the Arabic Version of the Hypertension Numeracy Assessment Tool](#)

Samer O. Alalalmeh, Omar E. Hegazi, Ahmed Abdalla Gaili and Sanah Hasan, Ajman University

[11.50 Personalized Evaluation of Clopidogrel Responsiveness Using Point-of-Care Platelet Reactivity, Pharmacogenetic Testing, Drug Interaction, and Medication Adherence in Peripheral Vascular Disease](#)

Mohammed Husham Khattab (United Arab Emirates University, United Arab Emirates); Mohamed Baguneid and Hagir Mohamed (Sheikh Shakhbout Medical City, United Arab Emirates); Salahdien Aburuz (United Arab Emirates University, United Arab Emirates)

[12.00 Regulatory Signature of Striatin on the Adrenergic Signaling in the Failing Heart](#)

Shamma Albakr, Stephanie Chacar, Samar Ahmed and Samira Babiker, Khalifa University, Frank Howarth, United Arab Emirates University, Ali Khraibi, Habiba Alsafar, Moni Nader, Khalifa University

[12.10 Uncomplicated Urinary Tract Infection in Oman: A prospective Insight of the Etiology, Resistome and Diagnostic Antimicrobial Stewardship](#)

Aisha Said Salim Al-Mufarji, Sultan Qaboos University

[12.20 The effect of nerolidol on the renal dysfunction following bilateral ureteric obstruction in the rat](#)

Harun Rashed Toumi, Sundus Farag Sallabi, Sr., Loay Lubbad and Fayez Hammad, United Arab Emirates University

Room Number: 1054, E1 (Female Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Education, Arts, Humanities & Social Sciences

Topic: Education

Conference Chair: Fajr M. AlKouz United Arab Emirates University, and Pengqing Yu, Tsinghua University

[11.30 Investigating Parental Roles in Developing Children's Emergent Literacy in English, their Second Language, through Storybook Reading in a Sample of Kuwaiti Homes](#)

Fajr M. AlKouz, United Arab Emirates University

[11.40 Learners and Teacher's Perceptions of Summarizing Strategies for Reading Comprehension](#)

Safeya Al Katheeri, United Arab Emirates University

11.50 School Leadership Supports for The Practice of Inclusive Education in Elementary Schools in the United Arab Emirates

Aysha Saeed Al Nuaimi, United Arab University & ESE

12.00 The Role of Task-Based Language Assessment in Language Learning and Learner Autonomy Enhancement in an EFL High School Context in the UAE

Eman Yousef Mahmoud, United Arab Emirates University

12.10 An Exploratory Study of Building an Interdisciplinary Competence Framework

Pengqing Yu and Zhong Zhou, Tsinghua University, Hong Kong

12.20 التفكيرين الناقد والأخلاقي كمتنبات بالذكاء الرقمي لدى طلبة الصف الحادي عشر للتعليم ما بعد الأساسي بمحافظة مسقط

Fawziya Saif Alsaïdi, (Maskat & The Ministry of Education, Oman) and Saif Nasser Al-Maamari (College of Education, Oman)

12.30 Sensory Processing Disorder in Special Education

Hawraa Mohammad Habeeb United Arab Emirates University, Maria Efstratopoulou United Arab Emirates University & ECE

12.40 Exploring Four Dimensions of Language Literacy Assessment: Towards a Comprehensive Model of Language Assessment Literacy in English

Mais Ahmad, United Arab Emirates University & Edupartners

12.50 Factors Influencing UAE High School Chemistry Students' Learning of Organic Qualitative Analysis: A Qualitative Study

Manal Jumah Almahdawi , United Arab Emirates University & United School, United Arab Emirates

Room Number: 1055, E1 (Female Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Education, Arts, Humanities & Social Sciences

Topic: Behavioral Sciences & Communication Studies, Psychology, Languages & Linguistics

Conference Chair: Sara Issam Kreishan , University of Sharjah and Shatha Khairi, Al Ain University

11.30 Exploring Psychological Insights through Children's Drawings: A Mixed-Methods Approach

Sara Saleh Bin Amro, Alain University

11.40 Changing the Arab perception toward mental health: a case study of Wijdan podcast

Sara Issam Kreishan and Syed Ali Hussian, University of Sharjah

11.50 تصميم برنامج تدريبي مقترح حول تأثير التكنولوجيا الحديثة على مستقبل منظومة العلاقات الأسرية في القرن 21

Fatma S Alabri (Mohammed V University & College of Educational Sciences, Morocco); Family Development Department Branches, Sharjah (Supreme Council for Family Affairs, United Arab Emirates)

12.00 Institutional optimism and its relationship to some demographic variables among employees of the Consumer Protection Authority in the Sultanate of Oman

Basma Salem Albalushi, Mohammed V University in Rabat

12.10 Impact of the Presence of a Child with Attention Deficit Hyperactivity Disorder (ADHD) on the Quality of Family Life

Shatha Khairi, Al Ain University

12.20 تصورات الممارسين العاملين مع الأشخاص ذوي اضطراب طيف التوحد تجاه التحديات التي تحول دون استخدام تقنيات الذكاء الاصطناعي في التدخلات المهنية. دراسة ميدانية مطبقة على مراكز التوحد بسلطنة عمان

Fatima Mohammed Alkalbani , Sultan Qaboos University

12.30 The Effects of Dynamic Assessment on EFL Learners' Grammar Achievement in the UAE

Abdelhamid Khalil, The British University in Dubai

12.40 Identifying Students' Perceptions of Social Reinforcement in the Classroom

Vighnesh P Kizhepat, Özgür Parlak and Philip McCarthy, American University of Sharjah

Room Number: 1008, E1 (Female Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: **Physics.**

Conference Chair: Mohamed Elfatih Daoud and Zaheer Iqbal, Khalifa University

11.30 A New Group Structure within General Relativity

Jack C M Hughes and Fedor Kusmartsev, Khalifa University

11.40 Carbon nanotubes based rectenna for photo-sensors

Husam AlTakroori, Sherif Elsayed, Baker Mohammad and Moh'd Rezeq, Khalifa University

11.50 Exploring Metavalent Bonding Effects on Phonon Transport in 2D γ -MX Monolayers

Surabhi Suresh Nair and Muhammad Sajjad, Khalifa University, Kanishka Biswas (New Chemistry Unit, India), Nirpendra Singh, Khalifa University

12.00 A multi-state memory device based on the Manipulation of a single skyrmion using spin-polarized current

Warda Al Saidi, Sultan Qaboos University

12.10 Nanoscale Mapping of the Residual Stresses in AlSi10Mg Alloy Manufactured with Selective Laser Melting Method

Mohamed Elfatih Daoud, Dalaver Anjum and Kamran Khan, Khalifa University,

12.20 Unlocking the Potential of Nanocluster Catalysts in Reverse Water Gas Shift Reactions

Moshood Olawale Bolarinwa, Kyriaki Polychronopoulou, Nirpendra Singh and Dalaver Anjum, Khalifa University

12.30 Novel Biphenylene Networks as Anodes for Lithium-ion Battery: A First-principles Study

Adewale Hammed Pasanaje, Daniel Choi, Nirpendra Singh, Khalifa University

12.40 Silicon platform for broadband mid-infrared photonics with high Q-factor

Zaheer Iqbal, Mauro Fernandes Pereira and Humaira Zafar, Khalifa University

Room Number: 1045, E1 (Female Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Clinical, Pre-Clinical, Health & Life Sciences

Topic: **Artificial Intelligence, Bioinformatics and Pharmacy**

Conference Chair: Fatima Alshamsi, Khalifa University, and Rahaf M. Ahmad, United Arab Emirates University

11.30 Boosting the accuracy and chemical space coverage of SCAM detection using the BAD molecule filter

Abdallah Faissal Abou Hajal, Mohammad A Ghattas, (Al Ain University), Richard Bryce (University of Manchester, United Kingdom (Great Britain))

11.40 RespiroDynamics: A Multifaceted Dataset for Enhanced Lung Health Assessment Using Deep Learning

Ahmed Sharshar (Egypt-Japan University of Science and Tehnology, Egypt & Mohamed Bin Zayed University of Artificial Intelligence), Mohammad Yaqub, Mohsen Guizani, Mohamed Bin Zayed University of Artificial Intelligence

11.50 Beyond the Game: Multimodal Emotion Recognition Before and After Gameplay

Efstratia Ganiti-Roumeliotou (Khalifa University of Science, Research and Technology, United Arab Emirates); Sofia B. Dias (Faculdade de Motricidade Humana, Portugal); Herbert F Jelinek (Healthcare Engineering Innovation Center, Khalifa University & Charles Sturt University, United Arab Emirates); Leontios Hadjileontiadis (Khalifa University of Science and Technology, United Arab Emirates)

12.00 Decoding Endothelial Immunomodulation

Fatima Alshamsi, Mira Mousa, Halima Alnaqbi, Sarah Azzam and Habiba Alsafar, Khalifa University

12.10 Pathogenicity Prediction of Breast Cancer Genetic Variants using Machine Learning Algorithms

Rahaf M. Ahmad and Mohd Saberi Mohamad, United Arab Emirates University

12.20 Screening And Bioinformatics analysis of functional endogenous microRNA-mRNA regulatory networks in oral squamous cell carcinoma

Newsheen Bhat, Sahar Mohsin, United Arab Emirates University

12.30 A hybrid model for multiclassification based on DNA sequence to image conversion

Ruihao Zhang and Xiao Liu (Tsinghua University, China)

12.40 Exploiting Pharmacogenomic Data to Predict the Safest Statins for Emiratis

Mais N Alqasrawi and Zeina Almahairi, United Arab Emirates University

Room Number: 1053, E1 (Female Side)

Oral Session: 1

11.30 AM - 1:00 PM

Track: Clinical, Pre-Clinical, Health & Life Sciences

Topic: Agriculture, Fisheries & Food, Biology, Plant Sciences

Conference Chair: Archana Mathew Mathai and Kehinde Ganiyat Lawal, United Arab Emirates University

11.30 Organic-based nutrient solutions for sustainable vegetable production in a zero-runoff soilless growing system

Maitha Almheiri, United Arab Emirates University

11.40 Exploring Desert Sand as a Sustainable Growth Medium for Microgreens: A Comparative Analysis of Growth, Yield, and Nutritional Content

Chythra Nair and Abdul Jaleel Cheruth, United Arab Emirates University

11.50 Increasing the phytoremediation efficiency of heavy metal-contaminated soils in the UAE using endophytic actinobacteria for sustainable agriculture

Archana Mathew Mathai, Synan AbuQamar and Khaled El-Tarabily, United Arab Emirates University

12.00 Valorizing date seeds in biscuits

Meththa Ranasinghe, Sajid Maqsood, United Arab Emirates University, Constantinos Stathopoulos, University of Canberra

12.10 Antimicrobial and prebiotic potential of date seed polysaccharides extracted using an ultrasound-assisted deep eutectic solvent system

Athira Jayasree Subhash and Mutamed Mohammad Ayyash, United Arab Emirates University

12.20 Development of Carboxymethylcellulose-Based Active and Edible Food Packaging Films Using Date Seed Components as Reinforcing Agents

Kehinde Ganiyat Lawal and Sajid Maqsood, United Arab Emirates University

12.30 Physicochemical, microbiological, and antioxidant properties of camel and bovine milk fermented with Lactic acid bacteria (LAB)

Santhoshani Warakulle, United Arab Emirates University

12.40 Assessing the Impact of Abiotic Stresses on Quinoa Seed Germination: Implications for Cultivation in Arid Climates

Azza Sulaiman Khalid Alhadhrami and Ali Al Kiblawy, University of Sharjah

12:30 PM - 14:00 PM

Lunch Break (Food Court)

Saturday, 20 April 2024

Room Number: 1012, E1 (Male Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Computer & Information Science.

Conference Chair: Mohammed El Amine Said Azz, Mohamed Bin Zayed University of Artificial Intelligence and Zaid Shuqfa, United Arab Emirates University

2.00 Efficient Visualization Recommendation for Time Series Data

Heba Helal and Mohamed Sharaf, United Arab Emirates University

2.10 Filter Sorting and Reordering for Reducing Switching Activity in DNN Model Inference

Huruy T Tesfai, Leen Younes, Hani Saleh, Mahmoud Al-Qutayri and Baker Mohammad, Khalifa University

2.20 Towards User-Centered Design for Motor Imagery Brain-Computer Interface: From MI-BCI Illiteracy to MI-BCI Unfamiliarity

Zaid Shuqfa, United Arab Emirates University

2.30 DOS Based Robust and Fair FL

Mohammed El Amine Said Azz, Mohamed Bin Zayed University of Artificial Intelligence

2.40 From Motor Imagery Brain-Computer Interface Illiteracy to Unfamiliarity

Zaid Shuqfa, United Arab Emirates University

2.50 Robust Logo Inspection in Military Aircraft: A Comparative Study of CNN Models

Nasser Jamal Al-Saif, Khalifa University

Room Number: 1027, E1 (Male Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Chemical Engineering

Conference Chair: Sarah Hamdan and Muhammad Usman Khalifa University

2.00 Bifunctional Tandem Catalysts for CO₂ hydrogenation to Light Olefins

Sadiya Mushtaq, Khalifa University

2.10 Nano-porous Carbon-based Electrodes for the Electro-catalytic Reduction of CO₂ to Methanol

Abdelrahman Akram Fouda, Maryam Khaleel, Ludovic Dumée, Khalifa University

2.20 Photocatalytic Hydrogen Production over Zinc Cadmium Sulfide nanoparticles

Sarah Hamdan, Khalifa University

2.30 Phosphorus Modified Cu Ferrite Composites for Photocatalytic Ozonation of Lomefloxacin

Hebah S Jarusheh, Giovanni Palmisano, Mohammad Abu Haija, Fawzi Banat, Khalifa University

2.40 Design of Zeolite-based Catalyst for the Conversion of CO₂ into Long-chain Hydrocarbons

Abdulla Alhendi, Kyriaki Polychronopoulou, Maryam Khaleel, Khalifa University

2.50 Thermochemical Conversion of CO₂/H₂O using perovskites

Muhammad Usman, Khalifa University

3.00 Electrochemical Conversion of CO₂ at Room Temperature Using Liquid Metal Systems

Mohamed Ali Alyassi, Ricardo Nogueir, Blaise Leopold Tardy, Ludovic Dumée, Khalifa University

3.10 Production of hydrogen and high-value carbon nanofibers through catalytic methane decomposition over Ni-Cu/AC catalysts

Adeel Ahmad, Abdul Rasheed Pillantakath, Khalifa University & Centre of Catalysis and separation; Ahmed Al Shoaibi, Srinivasa Chandrasekar, Khalifa University

Room Number: 1028, E1 (Male Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Chemical Engineering

Conference Chair: Safal Mestri and Ahmad Saud Jawed Khalifa University

2.00 3D-printed zeolite X gyroid monoliths as selective CO₂ capture adsorbents

Kedar Bharat Jivrakh, Anish Mathai Varghese, Kyriaki Polychronopoulou, Rashid Abu Al-Rub AlAmoodi, Georgios Karanikolos, Khalifa University

2.10 Graphene Quantum Dots (GQDs) Assisted Ultrafiltration Membranes for the Removal of Phenols from Oil and Gas Produced Water

Muhammad Kashif Raza, Jisha Kuttiani Ali, Emad Alhseinat, Khalifa University

2.20 Functionalized metal oxide nanomaterial in photothermal membrane distillation for sustainable water desalination

Ahmad Saud Jawed, Hanaa Hegab, Shadi Wajih Hasan, Khalifa University

2.30 Ionic-Liquids-Enhanced Membranes for Protein Sorption in Wastewater Treatment

Mujeeb O. Kareem, Ludovic Dumée, Enas M. Nashef, Khalifa University

2.40 Selective Surface Chemistry Patterning of Microfluidic Separators using Zeolites

Ibrahim K Almazrouei, Nahla AlAmoodi, Maryam Khaleel, Khalifa University

2.50 Fabrication of Bio-based Anion Exchange Membrane for Reverse Electrodialysis

Hanan Nasser Al Hasani, Emad Alhseinat, Tu Phuong Pham Le, Khalifa University

3.00 Developing Nanofiltration Membrane with Enhanced Anti-fouling, Salt Rejection and Permeate Flux Performance

Safal Mestri, Khalifa University

3.10 A Ti₃C₂T_x Electrocoagulation Membrane Filtration Pretreatment System

Mariam Ouda, Shadi Wajih Hasan, Khalifa University

Room Number: 1013, E1 (Male Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Electrical & Electronic Engineering

Conference Chair: Nour M Shabar, Khalifa University and Jahanara Thasnim, American University of Sharjah

2.00 Real-Time Switched Capacitor Based Power Side-Channel Attack Detection

Leen Younes, Baker Mohammad, Hani Saleh, Mahmoud Al-Qutayri, Khalifa University; Dima Kilani, The University of British Columbia

2.10 A Multi-Functional Virtual Impedance for Droop Controlled Inverter-Based Microgrids

Nour M Shabar, Hatem H Zeineldin, Ehab El-Saadany, Khaled Aljaafari, Khalifa University

2.20 ANN Based Improved Direct Torque Control of Open End Winding Induction Motor

Kaif Ahmed Lodi, Khalifa University

2.30 A Novel Control for Battery Degradation Reduction

Ammar Atif Ibrahim, Mohamed Shawky El Moursi, Khalifa University, Tarek EL-Fouly, Khalifa Hassan Al Hosani, Khalifa University

2.40 Behavioral Modeling of RF Power Amplifiers Using Real Values Time Delay Neural Networks

Sharafa Idowu Bankole, Oualid Hammi, American University of Sharjah

[2.50 Behavioral Modeling of Dual-Band RF Power Amplifiers using Augmented BiLSTM Structures](#)

Majid Ahmed, Oualid Hammi, American University of Sharjah

[3.00 Accidental Protection of Vehicles through Energy Control](#)

Jahanara Thasnim, Sushil Kannan, Hafsa Shajidha, American University of Sharjah

[3.10 Application of a newly developed Integrated NLC-SHM Control on the Packed-U-Cell-7 inverter and its simulation analysis](#)

Shahbaz Ahmad Khan, Khalifa University

Room Number: 1016, E1 (Male Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: [Electrical & Electronic Engineering](#).

