6th 2024 International Youth Conference on Radio Electronics, Electrical and Power Engineering (REEPE), IEEE

Registration of Participants – February 29, 2024, from 10:30 till 11:00

Gamal Mokhtar Hall, College of Engineering and Technology, Heliopolis Campus, AASTMT, Egypt.

Opening program of EGYPT Venue

(February 29, 2024) (11:00 - 13:15 PM EGY | 13:00 - 15:15 PM UAE)

- Prof. Dr. Ismail Abdel Ghafar, President of AASTMT, Egypt.
- Prof. Dr. Yasser Galal, Dean of College of Engineering and Technology (Heliopolis), AASTMT, Egypt.
- Prof. Dr. Fadi Aloul, Dean of College of Engineering, AUS, Sharjah, Emirates.
- Prof. Dr. Mostafa Shaaban, Interim Head of the Department of Electrical Engineering, AUS, Sharjah, Emirates.
- Prof. Dr. Rania El Sharkawy, Dean of Education (Cairo Campus), AASTMT, Egypt.
- Prof. Dr. Rinat Nasyrov / Dr. Mohamed Tolba General Chairs of the IEEE REEPE conference.

11:15 - 11:45 AM EGY | 13:15 - 13:45 PM UAE

Plenary Speaker: Prof. Dr. Hatem Zeineldin

Professor, Chair of Electrical Engineering Department at Khalifa University

Title: Micro-grid Implementation: Challenges and Solutions

11:45 AM - 12:15 PM EGY | 13:45 - 14:15 PM UAE

Plenary Speaker: Prof. Dr. Mohamed Aboul-Dahab

Professor of Communication Engineering, Advisor to the AASTMT President, Life Senior Member, IEEE.

Title: Evolving Technologies in IoT: Future Perspective for the Internet of Things.

12:15 - 12:45 PM EGY | 2:15 - 2:45 PM UAE

Plenary Speaker: Mr. Amr Kandil

Director, Schneider Electric, Middle East & Africa New Energy Landscape & Real Estate Segment

Title: Energy Efficient and Smart Universities of the future

12:45 - 1:15 PM EGY | 2:45 - 3:15 PM UAE

Plenary Speaker: Mr. Sari Issa

Senior Manager Training Development at Hyundai Motor M. East & Africa Headquarter

Title: Electric Vehicles: Future and Challenges

Coffee Break 1:15 - 1:45 PM EGY |3:15 - 3:45 PM UAE

Conference Program (February 29, 2024)

Starting the international participants' presentations (13:45 EGY)

{Each Participant has 7 minutes for introducing presentation + 3 minutes Q&A by attendees}

Section-A

Section chair: Prof. Dr. Rania El Sharkawy

Section co-chair: Dr. Mohamed Tolba

| 1. | Smart Emergency Load Supply via Off- Grid Photovoltaic System | Dalal Alharbi, Reem Alshuaib, Ruba Hussain, Taif Alotaibi, Zahrah Alsayegh, Ali M. El-Rifaie |
|----|--|--|
| 2. | A Comparative Study for Designing SAW Gas Sensor Using Different MEMS Piezoelectrical Materials based on COMSOL | Ahmed M. Mohy El Den, Gina Nagui Amin, Yosra Ali, Iman Morsi |
| 3. | Optimal Home Energy Management Algorithm Incorporating PVs/Electric Vehicles. | Seif ELNasr Sayed, Rana Maher Mohamed, Amany El-Zonkoly |
| 4. | Optimization for Charging Scheduling in Electric Bus System | Sarah Hussein Abdelwahab, Mohammed Alhasheem, R. M. Sharkawy |
| 5. | Sensing voltage of MEMS Accelerometer using Polycrystalline Silicon (Si), Gallium Arsenide (GaAs) and Germanium (Ge) | Amr N. Elsayed, Iman G. Morsi, Roshdy A. Abdelrassoul, Ahmed Khairy Mahmoud |