Conference Chair: Mohammad Suhail, Ismail Shittu, Khalifa University

[2.00 Adaptive Receiver Search Strategy for Electronic Support: A Reinforcement Learning Approach](#)

Muhammad Shahzad Arif, Paschalis C. Sofotasios, Sami Muhaidat, Khalifa University

[2.10 An Intrusion Detection System for Line Relays](#)

Ahmad Mohammad Saber, Hatem H Zeineldin, Ehab El-Saadany, Khalifa University

[2.20 Novel Non-Destructive Fog Dissipation System](#)

Mohammed Yassin Ibrahim, Reyad El-Khazali, Khalifa University

[2.30 Inverse Stealth Metamaterial Design With Customized Deep Generative Model](#)

Ismail Shittu, Ibrahim (Abe) M. Elfadel, Khalifa University

[2.40 Memory-Centric Computing Using RRAM for SNN Algorithm](#)

Nada AbuHamra, Baker Mohammad, Khalifa University

[2.50 A 1.91 TOPS/W end-to-end RNS CNN Accelerator](#)

Vasilis Sakellariou, Hani Saleh, Thanos Stouraitis, Khalifa University; Vassilis Paliouras, Ioannis Kouretas, University of Patras

[3.00 A Four-Phase Input-Parallel Output-Series DC-DC Converter with Minimized Input Current Ripple for Fuel Cell Applications](#)

Babina Babu Maliyekkal, Khalifa University; Vinod Khadkikar, Advanced Power and Energy Center

[3.10 Frequency Domain Decomposition and Kernel based SVM for classification of Power Quality Disturbances](#)

Mohammad Suhail, Mohamed Shawky El Moursi, Khalifa Hassan Al Hosani, Khalifa University

Room Number: 1020, E1 (Male Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: [Mechanical Engineering](#)

Conference Chair: Moza Ibrahim Alteneiji, United Arab Emirates University and Abdulla T Alhourani, Khalifa University

[2.00 Effect of Varying Liquid Properties on the Droplet Diameter and Volume Distribution Using Pressure-swirl Atomizer](#)

Abdullah SA Shaikh, Dimitrios Kyritsis, Khalifa University

[2.10 Heat Transfer and Flow-Induced Vibrations of Dual Cylinders in Tandem and Staggered Arrangements](#)

Ussama Ali, Md Islam, Isam Janajreh, Khalifa University

[2.20 Thermal Modeling of Friction Stir Welding of High Density Polyethylene Plates](#)

Abdulla T Alhourani, Imad Barsoum, Khalifa University

[2.30 Numerical Analysis of Subcritical Flow over Stationary Cylinders in Tandem using URANS and DDES](#)

Ahmed Mohamed Elgendy, Md Islam, Isam Janajreh, Khalifa University

[2.40 Enhancing the Humidification Process in the Humidification-Dehumidification Desalination Unit](#)

Mohammed Ziauddin, Fadi Alnaimat, Bobby Mathew, United Arab Emirates University

[2.50 Crystallizer Heat Transfer Analysis: A Sensitivity Analysis](#)

Anas AL-Aghbari and Isam Janajreh (Khalifa University, United Arab Emirates)

[3.00 Modeling and Assessment for the Estimation of Heat Transfer Coefficients on Curved Downwards-Facing Heated Walls in Application to ERVC](#)

Sameer Osman, Imran Afgan, Yacine Addad, Khalifa University

[3.10 Enhancing The Heat Transfer In Solar Receivers Using Three Different Types Of Triply Periodic Minimal Surfaces](#)

Moza Ibrahim Alteneiji, Saeed Alnuaimi, United Arab Emirates University

Room Number: 1021, E1 (Male Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Aerospace Engineering

Conference Chair: Kamran Khan, Khalifa University and Hamad Almarzooqi, United Arab Emirates

[2.00 Exploring the effects of additive manufacturing variables on buckling strength of plate lattices](#)

Muhammad Khizer Ali Khan, Kamran Khan, Khalifa University

[2.10 The Thermo-electro-mechanical Response of Graphene Based Multifunctional Composites for Aircraft Structures](#)

Sara Alzarooni, Kamran Khan and Rehan Umer, Khalifa University

[2.20 Real-time resident space object orbit determination using distributed satellite systems](#)

Khaja Faisal Hussain, Khalifa University

[2.30 Hybrid Origami-inspired cylindrical structures for energy absorption applications](#)

Khaja Fayaz Hussain, Khalifa University

[2.40 Piezo-Resistive Response of embedded sensors of rGO coated and GnP paper](#)

Kamran Khan and Mohamed Salman Sikandar Bathusha, Khalifa University

[2.50 UAV Failure Recovery Using Deep Reinforcement Learning with Direct Simulation to Reality Transfer](#)

Norhan Mohsen Elocia III Khalifa University

[3.00 Design, test, and verification of a reaction wheel for CubeSats](#)

Zayed Tariq Alktheeri, Sean Swei, Djamal Darfilal, Abderrahim Nabi, Khalifa University

[3.10 Aeroelastic Tailoring of High Aspect Ratio Strut-braced Wings](#)

Hamad Almarzooqi, Rafic Ajaj, Wesley James Cantwell, Khalifa University

Room Number: 1022, E1 (Male Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Artificial Intelligence and Bioinformatics

Conference Chair: Ziqing Li, Tsinghua University

[2.00 CochleaWave Filterbank](#)

Shibani Hamsa, Mohamed Lamine Seghier, Ernesto Damiani, Naoufel Werghi, Khalifa University

2.10 UWIE-TR: Improving Underwater Tracking Performance With Transformer-based Image Enhancement

Basit Olakunle Alawode, Sajid Javed, Khalifa University

2.20 Neuromorphic Optical Flow For Low-Power Edge-AI Applications

Muhammad Ahmed Humais, Khalifa University Yahya Zweiri, Khalifa University

2.30 Discrimination of Real and Deep Fake Videos using EEG Signals

Muhammad Riyyan Khan, Usman Tariq, Hasan Al Nashash, American University of Sharjah; Abhinav Dhall, IIT

2.40 Reducing Experimental Overhead in HBIR Research: A Methodological Breakthrough

Yifan Liu, Xing Liu, Xingjun Wang. Tsinghua University

2.50 Human Health Indicator Prediction from Gait Video

Ziqing Li, Tsinghua University

Room Number: 1036, E1 (Male Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Civil Engineering.

Conference Chair: Alaa A.A. Wazwaz, Sultan Qaboos University and Mohammed Abughali, United Arab Emirates University

2.00 Modified Long Term Aging Protocols for Crumb Rubber Modified Bitumen

Gohar Alam, Ahmed Faheem, Mutasem El Fadel, Khalifa University

2.10 Microstructure Characterization of Cementitious Composites Incorporating MWCNTs

Ibrahim Haj Fattouh, Tae-Yeon Kim, Khalifa University and Mohammed Abughali, United Arab Emirates University

2.20 Effect of Recycled Fine Aggregates on the Performance of Geopolymer Masonry Mortar

Elen R Abuowda, Hilal ElHassan, El-Maaddawy, United Arab Emirates University

2.30 Microstructural Dynamics in Cement Mortars Fortified with an Innovative Graphene Derivative

Mohammad Zuaiter, Tae-Yeon Kim, Fawzi Banat, Rashid K. Abu Al Rub, Khalifa University

2.40 Ferrochrome slag as a supplementary cementitious material towards sustainable construction

Alaa A.A. Wazwaz, Kazi Md Abu Sohel, Khalifa Al-Jabri and Mohamed Meddah, Sultan Qaboos University

2.50 Production of a Self-Leveling Fly Ash-Slag Cement-Free Mortar

Joud Hwalla, Hilal ElHassan, Tamer El-Maaddawy, United Arab Emirates University; Joseph Assaad, University of Balamand

3.00 Effect of Carbon Nanotubes on Mechanical Properties of 3D Printed Cementitious Materials

Mohd Mukarram Ali, Tae-Yeon Kim, Rashid Abu Al-Rub, Bashar El-khasawneh, Khalifa University

3.10 Influence of the sieving process and the addition of glass fibers on the properties of geopolymer concrete made with recycled concrete aggregates

Mohammed Abughali, Hilal ElHassan, Tamer El-Maaddawy, United Arab Emirates University

3.20 Where is the Downtown? A morphological study of Greater Muscat

Hafsa M Al Balushi, Zainab Al Abri and Yasa Al Malki, Sultan Qaboos University, Oman

Room Number: 1023, E1 (Male Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Industrial Engineering

Conference Chair: Mariam Bader and Dalal Almansoori, Khalifa University

2.00 Community Detection Approach-Telecommunication Clients Grouping: VNS and Louvain Methods

Nadeen M Faraj and Nenad Mladenovic, Khalifa University

2.10 Comparative Analysis of Machine Learning Algorithms for Hepatitis C Virus Prediction

Khaled M Toffaha, Mecit Can Emre Simsekler, Mohammad Omar, Khalifa University

2.20 Evaluation of the Critical Failure Factors of Process Improvement Methodologies: An AHP Approach

Mariam Bader, Raja Jayaraman, Ravindra Stephen Goonetilleke, Khalifa University; Jiju Antony, Northumbria University

2.30 A Decision Support System for Carbon Traceability for Sustainable Supply Chains using Blockchain and Artificial intelligence

Pratyush Kumar Patro, Adolf Acquaye, Khalifa University

2.40 Soiling Detection on Solar Panels using Artificial Intelligence

Hussein Mohamad Ali Kaya, Zied Bahroun, Noha M. Hassan, American University of Sharjah

2.50 A Data-based Machine Learning for the Prediction of Acute Kidney Injury in the Perioperative Settings

Dima T Al Absi, Mecit Can Emre Simsekler, Mohammad Omar, Siddiq Anwar, Khalifa University

3.00 Energy-Efficient Routing and Scheduling for Electric Vehicle Fleets in Urban Areas

Mohamed Abdelmagid, Maher Maalouf, Khalifa University

3.10 Comparative analysis of Hydrogen Production Techniques From Renewable and Non-Renewable Sources

Dalal Almansoori, Khalifa University

Room Number: 1024, E1 (Male Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Materials Science & Engineering.

Conference Chair: Swati Singh, Khalifa University

2.00 3D Printing Technology for Switchable Smart Lenses with Photochromic Powder

Bilal Bukhari, Khalifa University

2.10 Gold Nanoparticle Through Green Synthesis For Antibacterial Contact Lenses With Selective Color Filtering

Muhammed Shebeeb C, Haider Butt, Liya Jacob, Khalifa University

2.20 Catalytic Synergy of Bimetallic Catalyst for Enhanced NH₃ Synthesis and Cracking

Swati Singh, Eswara Komarala, Kyriaki Polychronopoulou, Khalifa University

2.30 Next-Generation Pressure Sensors: Creating Self-Healing, Graphene-Infused Double-Network Hydrogels for Tactile Applications in Wearables

Amaal Yahia Romih, Khalifa University

2.40 A DFT Study: TiNbMoTa High Entropy MXene Electrocatalyst for the Hydrogen Evolution Reaction

Louai Maghrabi and Nirpendra Singh, Kyriaki Polychronopoulou, Khalifa University

2.50 The Influence of Femtosecond laser Shock Peening on Functional Fatigue Properties of TiNbZrSn BioCompatible Shape Memory Alloy

Muhammad Asim, Wael Abuzaid, Ali Sami Alnaser, Faisal Mustafa, American University of Sharjah

3.00 Oxidation State and Reaction Pressure Steer the Selectivity of CO₂ Electroreduction on Copper Oxides

Asghar Ali, Ali Sami Alnaser, American University of Sharjah

Room Number: 1003, E1 (Female Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: **Chemistry**

Conference Chair: Hengyue Xu, Tsinghua University and Saswathy Rema Devi, Khalifa University

2.00 Synthesis and Biological Applications of Some Novel Selenourea-Quinoline, and Selenourea-Benzimidazole

Abedalqader Salameh AbuHussein, United Arab Emirates University

2.10 Development of Biogenic Ferrite Photocatalysts for Ciprofloxacin Removal from Water Bayan Alqassem, Mohammad Abu Haija, Fawzi Banat, Giovanni Palmisano, Khalifa University

2.20 Unveiling the Mechanistic and Structural Factors for Enhanced HER Catalysis in Co/Ni Nanoclusters

Hengyue Xu, Lan Ma, Tsinghua University

2.30 Biomaterial-based Nerve Conduit for Spinal Cord Injury Patients

Aya A Nasser, Hemant Singh, Syed Ashraf, Shabir Hassan, Khalifa University

2.40 In situ Growth of Covalent Organic Framework into Graphene-based Material for Hybrid Capacitive Deionization (H-CDI)

Najat Maher ALdaqqa, Dinesh Shetty, Emad Alhseinat, Abdul Fahim Arangadi, Abdul Khayum Mohammed, Khalifa University

2.50 Theoretical Prediction on the Size-Selectivity of Carbon Nanotubes and Fullerenes in Photoresponsive Nanorings

Saswathy Rema Devi, Akbar Ali Mohamad, Khalifa University

3.00 Impact of synthesis strategies on MnFe₂O₄ Nanoparticles for the Degradation of Phenol Noor Nader Albadawi, Khalifa University

3.10 Highly stable 3D conjugated metal-organic framework for energy storage application

Safa A Gaber, Abdul Khayum Mohammed, Dinesh Shetty, Khalifa University; Ajmal Pandikassala, Sreekumar Kurungot, CSIR-National Chemical Laboratory

Room Number: 1044, E1 (Female Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: **Engineering, Information Technology & Physical Sciences**

Topic: **Biomedical Engineering**

Conference Chair: Tasneem Aljassim, American University of Sharjah

2.00 Interfacing Authentic Cell Membranes With 2D Materials For Biological Sensing

Nada K Morsy, Kishore K Jena, Vincent Chan, Sung Lee, Abdulsamad, Anna-Maria Pappa, Khalifa University

2.10 Polymer-Coated Metal Organic Framework for Drug Delivery

Tasneem Aljassim, Rana Sabouni, American University of Sharjah

2.20 A biofilm-on-chip platform for antibiofouling studies

Deema Khaled Islayem, Sagar Arya, Sung Lee, Charalampos Pitsalidis, Anna-Maria Pappa, Khalifa University

2.30 Enhancing Dynamic Causal Modeling for fMRI Data through Multivariate Variational Mode Decomposition

Charalampos Lamprou, Aamna Alshehhi, Leontios Hadjileontiadis, Mohamed Lamine Seghier, Khalifa University

2.40 Cognitive tests do not always measure the same constructs across age groups

Oula Mohamed Momen Hatahet, Mohamed Lamine Seghier, Khalifa University

2.50 The Enhancement of SPIDER Cage Therapy Through Sensor Integration and Gamification

Doua Kosaji, Herbert F Jelinek, Mohammad I. Awad, Kinda Khalaf, Khalifa University

Room Number: 1005, E1 (Female Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: **Engineering, Information Technology & Physical Sciences**

Topic: **Environmental Science & Engineering.**

Conference Chair: Mohammadu Bello Danbatta, Sultan Qaboos University and Rana Saqer, United Arab Emirates University

2.00 Optimizing the use of Locally Produced Slag as Amendments for Agro-Industrial Soils

Maryam Omar Qassem, Mohamed Hamid Salim, Ludovic Dumée, Lourdes Vega and Blaise Leopold Tardy, Khalifa University

2.10 Leaf water content LWC modeling using near-infrared NIR wavelengths

Mohammad Omar, Fahim AbdulGhafoor, Abdel Rahman Satei Hussein Alsaleh, Tiejun Zhang and Maryam Rashed AIShehhi ,Khalifa University

2.20 Assessing Particulate Matter 10 Variation in Abu Dhabi Emirate During the Period 2013-2017

Rana Saqer and Salem Issa, United Arab Emirates University

2.30 Air-Sea Surface Heat Flux for Arabian Gulf: Estimates from High Resolution Regional Ocean Model

Alfiya Fathima Paradan and Imran Afgan and Maryam Rashed AIShehhi ,Khalifa University

2.40 Exploring Atmospheric Composition Over Oman and the GCC Using Microwave Limb Sounder (MLS/AURA) Data: Insights into Artificial Neural Networks and Gaseous Compounds

Mohammadu Bello Danbatta and Nasser Al-Azri, Sultan Qaboos University, Oman

2.50 A novel approach for clay modification to improve electroplating wastewater treatment.

Jamiu Olanrewaju Eniola, Banu Sizirici, Mutasem El Fadel and Ibrahim Yildiz, Khalifa University

3.00 Microalgae Utilization for Sustainable Aquaculture

Abdelfattah Jamal Siefan, Pau-Loke Show and Mutasem El Fadel, Khalifa University

3.10 Long-Term Enhanced Oil Removal Utilizing Two-Dimensional-Based Nanomaterial Membranes

Zainab AlAnsari , Khalifa University

Room Number: 1007, E1 (Female Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Mathematics & Statistics, Operations Research & Management Science.

Conference Chair: Fouzia Shaheen, United Arab Emirates University and Karim Moawad, Khalifa University

2.00 On a Hyperbolic Relaxation of a Fractional Reaction Diffusion Equation

Ibrahim A Suleman, Mokhtar Kirane, Khalifa University

2.10 Dynamic Portfolio Optimization Under Stochastic Dominance Constraints

Sanabel Mahmoud Bisharat and Giorgio Consigli, Khalifa University

2.20 On the Characters of some K1-Groups of C*-Algebras

Fouzia Shaheen and Ahmed Al-Rawashdeh, United Arab Emirates University

2.30 Optimal Control and Behavioral Dynamics in the SVIR Epidemiological Model

Omar A Forrest, Khalifa University

2.40 Optimal Cleaning Schedule for Photovoltaic Fleet: Analyzing the Impact of Operational Costs on System Profitability

Hind Abdulla, Khalifa University

2.50 A global study on the applicability of ISO 18404:2015 in the service sector: an exploratory qualitative study

Mariam Ali Ramadan, Mecit Can Emre Simsekler, Ravindra Stephen Goonetilleke, Khalifa University

3.00 Driving Mode Optimization for Plug-in Hybrid Vehicles Considering External Cost

Karim Moawad, Ahmad Mayyas, Mohammad Omar, Khalifa University

Room Number: 1052, E1 (Female Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Clinical, Pre-Clinical, Health & Life Sciences

Topic: Clinical, Pre-Clinical & Health, Mycology, Pharmacology, Medicine, Neurosciences.