Section-B

Section chair: Prof. Dr. Rinat Nasyrov

Section co-chair: Prof. Dr. Sherif El Fiki

| 1. | Gaze Tracking with Multi-Modal Neural Network in Desktop Environments using Generic Web Camera | Karim Kohel, Mohamed Osama, Nourhan Mohamed, Mohamed Mokhtar, Omar Tamer, Mohamed Waleed Fakhr, Sherif F. Fahmy |
|----|--|--|
| 2. | Frequency Control of Interconnected Power System Using Dandelion Optimization Algorithm | Abdulrahman M. Abushanab, Hany M. Hasanien,R. M. Sharkawy |
| 3. | Optimized Transmission Parameters in a Cognitive Radio Network Using Metaheuristic Algorithms | Hassan Mohamed Elkamchouchi, Yasmine Abouelseoud Saleh Metwaly, Gehan Abouelseoud Saleh Metwaly, Alaa Hassan Abd Elatif Ibrahim Mohamed |

4. Optimization of Directional Overcurrent
Relay Coordination using Metaheuristic
Coronavirus Technique

5. A Three-phase Interleaved AC-DC
Converter based Electric-Vehicle Off-Board
Battery Charger Station

Aya Mounir, Noha H. El-Amary, Hatem
Diab, Mahmoud Abdelsalam

Bader N. Alajmi, Ibrahim Abdelsalam,
Mostafa I. Marei, Nabil A. Ahmed

Section-C

Section chair: Prof. Dr. Eman Beshr

Section co-chair: Prof. Dr. Rinat Nasyrov

| 1. | On Dynamic Resource Allocation for D2D Communications over Ultra-Dense 5G Cellular Networks | Fady Anis, Mohamed Hussein, Sherif El Diasty, Mohamed H. Abd Elazeem |
|----|---|---|
| 2. | Achieving Smart Building Operation Sustainability by Utilizing AI Under Environmental Impact. | Mohamed Hamdy Naeem |
| 3. | Low Inertia in Ac Microgrid: Analysis and Enhancement | Mazen Emad, Eman Beshr, Mohamed Alhasheem |
| 4. | Design of a Solar Pumping System with Battery Storage based on Three-Port DC- DC Converter | Ayman Abu Zaid, Ibrahim Abdelsalam, and Mostafa I. Marei |
| 5. | Robust LMI Controller-based Reduced Order Model for Hybrid Microgrids | Hatem F. Sindi, Sultan Alghamdi, Mohammed Morgan, and Ahmed Lasheen |

Section-D

Section chair: Prof. Dr. Mohamed Aboul-Dahab Section co-chair: Dr. Mohamed Tolba

| 1. | Technical vs Fundamental Analysis for Egyptian Stock Market Prediction using a Unified Ensemble Regressor | Sherif F. Fahmy, Shereen F. Fahmy, Mohamed w. Fakhr |
|----|---|---|
| 2. | Patch antenna design using DGS technique for early detection of brain tumor at stages I to V | Eman Ismail, Sherif El-diasty, Mohamed Fathy Abo Sree, Mohamed Aboul-Dahab |
| 3. | ChaCha20-AES combined algorithm with 512 bits of security | Amr mahmoud el rashidy, Mohamed Hassan Abd el azim, Ahmed ali abd el hafez |
| 4. | Detecting Selected Neurodegenerative Diseases through Microwave Technology: Modeling and Identifying Different Stages of Alzheimer's Disease | Mohamed Abdelaleim Mohamed Abdelmoety, Mohamed Hassan Abdelazim, Mohamed Fathy Abo Sree |
| 5. | Detecting different stages of Alzheimer's disease using an ultra-thin wearable antenna | Mohamed Abdelaleim Mohamed Abdelmoety, Mohamed Hassan Abdelazim, Mohamed Fathy Abo Sree |