Conference Chair: Rateb Katmah, Khalifa University

2.00 Fully resolved assembly of *Fusarium proliferatum* DSM106835 genome

Gouthaman Puthan Purayil , Synan AbuQamar and Khaled El-Tarabily, United Arab Emirates University

2.10 Fluoride release potential of arginine-incorporated fluoride varnishes

Nouf Ali Alblooshi , Ajman University & Pediatric Dentistry, United Arab Emirates

2.20 In vitro comparative study: debris accumulation in root canal isthmuses associated with reciprocating and rotary endodontic files, effect of preparation size and mode of action; a Micro CT- Study

Naden Aamer Alnakeb, Ajman University

2.30 α -Bisabolol attenuates cardiac fibrosis by invoking Nrf2-mediated antioxidant defense systems in doxorubicin-induced chronic cardiotoxicity in rats

Mayar Abdelaziz, Nagoor Meeran, Mahinour Shokry, Seenipandi Arunachalam, Sheikh Azimullah and Shreesh Ojha, United Arab Emirates University

2.40 α -Bisabolol attenuates doxorubicin-induced acute cardiotoxicity in rats by inhibiting mitochondrial dysfunction, ER-stress mediated Hippo/Yap/Mst signaling and apoptotic pathways

Mahinour Shokry, Nagoor Meeran, Mayar Abdelaziz, Seenipandi Arunachalam, Sheikh Azimullah and Shreesh Ojha, United Arab Emirates University

2.50 Ellagic Acid Prevents Alpha synuclein propagation and Alleviates the Toxicity by Enhancing Autophagic Flux in an Animal Model of Parkinson's Disease

Nada Radwan, Engila Khan, Mustafa T. Ardah, United Arab Emirates University, Tohru Kitada (Otawa Kagaku Parkinson Clinic and Research Japan, Japan) and Emdadul Haque, United Arab Emirates University

3.00 Activity-Specific Neural Synchronization: An Examination of Supernumerary Robotic Finger Usage via EEG

Rateb Katmah, Khalifa University

3.10 Can we Characterize the Microbiome From Formalin-Fixed Paraffin-Embedded (FFPE) Tissues of Patients With Inflammatory Bowel Disease?

Noora Al-Ali and Suhail Abdullah, Maya Hassane, United Arab Emirates University; Haifa AlAwadhi, Tawam Hospital, United Arab Emirates, Farah Al Marzooq, United Arab Emirates University

3.20 Identification Of four Pathogenic Variants Associated With Marafn And Marafan Like Syndromes In four Families From United Arab Emirates

Manal Abdullah Irshaid, Nadia Akawi, United Arab Emirates University, Ghadeera Al Mansoori, Sheikh Khalifa Medical City, Sara Saif Abdullah Aleissae, Mouza Alnuaimi and Shamma Alzaabi, Anjana Raj, Bassam Ali, Fatma Al Jasmi, Areej Albawaneh, Nahid Al Dhahouri, Mohammed Tabouni, Ibrahim Baydoun, Praseetha Kizhakkedath, Hiba Alblooshi and Mushal Elhaj Ali, United Arab Emirates University

Room Number: 1057, E1 (Female Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Business and Management

Topic Business and Management

Conference Chair: Hajar El Mouttaqui, American University of Sharjah, and Rachidatou I. Traoret, United Arab Emirates University

2.00 The Impact of COVID-19 on the Financial Performance of Banks in UAE

Praveen Peter Dhas and Mosab I. Tabash , Al Ain University

2.10 The impact of the socialisation practices and the newcomer's adjustment on the onboarding success of Emiratis in the UAE private

sector

Siham AlBalooshi , The British University in Dubai

2.20 The role of different cross culture management strategies to improve organization performance in the global context A multilevel moderated leadership analysis

Doaa Nasr , The British University in Dubai

2.30 Organizational Form and Audit Pricing

Hajar El Mouttaqui and Feras Salama , American University of Sharjah

2.40 How Does Corporate Diversification Affect Earnings Management? A Path Analysis Approach

Hajar El Mouttaqui and Kimberly Gleason (American University of Sharjah), Pornsit Jiraporn (Pennsylvania State University Great Valley, USA); Feras Salama (American University of Sharjah)

2.50 The Effect of Auditor Characteristics on the Quality of Segment Disclosures of Diversified Firms

Sarah Ahmed Elkelani and Feras Salama, American University of Sharjah

3.00 An analysis of the effects of firms digital presence on their international quality certification in the global economy

Rachidatou I. Traoret and Mohamed Badran, United Arab Emirates University

3.10 Who benefits from strong patent protection? A developing country perspective

Sheikha N Al Akhzami , Sultan Qaboos University, Oman

3.20 The Relationship Between Startups' Early Adoption of Digital Platforms and Startups' Pre-money Valuation

Bader Faqeeh, (United Arab Emirates University & ASFAR, Saudi Arabia)

Room Number: 1054 (Female Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Education, Arts, Humanities & Social Sciences

Topic: Education

Conference Chair: Shatha Al Ghazali, United Arab Emirates University, and Essa Al Kandari, American University of Sharjah

2.00 Diversity Management as a New Organizational Paradigm: Leading with Cultural Intelligence

Meghry Nazarian and Mohamed Alhosani , United Arab Emirates University

Ibrahim Duyar, Arkansas State University, USA

2.10 The Performativity and Anxiety of Arab College Students' Oral Presentations: A Mixed Method Study

Moza JK Al-Kaabi and Negmeldin Alsheikh, United Arab Emirates University

2.20 اتجاهات المعلمين نحو تكنولوجيا الذكاء الاصطناعي وتحديات توظيفها لتحسين تعلم الطلبة في المدارس الحكومية بسلطنة عمان

Shaima Adil Aljuma , Sultan Qaboos & Ministry of Education, Oman), Yaser Alhandawi Almahdi, Sultan Qaboos

2.30 Assessing ChatGPT in Classroom Settings: A Comparative Study of AI and Traditional Teaching Methods in UAE Schools

Shatha Al Ghazali, United Arab Emirates University

2.40 Intelligent Tutoring System Ontology

Wael Mohamed Hasan and Farag Sallabi, United Arab Emirates University

2.50 Effects of a Taekwondo-Inspired Intervention Program on Children with ADHD

Zubaida Fares Shraim, United Arab Emirates University

3.00 Creative Giftedness: The enablers and the barriers from Creatively Gifted Students' Perspective

Hind Alghfeli and Noora Anwahi, United Arab Emirates University

3.10 Socially prescribed perfectionism and L2 speaking anxiety

Essa Al Kandari, American University of Sharjah

3.20 Constructivism: Mathematics Teachers' Beliefs and Practices in Utilizing the 5E Instructional Model of Constructivism in Teaching Mathematics

Muhammed Shittu and Shashidhar Belbase, United Arab Emirates University

Room Number: 1055, E1 (Female Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Education, Arts, Humanities & Social Sciences

Topic: Languages & Linguistics, Law and Literature.

Conference Chair: Wang Yu and Alyazia Abdulrahman Alblooshi, United Arab Emirates University

2.00 Effects of Writing Modes on Chinese Character Recognition for Non-native Young Learners in the UAE

Wang Yu and Shen Dingfei, United Arab Emirates University and Jiang Chenhao Peking University, China

2.10 Natural and legal persons' criminal liability for crime of money laundering according to UAE law

Yousef Salem Alhosani, Al Ain University

2.20 The Role of Judicial Precedent as a Source of International Law

Julius Galisonga, British University in Dubai

2.30 Electronic Judicial litigation in UAE law

Aysha Mohammed Aldhaheeri, Alain University

2.40 Unreliable Narration and Emotional Deterioration in Jean Rhys's Selected Short Stories

Alyazia Abdulrahman Alblooshi, United Arab Emirates University

2.50 Distorted Girlhood, Villainized Femininity, and the Many Revisions of Snow White

Muzoun Saeed Al'Dhaheeri, United Arab Emirates University

3.00 Comparative Study of Storytelling Techniques in Pride and Prejudice by Jane Austen, Pride and Prejudice and Zombies by Graham Smith, and Pride and Prejudice Manga Adaptation

Shahad Imad Mostafa, United Arab Emirates University

3.10 Depictions of Trauma in Comics: A study Of Maus, Palestine and Vietnameraica

Rasha Mohammed Alnuaimi, United Arab Emirates University

Room Number: 1008, E1 (Female Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Physics, Planetary science, Other topics in Engineering & Physical Sciences.

Conference Chair: Muhammad Waqas Haseeb, United Arab Emiretes University and Hessa Alshamsi, Khalifa University

2.00 Exploring the Role of Vibration-Assisted Electron Tunnelling in COVID-19 Infection: A Study Using the Quantum State Diffusion Approach

Muhammad Waqas Haseeb, Mohamad Toutounji, United Arab Emiretes University

2.10 Harmonic Generation in Semiconductor Superlattice Multipliers

Abdullah Al Ateqi and Mauro Fernandes Pereira ,Khalifa University

2.20 Quality Classification of Contextual Variables in Indoor Environments

Hessa Alshamsi, Khalifa University, United Arab Emirates); Elie Azar (Carleton University, Canada); Herbert F Jelinek (Healthcare Engineering Innovation Center, Khalifa University & Charles Sturt University, United Arab Emirates); Ravindra Stephen Goonetilleke and Mutasem El Fadel (Khalifa University, United Arab Emirates); Mecit Can Emre Simsekler and Saed Amer (Khalifa University of Science and Technology, United Arab Emirates)

2.30 Transient Thermal Analysis of AlAinSat-1: A Remote Sensing CubeSat

Ameereh Seyedzadeh and Mohamed Okasha ,United Arab Emirates University, Abdul Halim Jallad, American University of Ras Al Khaimah, Erwin Sulaeman ,United Arab Emirates University

2.40 Autonomous Technology and Human Behavior

Room Number: 1045, E1 (Female Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Clinical, Pre-Clinical, Health & Life Sciences

Topic: **Bioinformatics, Diabetes, Cancer, and Public Health**

Conference Chair: Fatima Abdullah Abdul Salam, University of Sharjah, and Sanabil Ali Hassan Ahmed, United Arab Emirates University

2.00 Modeling the progression of non-alcoholic fatty liver disease (NAFLD) utilizing induced pluripotent stem cells (iPSCs) as a cellular model

Fadia Abu Sailik and Suraiya Ansari, United Arab Emirates University

2.10 Thyroid Function Reference Ranges and Prevalence of Thyroid Disorders in the Jordanian Population: A Comprehensive Study

Areej Mohammed, Hussam Alsharideh and Abdulrahim Shamayleh, American University of Sharjah

2.20 Investigating the expression of CCL19/CCR7 and its association with PD-1/PD-L1 in colorectal cancer

Fatima Abdullah Abdul Salam, Noha M. Elemam and Iman Talaat, University of Sharjah

2.30 Deciphering histone 3 lysine 36 methylation in type 2 diabetes using Goto-Kakizaki rat liver tissue

Anil Kumar Challagandla , Starling Emerald Bright David and Suneesh Kaimala, United Arab Emirates University

2.40 The Effect of Gestational Diabetes Mellitus on the Developing Offspring

Sanabil Ali Hassan Ahmed, Anil Kumar Challagandla and Suneesh Kaimala and Starling Emerald Bright David, United Arab Emirates University

2.50 Proteomic and metabolomic signatures of U87 glioblastoma cells treated with Cisplatin and/or Paclitaxel

Munazza Ahmed, Ahlam M. Semreen (University of Sharjah), Alexander D. Giddey (Mohammed Bin Rashid University of Medicine and Health Sciences, United Arab Emirates); Wafaa SH Ramadan, Rafat El-Awady, Nelson C. Soares, Waseem Elhuneidi, Yasser Bustanji, Mohammad A. Y. Alqudah, Kareem H. Alzoubi and Mohammad semreen Semreen (University of Sharjah)

3.00 Epidemiology of primary speech and language delay among pediatric population in Arab countries. A scoping review

Ghada Salameh Al-Bluwi, Asma AlNababteh , Alexandra Marquis, Rami H. Al-Rifai , Iffat ElBarazi and Luai Ahmed ,United Arab Emirates University

Room Number: 1048, E1 (Female Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Clinical, Pre-Clinical, Health & Life Sciences

Topic: **Biochemistry, Biotechnology, Biology, Biophysics, Cancer, and Oncology.**

Conference Chair: Adnan Uddin, Khalifa University and Ameer Alakkal, United Arab Emirates University

2.00 Role of the Chromatin Remodeler in the Maintenance of Genome Stability in Saccharomyces cerevisiae

Amira Bekdash , Jisha Chalissery and Ahmed Hassan , United Arab Emirates University

2.10 Improving human epidermal stem cell in vitro culture conditions by uncovering how RNA methylation modulate non-coding RNAs

Adnan Uddin and Abdulrahim Sajini, Khalifa University

2.20 SOS1 gene from Avicennia marina enhances the salt tolerance in Arabidopsis thaliana and Solanum lycopersicum

Mariam Obiad Alzaabi, United Arab Emirates University

2.30 Solvation Structure and Thermodynamics of Anionic Functionalized Gold Nanoparticle in Water through Molecular Dynamics Simulation and Grid Inhomogeneous Solvation Theory

Haifa Mohammed Al Mamari , (Sultan Qaboos University & Ministry of Education, Oman)

2.40 Sanguinarine, a Benzophenanthridine Alkaloid Induces H2O2-Dependent Activation of Apoptosis and Ferroptosis in Human Cervical

Cancer

Ameer Alakkal, United Arab Emirates University, Faisal Thayyullathil, Siraj Pallichankandy and Karthikeyan Subburayan, Anees Cheratta and Sehamuddin Galadari New York University Abu Dhabi

2.50 In vivo and 3D Ex vivo murine models to study gastric precancerous lesions

Doaa Bahy Ahmed, United Arab Emirates University

3.00 The anti-cancer activity of a novel 8-hydroxyquinoline derivative against 5-fluorouracil-resistant colorectal cancer

Mazoun Talal Al Azzani , Zohra Nizami and Rabah Iratni, United Arab Emirates University

Room Number: 1053, E1 (Female Side)

Oral Session: 2

2.00 PM - 3:30 PM

Track: Clinical, Pre-Clinical, Health & Life Sciences

Topic: Agriculture, Fisheries & Food, Biochemistry and Biotechnology, Nutrition & Health, Entomology

Conference Chair: Kobika Chelladhurai and Muneeba Alam, United Arab Emirates University

2.00 kdr mutations and deltamethrin resistance in house flies in Abu Dhabi, UAE

Mohamad Hamdan and Amgd Sayed Ali and Mohammad Al-Deeb, United Arab Emirates University

2.10 Simulated In-vitro Gastrointestinal Digestion in Infants: A Comparative Study of Animal and Plant-based Milk blends for Potential Biomimetic Infant Formula Production

Nada Zamzam, United Arab Emirates University & Ain Shams University and Sajid Maqsood, United Arab Emirates University

2.20 Chemical Composition and Characteristics of Organic Solvent Extracts from the Omani Seaweeds *Gelidium omanense* and *Melanothamnus somalensis*

Abdullah Mohammed Al-Nassri, Sultan Qaboos University

2.30 Exploring Multimorbidity and Feeding Behaviour Issues in Children with Autism Spectrum Disorder - A United Arab Emirates Perspective

Monia Kittana , Asma Ahmadani , United Arab Emirates University, Mouza Mohamed Al-Salami ,Zayed Higher Organization for People with Determination and Amita Attlee, United Arab Emirates University

2.40 Acidification of *Lactobacillus helveticus*, *Lactobacillus delbrueckii* subsp. *bulgaricus*, and *Streptococcus salivarius* subsp. *thermophilus* in camel and bovine milk

Kobika Chelladhurai, United Arab Emirates University

2.50 Date fruit: Plant Melanin

Muneeba Alam, Mutamed Mohammad Ayyash and Afaf Kamal-Eldin , United Arab Emirates University

3.00 Unveiling the Impact of Commercial Fiber Supplements on Gut Microbiota for Better Health

Shaikha S Alameri and Nayla Munawar, United Arabs Emirates University

3:30 PM - 3:45 PM

Coffee Break

Saturday, 20 April 2024

Room Number: 1012, E1 (Male Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Computer and Information Science, Data Science, Information Security, and Information Technology.

Conference Chair: Saleh Suleman Adajeh and Heba Saleous, United Arab Emirates University

3.45 Data-Driven Modelling of The Performance of Catalyst Used for Dry Methane Reforming

Ismail M Salim, Abdallah Sofiane Berrouk and Zeyar Aung, Khalifa University

3.55 Cloud Network based Intrusion Detection System using Machine Learning Techniques

Mohamed Almaleki, United Arab Emirates University

4.05 Fortifying National Cybersecurity Strategic Challenges through Alternative Digital Credentials (ADC's)

Saleh Suleman Adajeh, United Arab Emirates University

4.15 Mindful Cybersecurity: Neuro-Educational Insights and Brain Wave Analysis for Phishing Email Threats

Nuraini Jamil and Muhusina Ismail, United Arab Emirates University

4.25 Community Perspectives on Harassment in Online Gaming

Heba Saleous, Marton Gergely and Khaled Shuaib, United Arab Emirates University

4.35 Enhancing Medical Record Management with Multi-Modal Knowledge Graphs

Weihao Gao and Lan Ma, Tsinghua University, China

4.45 Optimizing Client Selection in Federated Learning: A Static Parameter-Based Approach

Tariq Qayyum, Zouheir Trabelsi and Asadullah Tariq, United Arab Emirates University

Room Number: 1027, E1 (Male Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Chemical Engineering

Conference Chair: Ghadeer Mubarak, Khalifa University and Hooralain Bushnaq, Khalifa University

3.45 Mitigating Antimicrobial Resistance in Hospital Wastewater: A Novel Approach with Polylactic/MXene-Silver Nanoparticle Composite Membrane

Najah Abumounshar, Shadi Wajih Hasan, Ravi Pandey, Khalifa University

3.55 Inhibition of Corrosion in P110 Casing and Tubing Carbon Steel in a 3.5% NaCl Solution Employing Copolymers Based on Quaternary Ammonium Compounds

Ghadeer Mubarak, Khalifa University

4.05 Atmospheric Pressure Cold Plasma Technique (APCP) for food product preservation and shelf-life extension

Mohammad Keewan, Fawzi Banat, Pau Loke Show, Khalifa University

4.15 Polysaccharides as soil amendments: A study on arid soil mechanics and water dynamics

Muhammad Hidar Al Dali, Mohamed Hamid Salim, Ludovic Dumée, Faisal A AlMarzooqi, Blaise Leopold Tardy (Khalifa University)

4.25 Recent advances in Green synthesis of imine linked Covalent Organic Frameworks – A mini review

Azqa Khalid, Khalifa University

4.35 An investigation on the fouling of Humic Acid in reverse osmosis employing an optical coherence tomography

Momen Abubasha, Tu Phuong Pham Le, Emad Alhseinat, Hassan Arafat, Maguy Abi Jaoude, Khalifa University

4.45 Functionalized Ti3C2Tx Mixed Matrix Membranes: A Facile Approach to Pharmaceuticals Removal and NOM Fouling Mitigation in Water Treatment Applications

Aya Aboukhater, Shadi Wajih Hasan (Khalifa University)

4.55 Phthalocyanines as photosensitizers in wastewater treatment membranes

Hooralain Bushnaq, Khalifa University

Room Number: 1028, E1 (Male Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: **Chemical Engineering**

Conference Chair: Jubaydah Nasrin, American University of Sharjah and Yasmina Alseksek, Khalifa University

3.45 Nanomaterial Modified Paper-Based Microfluidic Sensor for Bio-Applications

Mohamad Almaazmi, Nahla AlAmoodi, Baker Mohammad, Anas AlAzzam, Khalifa University

3.55 Tuning BEA zeolite acidity through reactive force field molecular dynamics for oleic acid upgrading towards drop-in gasoline and diesel biofuels

Seba Alareeqi, Daniel Bahamon, Kyriaki Polychronopoulou, Lourdes Vega, Khalifa University

4.05 Tuning BEA zeolite acidity through reactive force field molecular dynamics for oleic acid upgrading towards drop-in gasoline and diesel biofuels

Sana Ahmad Minhas, Ravi Pandey, Shadi Wajih Hasan, Khalifa University

4.15 Zeolite templated carbon as a promising air electrode for lithium oxygen battery

Lina Jarrar and Maryam Khaleel, Khalifa University

4.25 Functionalized metal oxide nanomaterial in photothermal membrane distillation for sustainable water desalination

Ahmad Saud Jawed, Hanaa Hegab, Shadi Wajih Hasan, Khalifa University

4.35 Polyethersulfone membrane nano-modified with 2D/1D MoS₂-CeO₂ for the effective separation of oil-in-water emulsions

Yasmina Alseksek, Thanigaivelan Arumugham, Shadi Wajih Hasan, Khalifa University

4.45 Sodium Alginate Coated Metal Organic Framework For Near Infrared Triggered Release

Jubaydah Nasrin, American University of Sharjah

Room Number: 1013, E1 (Male Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: **Electrical & Electronic Engineering.**

Conference Chair: Usman Masood, United Arab Emirates University

3.45 Exploring eHGSS Dynamics Within A Hybrid AC/DC Microgrid

Rawdha AlKuwaiti, Hatem H Zeineldin, Ehab El-Saadany, Khalifa University; Hany Farag, York University

3.55 Day-Ahead Operation Scheduling Strategy for Demand Response and Hybrid Energy Storage Systems in Smart Grid

Mohamed Tagelsir Barakat Elsir, Ameena Al Sumaiti, Mohamed Shawky El Moursi, Khalifa University

4.05 A Strategic Framework for the Optimal Deployment of Electric Vehicle Charging Technologies

Sarah M.A Kandil, Akmal Abdelfatah, American University of Sharjah; Maher Abdelkhalek, University of Windsor

4.15 Shifting Peak Demand: A Novel Salt Hydrate PCM-based Air-Pre-cooling System for Building Energy Efficiency

Usman Masood, Mahmoud Haggag, United Arab Emirates University

4.25 A Low-cost Isolated Single-phase On-board Charger Topology with Low Voltage Battery Charger for Electric Vehicle

Room Number: 1016, E1 (Male Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Communication Engineering.

Conference Chair: Welelaw Yenieneh Lakew, Khalifa University and Rami Zaino, American University of Sharjah

3.45 Time Reversal Enhanced Spatial Modulation System Design

Abdallah Alkhatib (Khalifa University), Paschalis C. Sofotasios (Khalifa University & Tampere University, Finland), Sami Muhaidat and Leake Khasay, (Khalifa University)

3.55 On the BER Performance of NOMA-OFDM Systems Under Impulsive Noise Using Time-Domain Interleaving

Welelaw Yenieneh Lakew, Arafat Al-Dweik and Mohamed A Abou-Khousa, Khalifa University

4.05 Rotational Beam-Scanning Reflectarray with Fixed-Feed for Radar Scan Scatterometry

Khamis H Ali, Mohamed A Abou-Khousa and Ademola Akeem Mustapha, Khalifa University

4.15 Sum-Rate Maximization: A Multirate Approach to NOMA System

Zainab Ghazi Khader and Arafat Aldweik, Khalifa University

4.25 Rate Regions of Two-Way Wireless Communication with Wireless Power Transfer using a Mobile Relay

Rami Zaino and Mohamed S. Hassan, American University of Sharjah

4.35 Joint Beamforming for Weak Target Detection and Multi-user Communication in ISAC Systems

Zongyao Zhao (Tsinghua University, China); Xinke Tang (Peng Cheng Laboratory, China); Yuhan Dong (Tsinghua University, China)

Room Number: 1020, E1 (Male Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Mechanical Engineering.

Conference Chair: Nasser Tarek Rizk, American University of Sharjah and Kaouther Madi, Khalifa University

3.45 Integration of Nanoparticles into Contact Lenses

Said El Turk and Haider Butt, Khalifa University

3.55 Mechanical Behaviors of 316L Stainless Steel TPMS Lattices Fabricated by Fused Deposition Modeling Additive Manufacturing

Kaouther Madi, Khalifa University

4.05 Fabrication of 3D Printed Polymer-Derived Ceramics for Advanced Interpenetrating Phase Composites

Abdul-Rahman Kharbatli, Kin Liao, Andreas Schiffer, Khalifa University

4.15 The Large-Scale Fabrication of Carbon Nanostructured Buckypapers

Ahmed M Mohammed, Khalid Askar, Rashid Abu Al-Rub, Khalifa University

4.25 Pressureless Sintering of Uncompacted NiTi

Fares Alawwa, Rashid Abu Al-Rub, Bashar El-Khasawneh, Wael Zaki (Khalifa University, United Arab Emirates)

4.35 Sustainability Assessment of Powder Bed Fusion Additive Manufacturing

Nasser Tarek Rizk, Mohammad Nazzal, B Darras, American University of Sharjah

4.45 Utilizing DLP-type 3D Printing to Fabricate a Distinctive Graphene-based Eyeglass

Shammah Mohammed Aldhanhani, Khalifa University

4.55 Layer-by-Layer Simulation of Additively Manufactured Components

Room Number: 1021, E1 (Male Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Mechanical Engineering.

Conference Chair: Yasser Aldaghestani and Kamal Krishnam Raju Sirivuri Khalifa University

3.45 High-Fidelity Gasification of Crude Oil

Haider Ali Khan, Khalifa University

3.55 Enhancing Microfluidic Mixing: A Comparative Assessment of 3D Printing and Passive Mixing Techniques

Yasser Aldaghestani, Khalifa University

4.05 Effect of Anthropometry on Plantar Pressure Distribution during Gait in Overweight Male Subjects: A Novel Approach

Abdelsalam Tareq Alkhalailah, Kinda Khalaf, Marwan El-Rich, Khalifa University

4.15 Effect of gravity on melting kinetic for vertical channels with helical fins

Muhammad Faizan, Imran Afgan, Ahmed Al Kaabi, Khalifa University

4.25 Acoustic band gaps for TPMS lattices

Kamal Krishnam Raju Sirivuri, Wesley James Cantwell, Kin Liao, Rashid Abu Al-Rub, Khalifa University

4.35 Enhance Freshwater Production through 3D printed TPMS Structures in High-Humidity Environments

Omar Abdelqader, Mohamed Ibrahim Ali, Rashid Abu Al-Rub, Khalifa University

4.45 Effect of bi-lateral grading and unit-cell size grading on energy absorption of plate lattice

Mohamed Abdelmageed Abdelhameed, Wesley James Cantwell, Khalifa University

Room Number: 1036, E1 (Male Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Civil Engineering.

Conference Chair: Sachin Venu Jaya, Khalifa University and Ziad Ahmed, American University of Sharjah

3.45 Microbially Induced Calcite Precipitation (MICP): A Comprehensive Review

Marwan Naeem, George Mylonakis, Tadahiro Kishida, Mohamed G. Arab, Khalifa University

3.55 Experimental Study of Monotonic Behaviour of Carbonate Sands in Abu Dhabi

Deepa Kunhiraman Nambiar, Tadahiro Kishida, Khalifa University

4.05 Development of a Machine Learning Based Smart Water Leak Detection System

Rabab Al Hassani, Maruf Mortula, Tarig Ali, American University of Sharjah

4.15 The Enablers of Modular Construction in the UAE

Yara Mamoun Abu Jbarah, YM, American University of Sharjah

4.25 Advancing Construction Site Safety: A Smart Helmet for Worker Safety

Sachin Venu Jaya, Khalifa University

4.35 Sustainable Modular Construction: A Multi-Objective Optimization Model For Decision Making

Ziad Ahmed, Sameh El Sayegh, Salma Ahmed, American University of Sharjah

4:45 Environmental Impact Assessment of Khalid Bin Sultan Road: Socio-economic Impacts

Enaam Ouda, Hala Ajiba, Rawan Al Enezi and Mahmoud Haggag, United Arab Emirates University

Room Number: 1038, E1 (Male Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Civil Engineering.

Conference Chair: Hala Mehyar Abu Shehab, Khalifa University and Jumana Hasina, United Arab Emirates University

3.45 Tire Pavement Interaction Using Finite Element Modeling

Yasmeen Ghassan Abdelkarim, Tae-Yeon Kim, Khalifa University

3.55 Modelling the Drained Compression Behavior of Electric Arc Furnace and Gabbro Ballast Materials Using SANISAND04 Model

Meletetsega Gashaw Gebeyehu, Tadahiro Kishida, Khalifa University

4.05 Modelling of Pounding on Backwall-Backfill Systems

Hala Mehyar Abu Shehab, Khalifa University

4.15 Modeling of spatiotemporal variations of groundwater levels with the aid of GIS, case study from Emirate of Abu Dhabi

Tala Jalal Maksoud, Mohamed Mohamed, United Arab Emirates University

4.25 Machine Learning Modelling of Roadway Life Cycle History: Literature Review

Mohamad Alhalabi, Ahmed Faheem, Khalifa University

4.35 Non-Linear Behaviour of Severely Corroded Continuous RC Beams

Youssef Elmezayen, Tamer El-Maaddawy, United Arab Emirates University

4.45 Estimation of site attenuation parameter for site response analysis in UAE

Sana Anamangadan, Tadahiro Kishida Fateh Bouchaala, Khalifa University

4.55 Verification of Seismic Performance Enhancement Approaches for Reinforced Concrete Bridges

Jumana Hasina, Aman Mwafy, Anas Issa, United Arab Emirates University

5.05 Assessing the Applicability of the MC: The Case of Dubai

Ghalya M Alshehhi, Kholoud Khaliefa Almemari, Khaled Alawadi, Khalifa University

Room Number: 1022, E1 (Male Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Robotics, Mechatronics & Automation

Conference Chair: Muhammad Salman, Khalifa University, and Sherif Khaled Ismail, American University of Sharjah

3.45 Delay Compensator for Improved Performance of Teleoperated UGVs on Soft Terrains

Ahmad Abubakar, SAN Campus & Khalifa University

3.55 Motion Planning and Control Framework for Autonomous Vehicles in Navigating Diverse Scenarios

Abdulrahman Hamdy Ahmad (Khalifa University & Minia University, Egypt), Ameena Al Sumaiti, Jorge Dias and Majid Khonji, Khalifa University

4.05 Autonomous Inspection of Aircraft Safety Logos using Deep Learning and Drone Imagery

Mohammed Basheer Mohiuddin, Igor Boiko and Yahya Zweiri, Khalifa University

4.15 Robust Control Based on DDPG of 6 DOF Robot Manipulator

Muhammad Salman and Irfan Hussain, Khalifa University

4.25 Towards Efficient Underwater Robotic Swarms: Edge-Based Comparative Analysis of Multi-Object Trackers

Rim ElTobgui and Fakhreddine Zayer, Saverio Iacoponi (Khalifa University), Giulia De Masi (Technology Innovation Institute, Italy), Federico Renda and Jorge Dias (Khalifa University)

4.35 A Robust Approach for Enhanced Autonomous Robot Navigation

Sherif Khaled Ismail and Mamoun Abdel-Hafez, American University of Sharjah

4.45 Using electric sense to autonomously navigate confined paths underwater

Saif D Alameri, Khalifa University

4.55 Tracking Performance Enhancement Using Detection Noise Compensation

Mohamed Nagy Mostafa, Nagy (Khalifa University & Helwan University), Naoufel Werghi, Jorge Dias, Bilal Hassan and Majid Khonji (Khalifa University)

Room Number: 1023, E1 (Male Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Robotics, Mechatronics & Automation, Micro/Nano Systems, Transportation & Logistics.

Conference Chair: Mohamed El Hanbaly, Khalifa University

3.45 Design of High Efficiency Dielectric Metalems for Space Based Optical Imaging Applications

Sani Mukhtar and Jaime Viegas, Khalifa University

4.55 Preparation, Characterization & Antibacterial Characteristics of Caffeine-Loaded ZIF-67 Grown onto Cellulose-Based Microfibrous Membranes

Alia M Al Kaabi, Yaser Greish, Hesham El-Maghraby and Nayla Munawar, United Arabs Emirates University

4.05 Towards achieving Soft Robotic Proprioception using Hall-Effect Sensors

Yusuf Abdullahi Adamu, Daniel Feliu Telagon, Anup Mathew and Federico Renda, Khalifa University

4.15 Inverse Dynamics Modelling as a State Estimation Aid for Underwater Robots Navigation

Mohamed El Hanbaly, Federico Renda and Saverio Iacoponi, Khalifa University

4.25 Optimizing Multi-Sensor Switching Systems through Factor Graphs: A Strategy for Harmonizing Variable Frequency Inputs

Mohamad Halwani, Yahya Zweiri and Jorge Dias, Khalifa University

4.35 Spatial and Temporal Modeling of the Electricity Demand of Electric Vehicles in Dubai-UAE

Eiman A Elghanam, Mohamed S. Hassan and Ahmed Osman, American University of Sharjah

Room Number: 1024, E1 (Male Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Materials Science & Engineering.

Conference Chair: Khaled Abdelghafar, Khalifa University and Arhum Hassan, American University of Sharjah

3.45 Effect of TPMS structure on EMI shielding efficiency of PVDF graphene composites

Pooja Srinivas, Imad Barsoum and Rashid Abu Al-Rub, Wael Zaki, Khalifa University

3.55 Optimizing Process Parameters for Support-Free Metal 3D Printing of 0° Overhangs in SS-316L

Muslim Al Mahmood, Ali Sami Alnaser, American University of Sharjah

4.05 Optimizing Urban Sustainability: A Vehicle Routing Optimization for Efficient City Waste Management

Shadeedha Mohamed Saradara, Malik Khalfan, Andrei Sleptchenko, Khalifa University

4.15 Modified Constitutive Voyiadjis-Abed Model for C45-Steel exhibiting Dynamic Strain Aging: A Constitutive and Numerical Modelling Approach

Arhum Hassan, Farid Abed, American University of Sharjah

4.25 Fabrication and characterization of thick carbon nanotube-based buckypaper for EMI shielding applications

Syed Mohammed Sajl, Daniel Choi, Khalifa University

4.35 Structural and electronic properties of NV center using density functional theory

Khaled Abdelghafar, Daniel Choi, Khalid Askar, Khalifa University

4.45 Exploring Surface Properties: A Multi-Frequency AFM Approach

Lamiaa Elsherbiny, Matteo Chiesa, Khalifa University

Room Number: 1003, E1 (Female Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Chemistry, Water

Conference Chair: Hadel Mohsen El Agamawi, United Arab Emirates University and Delal Momani, Khalifa University

3.45 Novel Functionalized Multiwalled Carbon Nanotubes Nanoparticles in Polymeric Membranes for Photothermal Membrane Distillation

Lobna Nassar, Hanaa Hegab, Shadi Wajih Hasan, Mutasem El Fadel, Khalifa University

3.55 Bio-inspired Nano-architect based on MnO₂ for Atmospheric Water Harvesting

Ahmed Elsir, Hesham El-Maghraby, Yaser Greish, Fathy Hassan, United Arab Emirates University

4.05 Alginate-GO hydrogels as draw agents in Forward Osmosis

Ahmed Mamdouh Aboulella, Linda Zou, Khalifa University

4.15 Effectiveness of Cutoff Walls in Mitigating Seawater Intrusion

Assaad Kassem, Ahmed Sefelnasr, Mohsen Sherif, United Arab Emirates University

4.25 Forward Osmosis Performance using NaCl and MgCl₂ Mixed Solution

Hadel Mohsen El Agamawi, Mohamed Mohamed, Munjed Maraqa, Mohamed Hamouda, United Arab Emirates University

4.35 Chitosan MoS₂ GO Membrane for Catalytic Degradation of Organic Contaminants

Delal Momani, Khalifa University

4.45 Advancing Green Energy: Sulfide Quantum Dots for CO₂ Photocatalytic Reduction under Ambient Pressure

Israa Othman, Mohammad Abu Haija, Giovanni Palmisano, Fawzi Banat, Khalifa University

4.55 Unlocking Sustainability: Application of Response Surface Methodology Optimization and Elemental Insight into Effects of Thermal Stress on Biodiesel and Bioglycerol Produced from Used Cooking Oil

Rukayat S.B. Zakari, Mirella Elkadi, Mohamed Ibrahim Ali, Khalifa University; Abhijeet Raj IIT Delhi

5.05 Sustainable Covalent Organic Framework Catalyst via Efficient Pd-recovery from Wastewater

Mahira Bashri Kuzhimully, Dinesh Shetty, Sushil Kumar, Khalifa University

Room Number: 1008, E1 (Female Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Biomedical Engineering.

Conference Chair: Shaza Karaman, New York University and Vinod Paul, American University of Sharjah

3.45 Conducting Polymer Scaffolds Loaded With Polymeric Nanoparticles For Wound Healing Application

Khulood Hasan AlShehhi, Charalampos Pitsalidis, Anna-Maria Pappa, Khalifa University

3.55 Immunogenicity of Different Hydrogels used for Cell Culture, Tissue Engineering, and Bioprinting

Shaza Karaman, Jeremy Teo, New York University

4.05 Investigating the role of sleep disordered breathing on Major Depressive Disorder in the UAE

Shaween Shukir, Khalifa University

4.15 Effect of Cholesterol Concentration on Liposomes-loaded with Hydrophobic Drug Regorafenib

Vinod Paul, Ghaleb Hussein, American University of Sharjah

4.25 Role of Gene Polymorphisms in Endometriosis in Women of Arab Ancestry

Maryam Easa Almarzooqi, Habiba Alsafar, Mira Mousa, Khalifa University

4.35 Electrical Responses of Cancer Cells to pH Variations: A Novel Approach for Understanding Tumor Dynamics

Mary Krystelle Catacutan, Sung Lee, Michael Hughes, Khalifa University

4.45 Sensitivity of Spinal Loading in Lateral Bending and Axial Rotation to Thoracic Disc Stiffness: A Musculoskeletal Model Study

Muhammad Abdullah, Abdul Aziz Vaqar Ahmed Hulleck, Kinda Khalaf, Marwan El-Rich, Khalifa University; Dominika Ignasiak, ETH

Room Number: 1005, E1 (Female Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Environmental Science & Engineering, Sustainability, Geology.

Conference Chair: Hessa Saleh AIShehhi, American University of Ras Al Khaimah and Shahira Abdul Lathif, Khalifa University

3.45 Implications of the basement evolution and lithospheric structure on the sedimentary basins of the United Arab Emirates

Mohammed Jabir and Mohammed Ali, Khalifa University

3.55 Evaluating Double Skin Façades for Energy Efficiency in High-Rise Residential Building in Abu Dhabi

Narmeen Tariq Abu Hilal and Mahmoud Haggag ,United Arab Emirates University

4.05 DesignBuilder Evaluation: Measurement and Model Simulation

Sheikha Al Niyadi, United Arab Emirates University

4.15 Impact of Energy Conservation Strategies in the UAE's Educational Buildings: The Case of Ras Al Khaimah Schools

Hessa Saleh AIShehhi, American University of Ras Al Khaimah and Khaled Hossin , American University of Ras Al Khaimah & University of Benghazi

4.25 A comprehensive study of mangrove health index and temperature in Abu Dhabi using Landsat

Shahira Abdul Lathif , Maryam Rashed AIShehhi , Shabniya Veliyampatt, Alfiya Fathima Paradan and Batoul Mohsen ,Khalifa University

4.35 Enhancing Energy Performance through Passive Cooling Strategies

Reema AbdAllah Tobeishat and Hanan Taleb, British University in Dubai

Room Number: 1007, E1 (Female Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Engineering, Information Technology & Physical Sciences

Topic: Physics, Planetary Science, Earth Science.

Conference Chair: Muhammad Awais, King Fahd University of Petroleum and Minerals, Saudi Arabia and Indodeep Ghoshal, Khalifa University

3.45 Comparisons of the sedimentary characteristics and diagenesis of modern carbonate deposits between tidal channels and mangrove marshes, Abu Dhabi, United Arab Emirates

Tianyu Cao, Khalifa University

3.55 Biosphere changes during the Carnian-Norian in Tasmania: A new perspective from PAH analysis from the Paleo Antarctic Circle

Indodeep Ghoshal and Aisha Al Suwaidi, Khalifa University

4.05 CO2 Storage potential of the depleted VR014 gas field, Gulf of Mexico

Ahmed K Eleslambouly, Khalifa University

4.15 Enhancing the accuracy of DBSCAN's first arrival traveltime picking using super-virtual refraction interferometry.

Muhammad Awais, Khalifa and Sherif Mahmoud, King Fahd University of Petroleum and Minerals, Saudi Arabia

4.25 Accelerating 2.5D Frequency Domain Viscoelastic Full Waveform Inversion

Seda Rouxel and Fateh Bouchaala, Khalifa University

4.35 Multi-Criteria Overlay Analysis for Identifying Preferred Exploration Zones on Mars

Yousef Ahmad Mashal, Khalifa University

4.45 CO Spectral Signatures in the Martian Atmosphere for Molecular Abundance Retrieval

Malathe Khalil, Nayla ElKork and Marko Gacesa (Khalifa University, United Arab Emirates); Ebrahim Al Hajri (Associate Professor, United Arab Emirates); Scott Evans (VICE PRESIDENT, USA); Salman Mahmoud (Khalifa University, United Arab Emirates); Jonathan Tennyson (Massey Professor of Physics, United Kingdom (Great Britain)); Sergey Yurchenko (Professor of Physics, United Kingdom (Great Britain)); Amal A Al Ghaferi (Khalifa University of Science and Technology, United Arab Emirates)

Room Number: 1048, E1 (Female Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Clinical, Pre-Clinical, Health & Life Sciences

Topic: Immunology, Radiology and Virology

Conference Chair: Suresha Gopala Prabhu and Ienas Idriss, United Arab Emirates University

3.45 Mitochondrial control of the tumorigenicity and immunogenicity of colorectal cancer

Maram Ahmed , Basel Ramadi and Maria J Fernandez Cabezudo, United Arab Emirates University

3.55 Daily oral administration of Manuka honey enhances IFN γ -dependent immunity against colorectal cancer

Ienas Idriss, United Arab Emirates University

4.05 Deciphering the role of iron metabolism on airway remodeling in severe asthma

Ola Elamin, Mawieh Hamad and Qutayba Hamid, University of Sharjah, Khuloud Bajbouj , University of Pennsylvania, USA

4.15 Role of B cell mediated immune responses during Skin 'Atopic Dermatitis' Disease

Hidaya Abdulkader, United Arab Emirates University

4.25 Unraveling Breast Lesions: A Fractal Approach to Differentiate Between Benign and Malignant Tumors in Contrast-Enhanced Spectral Mammography

Noora Ali Rahmani, Kyriaki Stavros Katsikari and Manar Issam Alkhatib, Khalifa University

4.35 Measuring Material Identification And Quantification In The Presence of Metal Artefacts Using Spectral Photon Counting CT

Briya Tariq, Aamir Younis Raja, Nabil M. Maalej , Naoufel Werghi , Khalifa University and East Memisoglu (Cleveland Clinic Abu Dhabi, United Arab Emirates)

4.45 DNMT3L, A Crucial Modulator of Mouse Mammary Tumor Virus (MMTV) Replication in Mouse Mammary Epithelial Cells

Neena Gopinathan Panicker and Farah Mustafa, United Arab Emirates University

4.55 Structure-Function Relationship During Mouse Mammary Tumor Virus (MMTV) Genomic RNA Packaging

Suresha Gopala Prabhu, Vineeta N Pillai, Lizna Ali , Akhil Chameettachal, United Arab Emirates University, Valerie Vivet Boudou and Serena Bernacchi, University de Strasbourg, Farah Mustafa , United Arab Emirates University, Roland Marquet (CNRS and Université de Strasbourg, Strasbourg, France) and Tahir Rizvi, United Arab Emirates University

5.05 Immunomodulatory effect of Myelin oligodendrocyte glycoprotein (MOG) on monocyte-derived macrophages iron homeostasis

Shahad Musa Arikat, University of Sharjah & Research Institute for Medical and Health Sciences, Mohammad G Mohammad, University of Sharjah & Faculty of Health Sciences.

Room Number: 1052, E1 (Female Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Business and Management

Conference Chair: Eisa Hareb S. AlNeyadi, British University in Dubai, and Steny Ann Sabu, Khalifa University

3.45 Determinants of Adoption of Integrated Reporting in an Emerging Market: The Case of UAE

Dania M. Kurdy and Husam-Aldin Al-Malkawi , The British University in Dubai

3.55 Does FinTech Improve Healthcare in GCC? Application of Panel Analysis

Mashaal Jassim, Rajesh Mohnot and Gyanendra Sisodia, Ajman University

4.05 Enhancing Employee Agility through Leadership Approaches: Evidence form UAE

Eisa Hareb S. AlNeyadi and Husam-Aldin Al-Malkawi, The British University in Dubai

4.15 Managing HR Analytics risks in Organizations

Aisha Ahmad Abu Hijleh, Ajman University

4.25 Circularity in Waste Management within the Aviation Industry

Steny Ann Sabu and Malik Khalfan, Khalifa University

4.35 Evaluation of logistic service expectations and delivery options in Last-mile delivery in UAE using AHP

Wafa Mohammed Al Mazrouei , Ajman University

4.45 An investigation on customer intention to adopt self-service Smart lockers in Parcel delivery using SEM and ANN

Wafa Mohammed Al Mazrouei , Ajman University

4.55 Digital Transformation and Its Impact on Sustainable Project Management

Sheeba Hasnain ,The British University in Dubai

5.05 Knowledge Management Contribution to adopting Digital Twin Technology & Green Innovation in Construction Industry

Ahmed Basioni and Farzana Mir , The British University in Dubai

Room Number: 1053, E1 (Female Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Education, Arts, Humanities & Social Sciences

Topic: Education

Conference Chair: Abdulrahman Awad, Khalifa University

3.45 Multi-Scale Behavioral Modeling of User's Quality of Interaction On Learning Management Systems

Abdulrahman Awad (Khalifa University), Sofia B. Dias (Faculdade de Motricidade Humana, Portugal), Sofia J Hadjileontiadou (Democritus University of Thrace, Greece), Leontios Hadjileontiadis, (Khalifa University, United Arab Emirates)

3.55 ثقافة التسامح وعلاقتها بمفهوم التعايش وقبول الآخر لدى طلبة جامعة العين بدولة الإمارات العربية المتحدة

Suad A Alwaely and Aaysha Meshaal, Al Ain University

4.05 The Impact of Teacher Leadership on School Improvement: Exploring the Experiences and Views of School Leaders and Teachers in Private Schools in Sharjah

Asma Hamdan and Solomon David, The British University in Dubai

4.15 مهارات التدريس البنائي لدى معلمي اللغة العربية وعلاقتها بعمليات العلم لطلبتهم

Suad A Alwaely and Douaa Alhalwany , Al Ain University

4.25 ContextVis: Envision Contextual Learning and Interaction with Generative Models

Bo Shui, Chufan Shi and Xiaomei Nie , Tsinghua University, China

4.35 The Effect of Using English Captions and Arabic Subtitles on the Enhancement of Content Comprehension for ESL Students in the UAE

Shaymaa Hesham Abouelasaad ,American University of Sharjah

Room Number: 1054, E1 (Female Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Education, Arts, Humanities & Social Sciences

Topic: Political Science, Communication Studies, Law, and Urban Studies

Conference Chair: Gopika Balakrishnan and Atina Mohsen Ghunaim, United Arab Emirates University

3.45 How Petitions Impact Grassroots Propaganda in China

Xinzhao Huang, The Hong Kong University of Science and Technology

3.55 Unveiling the Past: Local Narratives of Al Ain Sha'abiat

Boshra Hassan and Sahera Bleibleh, United Arab Emirates University

4.05 Bridging borders: A place attachment spatial behaviour assessment

Gopika Balakrishnan and Sahera Bleibleh, United Arab Emirates University

4.15 Environmental Impact Assessment of the urban fabric of Al Ain Industrial area in Al Ain City, UAE

Atina Mohsen Ghunaim, Mahmoud Haggag and Nour Mousa Mousa , United Arab Emirates University

4.25 Corporate Website Analysis Unveiling Sustainability Commitments in Leading Financial Institutions of the UAE and GCC Region

Fatima Moosa Albalushi, Ajman University & Sharjah Islamic Bank

4.35 النظام القانوني للاستغلال التجاري للموارد الفضائي

Salam Alkasem, United Arab Emirates University

Room Number: 1044, E1 (Female Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Clinical, Pre-Clinical, Health & Life Sciences

Topic: Public Health, Infectious Diseases, and Other topics in Clinical, Pre-Clinical & Health

Conference Chair: Rener De Jesus and Lana Jamal Daoud, United Arab Emirates University

3.45 Detection of Carbosulfan and its metabolites in Date Palm Fruit (Phoenix dactylifera) Using QuEChERS and UHPLC-MS/MS

Rana Fawzi Morsi and Mohammed Meetani , United Arab Emirates University

3.55 Burden of Perinatally Detected Major Congenital Anomalies in the United Arab Emirates: The Mutaba'ah Study

Hiba Adam, Hassib Narchi , Rami H. Al-Rifai , Iffat ElBarazi , Nadirah Ghenimi and Luai Ahmed ,United Arab Emirates University

4.05 Low-Density Microplastics in Recreational Parks of Al Ain, United Arab Emirates: Abundance, Composition, and Potential Effects on Soil Health

Rener De Jesus and Ruwaya Al Kendi , United Arab Emirates University

4.15 Report of the first case of cefiderocol resistance in the UAE

Lana Jamal Daoud, Mushal Allam, Akela Ghazawi, Farah Al-Marzooq, Timothy Collyns, Aqeel Saleem, United Arab Emirates University

4.25 Assessment of Helicobacter pylori Cag A protein and its association with ferritin and vitamin B12 deficiencies among healthy asymptomatic residents in Sharjah, UAE

Omkolthoom Mahmoud Weisy and Ghalia Khoder, University of Sharjah

4.35 Streptomyces Sharjahi sp. nov.: A novel Streptomyces species Isolated from the Sharjah Desert with Broad Antimicrobial Activity Against Multi Drug Resistant Pathogens

Hasan Anwar Jarndal, University of Sharjah

4.45 Arabic Translation and Content Validation of the Mental Health Literacy Scale (MHLS) for Perinatal Emirati Patients in the United Arab Emirates

Rouwida K El Khalil, Emad Masuadi ,United Arab Emirates University, Mohamad AlMekkawi , Fatima College of Health Sciences, Luai Ahmed ,United Arab Emirates University, Rasha Bayoumi ,University of Birmingham Dubai, Rami H. Al-Rifai and Iffat ElBarazi, United Arab Emirates University

4.55 Review of Advanced Maternal Age and associated adverse health outcomes in GCC countries

Souha Alabboud , Hala Abu-Falah , Iffat ElBarazi and Luai Ahmed , United Arab Emirates University

Room Number: 1045, E1 (Female Side)

Oral Session: 3

3.45 PM - 5:15 PM

Track: Clinical, Pre-Clinical, Health & Life Sciences

Topic: Anatomy & Morphology, Biochemistry & Biotechnology, Nutrition & Health, Pathology & Pharmacy, Psychiatry &Surgery

Conference Chair: Gafar Babatunde Bamigbade, United Arab Emirates University and Tabarak Alzobi, Al Ain University

3.45 Defining Carbohydrate Residues and Cellular Dynamics in Gallbladder Epithelium

Marim Elkashlan and Sherif Karam, United Arab Emirates University

3.55 Characterization of proliferative stem cells and carbohydrate residues of the earwax gland

Ziad Sabry Khalaf, Sherif Karam and Hind Almarri, United Arab Emirates University

4.05 Biosynthesis of Chitosan Silver Nanoparticles using the UAE Medicinal plant Tephrosia apollinea

Shifa Malik, Kareem A. Mosa and Khalid Bajou, University of Sharjah

4.15 Characterization and Prebiotic Activities of Date Pomace Polysaccharides Extracted with Natural Deep Eutectic Solvent-Ultrasonic Assisted Extraction

Gafar Babatunde Bamigbade and Mutamed Mohammad Ayyash, United Arab Emirates University

4.25 Folic Acid Controls Gastric Stem/Progenitor Cell Proliferation and Chief Cell Production

Wilson Ebele Anyaba, United Arab Emirates University

4.35 The effects of multifactorial pharmacist-led intervention protocol on medication optimisation and adherence among patients with type 2 diabetes: A randomised control trial

Marwan El-Deyarbi, Salahdien Aburuz and Luai Ahmed, United Arab Emirates University and Jeffrey K. King, University of California

4.45 Integrating Multimodal Biomarkers and Advanced Machine Learning for Personalized Treatment Strategies in Mood Disorders

Tabarak Alzobi and Shatha Khairy, AL Ain University

4.55 Investigating the effect of Nuciferine on Renal Ischemia/Reperfusion Injury

Sundus Farag Sallabi, Harun Rashed Toumi, Loay Lubbad and Fayez Hammad, United Arab Emirates University

5:15 PM - 5:30 PM

Networking Break

Saturday, 20 April 2024

Poster Session: 1

E1 Building (Hallway, Male Side)

11.30 AM – 12:15 PM

Topic: **Artificial Intelligence, Computer & Information Science and Data Science**

Adapting Spatial Transformer Networks Across Diverse Hardware Platforms: A Comprehensive Implementation Study

Meriem Bettayeb, Baker Mohammad, Khalifa University

A Cloud-Based System for Arabic Sign Language Education and Communication Using AI and 3D Model Gesture

Mohammed Abduljabbar, Munkhjargal Gochoo, Mohamad T. Sultan, United Arab Emirates University

A Bayesian Approach to Feature Selection in Binary Classification Problems

Rohan Mitra, Maher Emarly and Ayman Alzaatreh, American University of Sharjah

Machine Learning-based Approach for Harvesting and Disease Identification of Date Palm

Sana Zeb Khan, Salam Dhou and Abdul-Rahman Al-Ali, American University of Sharjah

Bayesian Optimization-Based CNN Model for Blood Glucose Estimation Using Photoplethysmography Signals

Saifeddin Alghlayini, Mohammad AlBetar and Mohamed Atef, Ajman University

Towards Machine Translation of Emirati Dialect

Aisha Alraeesi, Sara Shatnawi, Majed Alsuwaidi and Muhammad Abdul-Mageed, Mohamed Bin Zayed University of Artificial Intelligence.

Ethical considerations in the use of AI for Self-service Technology (SST) in the UAE public sector

Muath Mohamed Alyileili, University of Sharjah

Evaluating DIANA: A Comparative Study of its Clustering Performance Relative to Alternative Algorithms

Sana Abouelnour and Abdulrahim Ahmad, Ajman University; Mohammad AlBetar, Al-Balqa

Applied Deep Learning for Solar Radiation Forecasting

Mohammed El Amine Said Azz, Raza Imam and Mohammed Talha Alam, Mohamed Bin Zayed University of Artificial Intelligence

Using artificial intelligence to accelerate the development of sodium-ion electrodes

Sara Arif Alzaabi, Ali Al Hammadi and Ali Elkamel, Khalifa University; Georgios N Karanikolos, University of Patras

AI Chatbots in UAE Government Entities: An Empirical Investigation of User Adoption and Acceptance Factors

Amna Alremeithi, Zayed University

The Self-Distillation Transformer and Fusion Modules in Emotion Recognition in Conversations

Humaid Alzaabi, Ernesto Damiani, Rabeb Mizouni and Ahmed AlDhanhani, Khalifa University

CochCeps-Augment: Cochlear Cepstrum-based Masking for Self-Supervised Contrastive Learning in Speech Emotion Recognition

Ioannis N Zioga, Ahsan Khandoker and Leontios J. Hadjileontiadis, Khalifa University; Hessa Alfalahi, University of Science and Technology

Enhanced Analysis of Flare Stacks through Deep Learning-Driven Vision-Based Detection

Muaz Al Radi, Naoufel Werghi and Sajid Javed, Khalifa University

Sensor-Data Driven PAT Image Reconstruction Using Compressive Sensing-Unrolled Networks

Mary Anjaley Josy John and Imad Barhumi, United Arab Emirates University

Rethink Model Re-Basin and the Linear Mode Connectivity

Xingyu Qu and Samuel Horvath, Mohamed Bin Zayed University of Artificial Intelligence

Blockchain-based Trust and Security for the Edge of Things: A Survey

Abir Raza and Elarbi Badidi, United Arab Emirates University

[Integrating Blockchain in UAV-assisted Search and Rescue Missions](#)

Iman Mohamad Chaabi, Khalifa University

[Tactile Stimulus Segmentation Using Deep Learning](#)

Pengfei Xie, Ruosi Kong and Panos Liatsis, Khalifa University

[Deep Learning Framework for Guided Real-Time Vehicle Teleoperation](#)

Fatima Kashwani, Bilal Hassan, Peng-Yong Kong, Majid Khonji and Jorge Dias, Khalifa University

[Convolutional Neural Network with Learnable Masks for EIT Based Tactile Sensing](#)

Ibrar Amin and Panos Liatsis, Khalifa University

[Comparison of Three Google Earth Engine \(GEE\)-based machine learning classifiers using Sentinel-2 Data](#)

Mubbashra Sultan and Salem Issa, United Arab Emirates University

[Federated Learning for EEG signal classification](#)

Omar Belal, Khalifa University

[AI-Based Learning Analytics for Lecture-Free Instruction](#)

Shamma Alwheibi, Khalifa University

[Machine Learning-based Document Similarity Detection](#)

Ruba Nasser, Khalifa University

E1 Building (Hallway, Female Side)

11:30 AM – 12:15 PM

Topic: [Environmental Science & Engineering, Sustainability, Geology Earth Science and Urban Studies](#)

[Towards Sustainable Produced Water Management in Offshore Oilfield Operations – Life Cycle Assessment](#)

Houda Majid, Khalifa University

[Modelling and Experiment of a commercial AWG System powered by renewable energy](#)

Batool Taher Khalaf, Khalifa University

[Harmonizing Innovation with Environment: Decoding the Optimal Energy Tool for Abu Dhabi's Sustainable Building Future](#)

Farah Hazem Daghsh, Ibrahim Ismail and Moza Yaqoub Alhammad, Khalifa University

[Integrated BIM Level 3 Maturity Assessment Tool for The AEC Industry](#)

Lama Abu Moeilak and Salwa Beheiry, American University of Sharjah

[A Comparison of the Effects of Different Chemical Activation Methods on the Physicochemical Characteristics of Kaolin Clay](#)

Amos Kwaku Avornyo and Constantinos Chrysikopoulos, Khalifa University

[Waste Tamarind seed derived activated carbon for Orange G dye removal](#)

Manisha Sukhraj Kothari, United Arab Emirates University

[Enhancing Thermal Comfort through Wind-Catcher Integration for Optimizing Natural Ventilation](#)

Reema AbdAllah Tobeishat and Hanan Taleb, British University in Dubai

[Impact of Innovative Lighting Strategies on The Performance of Educational Environment](#)

Khaloud ALmezeini, Byan Abdulraheem Aldeeri and Wael Sheta, British University in Dubai

[Sustainable Development and Climate Change Mitigation Strategies for Kuwait](#)

Muhammad Sadiq, Khalifa University

[Applying ZEB Strategies to Enhance Energy Efficiency in Mosques](#)

Waheed Addin Ibrahim Almasri and Wael Sheta, British University in Dubai

[Prediction of Soil Chromium Content Using Hyperspectral Spectroscopy](#)

Mariam Alcibahy, Abdel Rahman Satei Hussein Alsaleh and Maryam Rashed AIShehhi, Khalifa University

[Environmental change and stratigraphy of the Upper Triassic sediment succession in Ras Al-Khaimah, UAE](#)

Azeem Shah, Aisha Al Suwaidi and Thomas Steuber, Khalifa University; Dominik Hennhoefer, Hessisches Landesmuseum Darmstadt, Germany

[Geochemical fingerprints of dolomitization in Upper Jurassic Arabian carbonate platform: Evidence from magnesium isotopes](#)

Xiaolan Jia (Khalifa University)

Red Sea rifting evolution in Quseir area, Egypt: a field approach

Mohamed Abdelkawy Elfadly, Khalifa University & Assiut University

Analysis of the genesis of Paris Basin: insights from Variscan orogeny dynamics

Ramon De Luca, Andrea Ceriani, Alessandro Decarlis and Francesco Arboit, Khalifa University

Sorption of trimethoprim and ibuprofen to sandy soils

Ahmad Mohammad Hassan Alhalabi, Munjed Maraqa and Mohammed Meetani, United Arab Emirates University

Emergence Of Clay Mineral Formation On Early Earth As An Important Analogue For Exploring Extra-terrestrial Life Forms

Omar Alattas, Khalifa University

Transformation of the point-source seismograms into line-source ones in a 2-D geological model

Moosoo Won, Bing Zhou, Mohammad Al-Khaleel and M. Jamal Zemerly, Khalifa University

An efficient parallel iterative solver for multi-source and multi-frequency seismic wave modeling

Guoqi Ma, Bing Zhou, M. Jamal Zemerly and Mohamed Riahi, Khalifa University

Geophysical and rock physics studies for Carbon dioxide (CO₂) injection and sequestration monitoring

Jianming Chen and Fateh Bouchaala, Khalifa University

Addressing Urban Challenges: A Study on the Efficacy of Convoy Driving

Sumbal Malik, Hesham El-Sayed, Manzoor Khan and Muhammad J Khan, United Arab Emirates University

Grey water as a potential, energy efficient solution for diverse water requirements of the UAE: insights from research in selected fodder crops of the UAE

Yasmin Shameem, United Arab Emirates University

Architectural Identity: Assessing User Perception About External Styles for Emirati Vertical Public Housing

Omar Sherzad M. Shareef and Khaled Galal Ahmed, United Arab Emirates University

'Superblock Archetypes': Classification based on Gaussian Mixture Models

Najeeba Kutty, United Arab Emirates University

How did the COVID-19 crisis reshape mobility in post-pandemic cities?

Abrar Bashar Aletaywi and Rahma Abdelghani, Khalifa University

E1 Building (Hallway, Male Side)

12.15 PM – 1.00 PM

Topic: **Chemical Engineering and Chemistry**

Investigation of Carbon Nanotubes-Based Electrodes for Water Splitting and Hydrogen Production

Ebrahim Alostta and Ludovic Dumée, Khalifa University

Biodegradable based Mixed Matrix Membrane with TiO₂-MWCNTs functionalization for Oil Water Separation

Farah Abuhantash Hanaa Hegab and Shadi Wajih Hasan (Khalifa University, United Arab Emirates)

Catalytically accelerated CO₂ desorption for energy efficient solvent regeneration

Muhammad Waseem, Mohamed Al-Marzouqi and Nayef Mohamed Ghasem, United Arab Emirates University

Kinetics, Thermodynamics, and Biological Characterizations of Hydrolysates Enzymatically Produced from Proteins Extracted from Microalgae

Hebah Al Amodi, United Arab Emirates University

Electromagnetic Field Effect on TEMPO Conversion Cycle: Toward a sustainable catalyst

Ahmad Al Masri Alwan, Tu Phuong Pham Le, Gobind Das, Maguy Abi Jaoude and Emad Alhseinat, Khalifa University

pH-responsive MXene-based Ultrafiltration Membrane for Sustainable Removal of Microplastics in Desalination Processes

Fatema Hisham Khamis, Hanaa Hegab, Hassan Arafat, Fawzi Banat and Shadi Wajih Hasan, Khalifa University

Hydrodynamic Modeling of Skim Milk Microfiltration using Flat-sheet Membranes

Mairaj Khalid, United Arab Emirates University

Innovative Synthesis of MXene-Based Membranes for PEM Fuel Cells: A Sustainable Approach towards Energy Advancement

Ryan Al Tayeb and Amani Al-Othman, American University of Sharjah

Laser Powder Bed Fusion of 316L Stainless Steel: Influence of process parameters on relative density, microstructure and corrosion performance

Ahmed K Alameri, Akram Alfantazi and Imad Barsoum, Khalifa University

2D MXene Electrodes for Ammonia Oxidation Reaction for Hydrogen Generation

Alanood Abdulla Alzaabi and Faisal A AlMarzooqi, Khalifa University

Modeling of Transient Biofiltration Process for Volatile Organic Compound (VOC) Removal

Basil Moawia Mustafa and Zaroook Shareefdeen, American University of Sharjah

Potential of Bio-Adsorbents for Lithium Extraction from Brine

Mohammed Abujayyab and Fawzi Banat, Khalifa University

A Literature review of Rice Bran Oil Production from Rice Bran by using Solvent Extraction Technique

Riffat Amna, Khalifa University; Syed Farzan ali Shah, American University of Sharjah

Performance Analysis and Benchmarking of Biopolymers in Food Coating

Sarath Haridas Kaniyamparambil, Mohamed Hamid Salim, Blaise Leopold Tardy, Faisal Al Marzooqi, Fawzi Banat and Srinivas Mettu, Khalifa University

Breakthrough Highly-Effective Extraction of Perfluorooctanoic acid using Natural Deep Eutectic Solvents

Ahmad Darwish Inas Alnashef, Shadi Wajih Hasan, Sana Eid, Maguy Abi Jaoude and Fawzi Banat, Khalifa University

Hydrodeoxygenation of Alcohols over Metallic Catalyst Supported on HZSM-5

Dana Salaas and Joy Tannous, United Arab Emirates University

Design of Highly Stable Alloy Anodes by Surface and Interface Engineering for Sodium-ion Batteries

Khawla Ahmed Alhebsi, Khalifa University

Fast and Efficient Removal of p-nitrophenol from Wastewater using Graphene Nanoplatelets; Equilibrium and Kinetic studies

Babatunde Ogunbadejo and Sulaiman Al-Zuhair, United Arab Emirates University

Optimizing HSMR for Sustainable Hydrogen: AI-Based Process Optimization and Forecasting

Sheeraz N. Ahmad, Ali Almansoori, Lourdes Vega, Ismail I.I. Alkhatib and Ali Elkamel, Khalifa University

Experimental and Computational Investigation of Polymorphism in N-Salicylidene Aniline Schiff Base

Zeinab Mohamed Saeed, Sharmarke Mohamed and Praveen Managutti, Khalifa University,

Novel 3D Cu-S MOF as highly acetaldehyde-selective in electro-catalytic carbon dioxide reduction

Abdul Mannan Butt, Ahsan Ul Haq Qurashi, Dalaver Anjum and Faisal A AlMarzooqi, Khalifa University

Enantioseparation of Mecoprop in Capillary Electrophoresis Using β -Cyclodextrin and Derivatives as Chiral Selectors

Davit Khutsishvili, Tsinghua-Berkeley Shenzhen Institute & Institute of Biopharmaceutical and Health Engineering, China.

Optimization of Copper-Fumarate Frameworks for Selective Adsorption of H₂S

Abdul Samad Butt, Nagy Kamal Torad, Mohammad Abu Haija, Maguy Abi Jaoude and Kyriaki Polychronopoulou, Khalifa University

Covalent Organic Framework-derived Composite Membranes for Water Treatment

Nada Adnan Elmerhi, Sushil Kumar, Maguy Abi Jaoude and Dinesh Shetty, Khalifa University

E1 Building (Hallway, Female Side)

12.15 PM – 1.00 PM

Topic: **Petroleum Engineering, Energy & Fuels, Nuclear Engineering and Biomedical Engineering**

Effects of surface deposited vs support dispersed Fe ions on Ni-based catalysts in combined dry-reforming and partial oxidation of methane

Abdulmuizz Adamson and Abbas Khalil, United Arab Emirates University

Designing and Manufacturing a Solar-Water Electrolysis System to Reduce Fuel Consumption in Natural Gas Vehicles

Kareem A. Morsi and Mohammad O. Hamdan, American University of Sharjah

Synthesis of Hyaluronic acid-PVDF-based composite membranes for high-performance PEM fuel cells

Tallah MY Ahmed, Amani Al-Othman and Abdulrahim Shamayleh, American University of Sharjah

Optimal Energy Management System for Green Hydrogen Production Plants from Sea Water

Rawan A Abdelsalam, Hatem H Zeineldin and Ehab El-Saadany, Khalifa University; Hany Farag, York University, Canada

Techno-economic assessment of wind resource and power generation potential in the Gulf region

Sajeer Ahmad, Valerie Evely and Md Islam, Khalifa University

A Computational Fluid Dynamics Study of Food Waste Pyrolysis in an Industrial-Scale Bubbling Fluidized Bed Reactor

Eman Abdein Mohammedali Basheir and Yassir Makkawi, American University of Sharjah

Optimization of Heat Networks for CO₂ Capture from Natural gas combined cycle Power Plant

Khalfan S Almesmari and Ahmed Al Hajaj, Khalifa University

Development of Cr-coated Zr alloy cladding using electrodeposition from ionic liquids

Ghadeer Hegab Mohamed, Akram Alfantazi, Saeed Alameri and Karuppasamy Karuppasamy, Khalifa University

Effects of Cladding Thermal Properties on the Oxidation Kinetics During Loss-of-Coolant-Accident

Maithah Alaleeli and Saeed Alameri, Khalifa University

Performance Analysis for Enhanced Cr-Coated Fuel Cladding System in APR-1400 Reactor

Asma Alzarooni, Saeed Alameri and Mohammad Alwashdeh, Khalifa University

Derivation of a Condensation Heat Transfer Model for Light Water Reactor Applications using Machine Learning Techniques

Samah Al-bdour, Khalifa University

Non-Newtonian Polymer Flooding in Low-Permeability Carbonate: An Experimental Investigation

Chuangchuang Qi, Mohammed Haroun, Mohammed Al Kobaisi and Md Motiur Rahman, Khalifa University

Experimental Characterization of Shale Microstructure and Wettability in the Presence of CO₂

Batool R Alwerfalli and Muhammad Arif, Khalifa University

Recent Developments in Prediction of Vapor-liquid Equilibrium Using Machine Learning in Carbonates

Ravan Farmanov, Khalifa University

A review of the CO₂ residual Trapping in different types of rock

Haiyang Zhang and Muhammad Arif, Khalifa University

Solving the Pressure Equation with Injection and Production Wells Using PINNs

Waleed Diab and Mohammed Al Kobaisi, Khalifa University

Numerical Investigation Of Formation Caprock Integrity: A Laboratory investigation of Hydrogen Storage

Mohammed Ali AIDhuhoori, Khalifa University

A New Calculation Method and Model of Hydrate Slurry Flow of The Multiphase Pipeline in Deep Water Gas Field

Yan Gao, Khalifa University

3D printable Colorimetric Natural Hydrogel- Wound Healing Monitoring Patch

Nazmi Alsaafeen, Aaasha Alteneiji, Shamma A Almansoori, Meznah Alabdouli, Ayesha Alkhaaldi, Shabir Hassan, Charalampos Pitsalidis and Anna Maria Pappa, Khalifa University,

Advancing Diabetes Management Through Non-Invasive Wearable Technology

Dana Alhosani and Herbert F Jelinek, Khalifa University

Identification of Mental Stress from Long-Term ECG Recordings Using Novel Complexity Analysis

Sara Nasrat, Ahsan Khandoker and Herbert F Jelinek, Khalifa University

Conversational emotion climate recognition using higher-order spectra, emotion dynamics and deep learning

Ali H Alsuwaidi and Leontios Hadjileontiadis, Khalifa University

Self-Expanding Stents: A Finite Element Analysis of their Interaction with the Wall of Blood Vessels

Zubeir Allum Saib and Farid Abed, American University of Sharjah

Cochlear Transform: A Novel Bio-inspired Time-Frequency Analysis Framework

Hessa Alfalahi, Ahsan Khandoker and Leontios Hadjileontiadis, Khalifa University

DeepGCN: A deep learning model for predicting Protein-Protein Interactions

Noor Jamal Alkhateeb and Mamoun Awad, United Arab Emirates University

12:30 PM - 2:00 PM

Lunch Break (Food Court)

Saturday, 20 April 2024

Poster Session: 2

E1 Building (Hallway, Male Side)

2.00 PM – 2.45 PM

Topic: **Electrical & Electronic Engineering, Communication Engineering and Micro/Nano Electronics**

CRPs Dataset for Security Analysis of PUF Device

Enas Abulibdeh, Hani Saleh, Baker Mohammad and Mahmoud Al-Qutayri, Khalifa University

Impairments Compensation in 5G Power Amplifiers Using Neural Networks

Reem Alnajjar and Oualid Hammi, American University of Sharjah

Blockchain-Enabled Moving Target Defense for Secure CR Networks

Esraa M. Ghourab, Lina Bariah Sami Muhaidat, Paschalis C. Sofotasios, Mahmoud Al-Qutayri and Ernesto Damiani, Khalifa University

Modeling and controller design of two-stage grid-connected battery energy storage system (BESS) operating in the grid-following mode
Mohamed A Shahboob and Mohamed Shawky El Moursi, Khalifa University

Enhancing Renewable Power and System Loading Forecasting in Smart Grids: A Deep Learning Approach Using LSTM on the PSML Dataset

Abdullahi Oboh Muhammed and Mohamed Shawky El Moursi, Khalifa University

A Novel Voltage Droop Scheme for Reactive Power Sharing Improvement in Droop-Controlled Inverter-Based Microgrids

Adham Osama, Khalifa University

Bi-level Integrated Electricity and Natural Gas System Retrofit Planning Considering Carbon Capture, Utilization and Storage

Ang Xuan and Xinwei Shen, Tsinghua University, China

Artificial Neural Network Controller for Boost Converter: A Design and Performance Analysis

Amulya Viswambharan and Rachid Errouissi, United Arab Emirates University

Auto-Tuning of DC-AC Voltage Source Converters with Gain Margin Specification

Zheng Zhang and Igor Boiko, Khalifa University

Coordinated Multi-Mode LVRT Scheme for PV Systems with FCS-MPC

Ahmed Mohammedosman, Tarek EL-Fouly, Mohamed Shawky El Moursi and Khalifa Hassan Al Hosani, Khalifa University

Integrating Deep Learning and Ensemble Methods for Enhanced Short-Term Solar Irradiance Prediction: A Hybrid LSTM-RF Approach
Mohamed Alhashmi, Khalifa University

Performance Analysis of Sliding Mode Speed Control for Field Oriented Control Induction Motor

Ahmad Rizwan, Habib-ur Rehman and Rached Dhaouadi, American University of Sharjah

Detection and Mitigation of Cyber Attacks Against Automatic Generation Control

Ahmed Abughali, Ameena Al Sumaiti and Mohamed Shawky El Moursi, Khalifa University

A Practical Urban Distribution Network Planning Method with Geographic Information System

Zhen Wang, Xinwei Shen and Hongbin Sun, Tsinghua University, China

Microchannel with nanofluids for cooling of electronic systems

Muhammad Mustafa Generous, Khalifa University

A Comprehensive Study on Material Variations and Geometric Shapes for Improved Effective Mass Detection in Coupled Cantilevers Using Piezoelectric Materials

Atif Sultan and Irfan Hussain, Khalifa University

Asymptotic Ergodic Capacity of cascaded Fisher-Snedecor F fading channels

Hamza Siddig, Khalifa University

Vehicles Charging Using on the Go Wireless Power Transmission for Modern Cities

Bassam A. Harb and Omar Al Samahei, Al Ain University

AI-Based Path Loss Characterization for Future Mobile Network Links

Hanan Said AL-Dhamri, Sultan Qabus University, Oman

Performance Analysis of LoRa for Multihop Internet of Underground Networks with Relaying

Irfana Ilyas Jameela Manzil and Nasir Saeed, United Arab Emirates University

BER Performance of V-BLAST MIMO in Different Detection Techniques

Tessema Tariku Terefe, Arafat Al-Dweik and Shihab Jimaa, Khalifa University

Loop Antenna with enhanced impedance bandwidth and realized Gain for X-Band applications

Sagiru Mukhtar Gaya and Mohamed A Abou-Khousa, Mohamed AlShehh, and Khaled Al-Wahedi, Khalifa University

Energy Storage in Wholesale Electricity Markets: A Techno-Economic Analysis

Osama Mussawar and Ahmad Mayyas, Khalifa University

Bioelectronic organ-on-Chip: A 3D microfluidic device integrated with conducting polymer scaffolds for monitoring cell growth and function

Rasha Ayman Nasser and Charalampos Pitsalidis and Anna Maria Pappa, Khalifa University; Jeremy Teo and Jiranuwat Sapudom, New York University Abu Dhabi

E1 Building (Hallway, Female Side)

2.00 PM – 2.45 PM

Topic: **Education**

An Examination of Teacher Retention Policies in UAE Schools Through Support and Development

Ameirah Hassan Al Mohamed and Ali Ibrahim, United Arab Emirates University

The role of educators in mitigating cyberbullying

Ruba Albirbary and Tendai Charles, British University in Dubai

أثر استخدام نموذج سوم "SWOM" في التحصيل العلمي لدى طالبات الصف الخامس الأساسي في مادة العلوم في سلطنة عُمان

Aliaya Aamir Alhajri, Sultan Qaboos University, Oman

Virtual Reality in ESL Teaching and Learning in a Hybrid Learning Environment in the UAE

Basma A Abri, United Arab Emirates University

"I Fear Unintentionally Adding to Their Trauma": A Study Exploring Teachers' Perception and Readiness to Implement Trauma-Informed Teaching in UAE Schools

Hadeel Mohsen Saleh, United Arab Emirates University

The experience of Emirati women with using ICTs for e-entrepreneurship: a phenomenological perspective

Hessa Hassan Essa Saleh, University of Sharjah

فاعلية برنامج تعليمي قائم على تقنية الإنفوجرافيك في تنمية عادات العقل لدى طالبات الصف العاشر الأساسي في مادة التربية الإسلامية

Karema Abdalluh Alsaadi and Mohammed Abdulkarim Aleayasira, Sultan Qaboos University, Oman

Mother-Sources in Modern Gulf History: A New Rooting Method

Mohammed Rashed Kharshan (Sultan Qaboos University)

Human Susceptibility to Financial Fraud: A Victim Precipitation Perspective Using the Big Five Personality Traits

Saad Almarzooqi, United Arab Emirates University

درجة امتلاك معلمي اللغة العربية في مدارس إمارة أبوظبي لمهارات الكتابة الجدلانية

Fatima Alhammady and Suad A Alwaely, Al Ain University

University-Level Learners' Perceptions on WhatsApp Integration as a Learning Tool to Develop EFL Vocabulary for English Language Skills

Manhal Musa Elemam, Ghadah Al Murshidi, Patil Arsen Maradian and Mahra Khaled Alfalah, United Arab Emirates University

تحليل خطاب مرضى الزهايمر في ضوء التداولية المعرفية

Mohammad M Alsadani, Sultan Qaboos University, Oman

Balancing Act: Unveiling the Dual Nature of Student Device Usage in the Digital Age

Wissal A. Mohsen and Mohammad AlRashaida, United Arab Emirates University

دور المختبر الافتراضي الغامر (IVRL) القائم على النظريتين التواصلية ونظرية الترميز الثنائي في تنمية المفاهيم الفيزيائية لدى طالبات الصف التاسع الأساسي في سلطنة عمان

Khalsa Hamed AlBahri, Mohammed Shahat and Abdullah Khamis Ambusaidi, Sultan Qaboos University, Oman

استكشاف تأثير القيادة التمكينية على التزام المعلمين بالتغيير نحو التعليم الإلكتروني في المدارس الحكومية بسلطنة عمان

Muna Khamis Rashid Al-Alawi, Yaser Alhandawi Almahdi, Rashid Suleiman Al Fahdi and Rayya Salim Al Mandhariya, Sultan Qaboos University, Oman

Exploring Ninth and Tenth-Grade Students' Mathematical Problem Solving in UAE High Schools

Nadeia Rashed Al Alawi, United Arab Emirates University

تقنية الواقع الافتراضي في مادة التربية الإسلامية: تجربة تطبيق الواقع الافتراضي الغامر " الأيام الخالدة" في السيرة النبوية " الواقع والتحديات"

Saja Said Al farisi, Sultan Qaboos University, Oman

Mothers' Perceptions about Fathers' Roles in Raising Children with Disabilities in Abu Dhabi

Shamsa Ali Almarzooqi, Ahmed Hemdan Mohamed and Maxwell Opoku, United Arab Emirates University

Academic excellence: key factors and review of world-class institutions

Younis Hassan Alhosani, United Arab Emirates University

The Use of Tragicomedy in Emirati Theatre: The Wounded as an Example

AlAnood Ahmed Albuainian, United Arab Emirates University

A Triadic Analysis of Higher Education Strategies in the UAE

Fatima AlMugarrab, American University of Sharjah

Teachers' Emotional Intelligence and Social Emotional Learning in the United Arab Emirates: Integrate Artificial Intelligence

Jehan Abdulla, United Arab Emirates University

فاعلية منصة تعليمية قائمة على التلعيب في تنمية مهارات الفهم القرآني وفق العمليات الأربع للدراسة الدولية "بيزلز" لدى تلاميذ الصف الرابع الأساسي بسلطنة عمان

Fawziya Malallah Alwahabi, Sultan Qaboos University, Oman

Enhancing Classroom Dynamics: The Power of Questioning in Student Engagement and Learning

Joumana Abdo and Tendai Charles, British University in Dubai

Effect of using HWT on 1st grade Omani students' handwriting performance aligned with JP and TTO

Rahima Mohammed Albalushi, Sultan Qaboos University, Oman

E1 Building (Hallway, Male Side)

2.45 PM - 3:30 PM

Topic: **Mechanical Engineering and Aerospace Engineering**

Dual-Function Hydrogel-Based Smart Wearables: AI-Driven Temperature Responsiveness & UV Index-Indicative Color Monitoring

Mohamed Elnemr, Khalifa University

Multi-objective parametric optimization of ultrasonic vibration assisted milling of Ti-6Al-4V alloy

Ansar Kareem and Jaber Abu Qudeiri, United Arab Emirates University

Liquid Metal Droplet Impacting-Solidifying Behaviors on Curved Surfaces

Haokun Zhang, Md Islam, Nader Vahdati and Yit Fatt Yap, Khalifa University; Firas Jarrar, Al Hussein Technical University, Jordan

Mechanical Characterization of 3D-Printed Polycarbonate Filament Reinforced with Carbon Fiber

Abdalhadi Fayad and Maen Alkhader, Bassam A. Abu-Nabah and B Darras, American University of Sharjah

Enhancing Strain Measurement in CFRP Tensile Testing through DIC

Afsar Husain and Sanan Husain Khan, Abdel-Hamid Ismail Mourad, United Arab Emirates University

Decarbonization potential and cost assessment of iron and steel production using renewable energy

Hammad Masood and Valerie Eveloy, Khalifa University

Impacts of System Configurations on Exergy Destruction and Efficiency: An In-depth Analysis of Thermal Oil and Organic Rankine Cycle Interactions

Heba Iyad Khafajah and Mohamed Ibrahim Ali, Khalifa University

Parametric Study of Hybrid AlSi10Mg Components Manufactured via Selective Laser Melting

Linda Ismail and Andreas Schiffer, Khalifa University; Omer Fathallah, Advanced Research and Innovation Center ARIC

A Multidimensional Perspective on Synergizing Innovations in Lithium-Ion Battery Thermal Management

Mehwish Mahek and Mohammad Alkhedher, Abu Dhabi University

Modeling, optimization, and testing of novel cuboidal spherical plate lattice structures

Abdulla Almesmari, Imad Barsoum and Rashid Abu Al-Rub, Khalifa University

A Study into the Effect of Pyrolysis Temperature on the Electrical Properties of Polymer Derived Ceramics

Adam Otabil, Khalifa University

Numerical Modelling and Flow Visualisation of Pulsating Flow in a Fluid Mount

Alfiya Simran Mohammed Ashraf, Khalifa University

Development and Performance Analysis of a Prototype Gas Flaring System

Fares O. Abdelhafez, Khalifa University

Performance investigation with parametric study of thermal-driven absorption refrigeration systems

Mohamed Zakaria Khatib, Hassan Arafat and Mohamed Ibrahim Ali, Khalifa University

Human Activity Recognition via Parameterized Multi-Stage Graph Convolutional Neural Network

Mohammad Belal Irshaid and Irfan Hussain, Khalifa University

Simulation and parametric optimization of resistance spot welding of ultra-high strength 22MnB5 and AISI 316L dissimilar metals

Anasmon Valappil and Jaber Abu Qudeiri, United Arab Emirates University

Assessment of vapour compression based Atmospheric water generation in the United Arab Emirates– experimentation and perspective

Essa Ansari, Khalifa University

Sewage Sludge Gasification in an Entrained Flow Gasifier: Characterization and Equilibrium Modelling

Sameer R Khan and Isam Janajreh, Khalifa University

Experimental demonstration of a novel dispatchable high temperature latent heat thermal energy storage

Asem Alemam, Nicolas Ferber, Valerie Evely, Nicolas Calvet and Imran Afgan, Khalifa University

CFD Modelling of Commercial GAS/LIQUID/LIQUID Separator

Omar M Nasro, Abdallah Sofiane Berrouk and Hamid Abderrahmane, Khalifa University,

Flight maneuverability analysis of a novel polymorphing wing during roll

Zawar Haider and Rafic Ajaj, Khalifa University

Structural Analysis of AlAinSat-1 CubeSat Validation of AlAinSat-1 CDHS Module

Abdalla Saad Elshaal, Mohamed Okasha and Erwin Sulaeman, United Arab Emirates University; Abdul Halim Jallad, American University of Ras Al Khaimah

Prediction of aerothermal environment and heat transfer for hypersonic vehicles with different aerodynamic shapes based on C++

Tianqiang Huang, Khalifa University; Guoyi He, Nanchang Hangkong University, China

E1 Building (Hallway, Female Side)

2.45 PM - 3:30 PM

Topic: **Agriculture and Pharmacy**

Mimicked climate change for triggers the antioxidant enzymes and photosynthetic parameters in grapevine rootstocks Ruggeri and Paulsen

Sonu Krishankumar, United Arab Emirates University

Improving Barley Crop (*Hordeum Vulgare* L.) Production by using Municipal Treated Wastewater

Wasef Ayed Alzayadneh and Mohammed Salem, United Arab Emirates University

Impact of root pruning on the growth of hydroponic plants, and opportunities for harvesting hydroponic plant roots as food

Mariam Yaslem Mubarak Albreiki, Fatima Alkaabi, Ayesha Alam and Elke Neumann, United Arab Emirates University

The Influence of Resin Embedding on Nanoindentation Analysis and Mechanical Properties of Rat Femur Bone

Mozan Hassan, Fatima Alnuaimi Dana Binkuwair and Sahar Mohsin, United Arab Emirates University

Immobilized Laccase for the Degradation of Emerging Pollutants in Water

Nada I. Alhatti and Syed Ashraf, University of Khalifa

Role of the Chromatin Remodeler Fun30 in Telomeric Maintenance in *Saccharomyces cerevisiae*

Amira Bekdash, United Arab Emirates University

Genomic Characterization of Xerophytic LEA2 Proteins for the Mining of Thermoprotectants

Mughair Abdul Aziz, United Arab Emirates University

The cellular trafficking and targeting of angiotensin converting enzyme 2 (ACE2) and neutral amino acid transporter (B0AT1): Implications for corona viruses' pathogenesis and therapy

Nesreen Alkhofash, United Arab Emirates University

Genetic Taste Predisposition and Dental Caries Among Children from United Arab Emirates (UAE)

Ranaa Al Shami and Tarun Walia, Ajman University

Potential role of MicroRNA-155 in type 2 diabetic osteopathy or Dysregulation of miR-155 in type 2 diabetic osteopathy

Mouza Mohammed Alaleeli, Suneesh Kaimala and Sahar Mohsin, United Arab Emirates University

Perceptions on oral health before and after the pandemic

Ruqaya Z. Shahin and Alexander M. Luke, Ajman University

Knowledge, attitudes and practices of parents on preschooler's oral health in the UAE

Slmy Mathew, United Arab Emirates University; Nada Asaad, Doaa Mohammed Nabil and Alexander M. Luke, Ajman University; Madiha Akbar, Independent Researcher, USA

Unraveling the mechanism of conventional heat and microwave treatments on the molecular conformation of jack bean protein

Feyisola F Ajayi and Sajid Maqsood, United Arab Emirates University

Children's preferences towards pediatric dentists and dental clinic design and their relationship with dental anxiety

Mai Mohamad Jbarah and Raghavendra Shetty, Ajman University

Assessment of Carboxylic Acid Bioisosterism: In Silico Perspective

Alaa Osman and Alya Arabi, United Arab Emirates University

Assessment of long-term safety and efficacy of Dupilumab therapy in patients with moderate-to-severe Atopic Dermatitis in the UAE: a real-life observational study

Noor Mohammed Al-Areqi, Sham ZainAlAbdin, Imene Amrane and Salahdien Aburuz, United Arab Emirates University; A. Akour University of Jordan, Jordan

Synthesis of modified Uridine analogues via click chemistry as potential anticancer agent

Ahmed Ibrahim, Al Ain University

Impact of Clinical Pharmacy Services on Adherence and Quality of Life of Pediatric Cystic Fibrosis Patients Using Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) Modulators

Heba Ibrahim Ahmad, Al Ain University

Formulation of Chitosan-based Nanoparticles Cream for Percutaneous Delivery of Fucidic Acid

Lama SA Abu Amer and Mohammad Bostanudin, Al Ain University

The impact of digital transformation in pharmacy practice in UAE

Nour Moharram Salaheldin, Al Ain University

Possible seasonal differences in the *C. colocynthis* microbiome

Miranda Procter, United Arab Emirates University

Availability of Healthcare: A Prominent Challenge in Public Health

Inas Al Khatib, Mahmoud Awad and Malick Ndiaye, American University of Sharjah

Investigating the effect of Nuciferine on Renal Ischemia/Reperfusion Injury

Sundus Farag Sallabi, Sr., Fayez Hammad, Harun Rashed Toumi and Loay Lubbad, United Arab Emirates University

Mode of EBV Transmission and its Impact on Viral Infection and Reactivation

Meera Mohammed Al Ameri, Pretty Phillip, Atia Rasheed, Latifa Al Khyeli and Gulfaraz Khan, United Arab Emirates University

3:30 PM - 3:45 PM Coffee Break

Saturday, 20 April 2024

Poster Session: 3

E1 Building (Hallway, Male Side)

3.45 PM – 4.15 PM

Topic: **Material Science & Engineering, Physics**

Molecular Dynamic Modelling to analyze the functionality of Metallic glass alloys as biomedical implants: A Review

Shubhra Shitole and Abdel-Hamid Ismail Mourad, United Arab Emirates University

Real-Time Stress Corrosion Cracking Diagnostics: A Sensor-AI Synergy in Extreme Environment Conditions

Hasan Tariq Hamdan and Mohammad Alkhedher, Abu Dhabi University

Synthesis and Performance Evaluation of Ag / TiO₂/MXene Composite for Clean Water Production

Nizamudeen Cherupurakal, Krishna Priya Ramachandran and Abdel-Hamid Ismail Mourad, United Arab Emirates University

Eco-friendly Insulating Materials Based on Alkaline Treated Date Palm Fiber Reinforced Poly(β -hydroxybutyrate) Composite

Amal Ibrahim Mlhem, United Arab Emirates University

Isotherm and kinetics study for Solid polymer desiccants

Muna Salem Salem, Khalifa University

Use of Recycled PET Fibers in Concrete

Abdelaziz Mahmoud Salim, M Talha Junaid and Samer Barakat, University of Sharjah

Effect of V on the magnetic properties of CoNiCr medium entropy alloys' thin films

Faisal Mustafa, Mehmet Egilmez, Wael Abuzaid and Sami El-Khatib, American University of Sharjah

Femtosecond laser treated nickel foams in different atmospheres as current collectors for supercapacitor application

Muhammad Faheem Maqsood, Ali Sami Alnaser, Ganjaboy S. Boltaev and Wael Abuzaid, American University of Sharjah

Thin Films Characterization Using Surface Roughness

Muhammad Mujtaba Syed, Khalifa University

3D Printing on Commercial Contact Lens Surface with Vat Photopolymerization

Muhammed Hisham and Haider Butt, Khalifa University

Characterization of 2D-Material Coated Fabric for Thermal Management

Xiaoning Fu, Khalifa University

Graphene Ink Formulation using Non-toxic Green Solvent (Cyrene)

Mariam Mohamed Yehia Badawi, Imran Afgan, Yarjan Abdulsamad and Kyriaki Polychronopoulou, Khalifa University

Effect of Carbon Nanotubes (CNT) on Chloride Ions Diffusion in Cementitious Materials Under Marine Environment of Arabian Gulf

Sohail Maqsood, Remilekun A Shittu, Tae-Yeon Kim and Rashid Abu Al-Rub, Khalifa University

Electric Field Driven Self-Assembly of Gold Nanoparticle Monolayers on Silicon Substrates

Firdous A Deader, Yawar Abbas, Ahsan Ul Haq Qurashi, Mahmoud Al-Qutayri, Vincent Chan and Moh'd Rezeq, Khalifa University

Manipulating Entanglement Dynamics in Dephased Interacting Qubits Using a Radiation Field

Rahma Abdelmagid and Gehad Sadiek, University of Sharjah

Rare Earth Nanoparticles Spectral CT Imaging and Optimization

Ahmed H Alhamedi, Khalifa University

Numerical Solution to Time-Dependent Transport Equations for Cosmic Rays Originating from Supernova Remnants

Ankit Yadav and Satyendra Thoudam, Khalifa University

A Preliminary Study on the Spectral Signatures of OD, towards Future Detection

Rania Abdallah Al Abdallah, Khalifa University

Effect of catalyst in the synthesis of Biomass Derived CNTs

Sadika Farsana Sulthan Pillai and Jamal Hassan, Khalifa University

Single Walled Carbon Nanotubes for Solar Energy Harvesting

Sherif Elsayed, Husam AlTakroori, Moh'd Rezeq and Baker Mohammad, Khalifa University

FRET Based Super Resolution Microscopy

Alam Saj, New York University Abu Dhabi

High-Precision Extraction Of The Nucleon Charge Radius Utilizing Flavor-Decomposition Nucleon Form Factors Data

Meera Abdulaziz Alblooshi, Khalifa University

Potential Desiccation Polygons (PDPs) in Mawrth Vallis, Mars

Khadiga Imam and Mohamed Ramy El-Maarry, Khalifa University

Barriers to Additive Manufacturing Adoption in the United Arab Emirates' Automotive Supply Chain

Asma Ali, British University in Dubai

Study of Productivity in Construction Industry

Gifty Elizabeth Syam and Malik Khalfan, Khalifa University

E1 Building (Hallway, Female Side)

3.45 PM – 4.15 PM

Topic: **Cancer & Oncology, Diabetes & Cardiovascular Disease**

Development of a tissue adhesive hydrogel post ovarian cancer resection

Rukshana Mangattu Veetil, Khalifa University

Targeting O-GlcNAc Transferase to Inhibit Glioblastoma Growth: An Investigation into the Impact of Reduced O-GlcNAcylation

Sedra Jamal Kremesh and Rose Ghemrawi, Al Ain University; Mostafa Khair, New York University

Exploring CDKs Inhibition as a Therapeutic Strategy for Pancreatic and Lung Cancer

Azizeh Alsayyid, Al Ain University

Predictive Potential and Clinical Significance of Peripheral Blood Biomarkers in Cancer Therapy

Suad Ajab, United Arab Emirates University

FTO and ALKBH5 were down-regulated in clear cell renal cell carcinoma Middle Eastern cohort

Muna Alhammedi, Nival Ali, Poorna Bhamidimarri, Burcu Yener, Amal Bouzid, Alaa Mohamed, Iman Talaat and Rifat Hamoud, University of Sharjah

Regulation of pancreatic ductal adenocarcinoma plasticity by mitochondria

Suresh Kumar Kali, Basel Ramadi, Aftab Alam, Maria J Fernandez Cabezudo and Uday Kishore, United Arab Emirates University

Effect of DFO an iron chelating agent on the survival of colorectal cancer cells

Tasneem Mohammad Al anta, University of Sharjah

Induction of cell death in gastric cancer cells using amino acids starvation

Aaminah Farrukh, United Arab Emirates University

The Anti-Cancer Effects of Piperine and Berberine

Aisha Suliman Alshamisi, United Arab Emirates University

WTAP Knockdown in BPH-1 cells using CRISPR/Cas9 system

Sanjana Chandran, Abdulrahim Sajini and Moni Nader, Khalifa University

The Role of Persistent Inflammation in Hematopoietic Dynamics and Disease Evolution

Yusuf Jamilu Umar and Symeon Savvopoulos, Khalifa University

Therapeutic potential of targeting ceramide for cardiometabolic diseases: in vitro and in vivo study

Youssef M Shalaby, Bashar AlZohily, Anjana Raj and Nadia Akawi, United Arab Emirates University

Mesenchymal Stem Cells based Therapeutic Cocktail Against Type 1 Diabetes Mellitus

Muhammad Hamza Tariq and Nupur Kohli, Khalifa University

HSD17B12 is a novel gene involved in the regulation of pancreatic β -cell function

Ola Saed Al Shehadat, master stu, Mona Youssef Youssef and Jalal Taneera, University of Sharjah

Relation of Erythrocyte Sedimentation Rate (ESR), Glycemic Parameters and Lipid Profile for the Prediction of Major Adverse Cardiovascular Events (MACE): A Single-Center, Cross-Sectional Study

Raghd F. F. Alaila, Moyad Shahwan, Ghala Rashid Humaid Alnuaimi, Samer O. Alalalmeh and Omar E. Hegazi, Ajman University; Ammar Abdulrahman Jairoun and Sabaa Saleh Al-Hemyari, Universiti Sains Malaysia, Malaysia

Downregulation of IGF-1 in Type 1 Diabetes-Associated Hypoglycemia Unawareness: the Unseen Danger

Ankita Srivastava and Bashair Mussa, University of Sharjah

Development of the literacy assessment of hypertension tool in Arabic

Samer O. Alalalmeh, Omar E. Hegazi, Ahmed Abdalla Gaili and Sanah Hasan, Ajman University

Experimental studies on the Effect of sodium-glucose cotransporter 2 inhibitors on the Regulation of Diabetic Glomerular Hyper-Permeability

Yousef Abualqumboz, Charu Sharma, Javed Pathan, Ahmed Abdul Aziz and Omran Bakoush, United Arab Emirates University

Neuro-immune circuit modulates the intestinal immune response

Alaa Ahmed Abdelrahman Mohamed, Basel Ramadi and Maria J Fernandez Cabezudo, United Arab Emirates University

A Computational Study for Accurately Identifying Inhibitors of Proteins

Tiyyaba Furqan, Amira Bekdash, Jisha Chalissery, Ahmed Hassan and Alya Arabi, United Arab Emirates University

Effect of Intra-Canal Cryotherapy on Post Operative Pain after Root Canal Treatment and Re-Treatment: (A Randomized Controlled Trial)

Mohamad Ali Tello, Ajman University

E1 Building (Hallway, Male Side)

4.15 PM - 4:45 PM

Topic: **Industrial Engineering, Robotics, Mechatronics & Automation, Mathematics & Statistics**

Optimizing Resource Allocation in Emergency Departments: A Design Thinking Framework by Integrating Design of Experiments and Discrete Event Simulation

Eman Ouda, Andrei Sleptchenko and Mecit Can Emre Simsekler, Khalifa University

Leveraging Blockchain to Track and Improve the Sustainability of Shared Economy Models A Platform for Shared Last-Mile Delivery

Omar Abdulkarim and Malick Ndiaye, American University of Sharjah

Estimation of Hourly Global Horizontal Irradiance: A comparison between Support Vector Regression and Random Forest Regression in Tustin, California

Fathy Yassin Alkhatib and Maher Maalouf, Khalifa University

Thermo-Economic Analysis of Organic Rankine Cycle (ORC) Integration for Low-Temperature Heat Recovery in the Steel Industry

Shaikha Bader Abdulla, Andrei Sleptchenko and Mohamed Ibrahim Ali, Khalifa University

The Impact of Operational Excellence Methodologies on Sustainable Performance in the Service Sector

Shatha Siefan, Maher Maalouf, Ahmad Mayyas and Mohammad Omar, Khalifa University; Jiju Antony, Northumbria University, United Kingdom

Analysis of energy storage technologies in the United Arab Emirates: current state and future needs

Khalood AlHammadi, A. Acquaye and Ahmad Mayyas, Khalifa University

Relationship between Industry 4.0, Circular Economy, and Sustainable Performance: A Review of the Current Research and Directions for Future Research

Than'a Alsaoudi, A. Acquaye and Malik Khalfan, Khalifa University

Exploring the transformative potential of Generative Artificial Intelligence in Mechanical Engineering Education

Mohannad Alghazo, Vian S Ahmed and Zied Bahroun, American University of Sharjah,

A Novel Hypervector Encoding Method for Hyperdimensional Regression

Toheeb Olajide Salahudeen, Maher Maalouf and Ibrahim (Abe) M. Elfadel, Khalifa University

Enhancing Fire Safety in High-Rise Buildings through assessing material selection, design practices, and regulatory compliance in the case study of Sharjah city

Amr Ahmed Oda, Imad Alsyounf and Emad S. Mushtaha, University of Sharjah

Estimation of Jacobian Matrix from Noisy Time Series Data Using Lyapunov Equation

Ismaila Muhammed and Dimitris M Manias, Khalifa University; Haralampos Hatzikirou, Technische Universität Dresden, Germany

Assessing the Prosperity of European Nations: A Cluster Analysis based Approach

Junu Jahana C, Tania M Joseph and Ayman Alzaatreh, American University of Sharjah

Comparing Neural Networks and Fourier Series in Solving Partial Differential Equations

Muhammad Luthfi Shahab, Khalifa University

Wave-Wave Interaction

Muhammad Ismail Yunus, Khalifa University

Optimizing Omnichannel Retail Operations through Scenario Reduction in Two-Stage Stochastic Optimization

Shahana Kappil and Adriana Gabor, Khalifa University

Equivalency of Gaussian measures in functional random fields

Vinicius Sousa S. Ferreira, Khalifa University

Game-Based Learning in Construction Management: The Development of a Digital Simulation Game

Yara Ashraf Elenany, American University of Sharjah

AI-Enhanced 3D Reconstruction with FEA Simulation for Neuromorphic Tactile Sensors

Islam Mohamed Zaid and Yahya Zweiri, Khalifa University

[Labview Implementation of Optical Flow with Feature Tracking](#)

Adewale Oseni and Vyshak Sureshkumar, United Arab Emirates University

[Design, Analysis, And Fabrication of a Redundant Five-Axes Hybrid Serial-Parallel Kinematics Machine Tool](#)

Aamna Alshehhi, Bashar El-khasawneh and Abdur Rosyid, Khalifa University

[Secure Robotic Process Automation](#)

Esrat Khan, Jorge Dias and Ibrahim (Abe) M. Elfadel, Khalifa University

[Intelligent Adaptive Directional RRT* Algorithm for Mobile Robot Path Planning](#)

Khidir Galal eldin Ahmed, American University of Sharjah

[5 DOF Robotic Manipulator System for Pick-and-Place Utilizing Computer Vision and Voice Recognition](#)

Mohammad Rashwan, Amer Aljuran, Karim Diab, Lotfi Romdhane and Ammar Hasan, American University of Sharjah

[Efficient Spiking Neural Network Implementation for Olfaction Sensing](#)

Rizwana Kausar, Fakhreddine Zayer, Jaime Viegas and Jorge Dias, Khalifa University

E1 Building (Hallway, Female Side)

4.15 PM - 4:45 PM

Topic: [business & Management](#)

[Artificial Intelligence in Higher Education Institutions: SWOT analysis](#)

Samiya Nasser AL-Hinaai, Sultan Qaboos University

[The Impact of Human Trafficking On National Security](#)

Aisha Rashid Al Zaabi, Sultan Qaboos University

[An examination of the antecedents and consequences of effective succession management in the UAE private and public sectors](#)

Aamna M Alshehhi, United Arab Emirates University

[Leadership and the Impact of Motivation on Employees' Performance](#)

Dana Abouchaar, Sultan Qaboos University

[Empowering Global Team Performance: Exploring the Role of Ethics in Technology Adoption, Mediated by Trust-Based Leadership](#)

Loubna Saad Saoud, British University in Dubai

[Factors affecting customers behavioral intention towards adopting AI-agent in tele-conversations: modeling through PLS-SEM-Neural Network](#)

Heba Amer Alkhoja, Ajman University

[Role of Transformational Leadership Style on Global Project Management](#)

Sheeba Hasnain, British University in Dubai

[Globalization in context of sustainable Labour force and mass-migration: a transnational literature review](#)

Abdelaziz Abdalla AIOwais and Ashmiza Ismail, British University in Dubai

[A Comprehensive Analysis of the Management Practices and Theories Adopted by Nestle in a Global Context](#)

Aaron Biju Joseph, Heriot Watt University

[A comparison between agile and waterfall approaches in managing large projects](#)

Mariam Saeed Al Kuwaiti, British University

[Examining the influence of manager-employee relationship quality and trust in managers on Performance Management System Effectiveness in Dubai](#)

Suhaila Bughooma, University of Wollongong in Dubai

[Natural Language Processing Technologies in Radiology Reports](#)

Marwa Fuad Alhaj Ahmad, Yauhen Statsenko and Emad Masuad, United Arab Emirates University

[Comparative Analysis of Comorbidities in Alzheimer's Disease](#)

Ferial AbuHantash, Aamna Alshehhi, Leontios Hadjileontiadis and Mohamed Lamine Seghie, Khalifa University

[Reference Binding Energy of a Small Copper-Containing Complex](#)

Tabeer Fatima and Alya Arabi, United Arab Emirates University

E1 Building (Hallway, Male Side)

4.45 PM – 5.15 PM

Topic: **Civil Engineering, Urban Studies and Biomedical Engineering**

Flexural Strength Optimization of Blended Mortar by Taguchi Method

Jad Bawab, Hilal Elhassan, Amr El-Dieb, United Arab Emirates University; Jamal Khatib, Beirut Arab University, Lebanon

Seismic Response of Earthfill Dams

Krishna Santhosh and Tadahiro Kishida, Khalifa University

Development of Design Equation for Deep Soil Mixing Columns in Sabkha soils

Mohammed A. Hammad, Sultan Qaboos University, Oman

Assessment of Peak Floor Acceleration Demand on Nonstructural Components of Nuclear Power Plants: A Comparative Study between Simplified Design Standards and Random Vibration Theory

Yakub Adeyemi Muniru, Tadahiro Kishida and Tae-Yeon Kim, Khalifa University

Evaluating the efficacy of Pervious Geopolymer Concrete pavements for effective stormwater management

Faiz Habib Anwar, Hilal ElHassan and Mohamed Hamouda, United Arab Emirates University

Overview of Structural Vibrations Control for Offshore Wind Turbines

Hisham Tariq and Agathoklis Giaralis, Khalifa University

Evaluating PlanetScope and Sentinel-2 Data in Representing Changes in Land Use and Land Cover in a Watershed

Chithrika J Alawathugoda, United Arab Emirates University

Behavior of Corroded RC Columns

Feras Farid Abu Obaida, Tamer El-Maaddawy, United Arab Emirates University; Farid Abed, American University of Sharjah; Ahmed El-Refai, Laval University, Quebec, Canada

Enhancing Storage Stability of Plastic Modified Binders

Haider Ibrahim and Mutasem El Fadel, Khalifa University

A Study on the Impact of Temperature on Basalt Fiber Reinforced Polymer Bars in Moist Geopolymer Concrete

Mouaz Chkhachirou, Hilal ElHassan and Tamer El-Maaddawy, United Arab Emirates University

Effect of Concrete Compressive Strength on the Performance of Flexural Prisms Externally Strengthened using CFRP Laminates

Prathibha Gowrishankar, Rami Hawileh and Jamal Abdalla, American University of Sharjah

Development-Led Low-Rise Housing in Dubai: A Study on Residents' Quality of Life

Sabreen Dar Amer, American University of Sharjah

Exploring the potential of graphene-enhanced concrete for waste containment structures

Safi Ur Rehman and Andreas Kappos, Khalifa University

Analytical Response of Tuned Mass Damper Inerter-Equipped Structures to Pulse-Like Seismic Motions

Salwa AttaUllah Shaheen and Agathoklis Giaralis, Khalifa University; Andrés Alonso Rodriguez, University of Exeter, United Kingdom

Multi-hazard design of regenerative tuned mass damper inerter (RE-TMDIs) for vibration control and energy harvesting

Uwais Ulde and Agathoklis Giaralis, Khalifa University

Bridging Construction and Automation: The Impact of NLP in Construction Management

Leen M Tabbara and Mutasem El Fadel, Khalifa University

Assessing Urban Network Efficiency: A Betweenness Centrality Approach to Trip Distribution Analysis

Ibrahim Ismail, Rim Anabtawi and Farah Hazem Daghash, Khalifa University

The impact of space syntax spatial attributes on urban land use of new cities in Oman The case study of Sultan Haitham City

Samiya Ahmed Al Ismaily and Maryam Mohamed Jaffar, Sultan Qaboos University

The Kinetics of Calcein Release from Mixed Targeted Liposomes Using Low-frequency Ultrasound

Nour AISawaftah and Ghaleb Hussein, American University of Sharjah

Effect of the Environmental Factors on the Secondary Structures and the Activities of Proteins

Mzoun Salim Alzaabi, Sung Lee, Vincent Chan, Abdulrahim Sajini and Mayssa Hachem, Khalifa University

A hybrid approach using MoS₂ nanoflakes and conducting polymers as an artificial biocatalyst

Sara Awni Alkhatib, Kishore K Jena, Eman Mahmoud Aljawi, Sagar Arya, Leontios J. Hadjileontiadis, Kyriaki Polychronopoulou and Anna Maria Pappa, Khalifa University

Unraveling Breast Lesions: A Fractal Approach to Differentiate Between Benign and Malignant Tumors in Contrast-Enhanced Spectral Mammography

Manar Issam Alkhatib, Noora Ali Rahmani and Kyriaki Stavros Katsikari, Khalifa University

Glucose trajectory predictive model for Type 1 diabetes patients

Moemen Mohamed M Hussein, Dana Alhosani and Aamna Alshehhi, Khalifa University

Analysing the Impact of Cognitive Stress on Postural Sway

Farah Alhosani, Herbert F Jelinek, Aamna Alshehhi and Kinda Khalaf, Khalifa University,

A Comparative Analysis of Transmedullary (Tm & TmY) Neurons in the *Drosophila melanogaster* Optic Lobe Using Anatomical and Bioinformatic Approaches

Khalid Abdulla and Aamna Alshehhi, Khalifa University

5:30 PM - 5:45 PM

Networking Break



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