





Wednesday, 6 th Dec 2017			
09:00-10:00	Registration (Venue: Petra Hall)		
10:00-11:30	Opening Ceremony		
11:30-12:00	Coffee Break		
12:00-12:30	Keynote Speech 1 Chair Dr. Ali Al Maqousi	Professor Madjid Merabti 21st Century Smart Cities: The Challenges for Sustainability, Security, and Privacy Dean, College of Sciences, University of Sharjah, Sharjah, UAE	
12:30-02:00	Session 1-A (Al Quds Hall) Track1: ICT Solutions and Support for Smart and Green Cities Chair: <i>Prof. Abdel Fatah Al Tamimi</i> Co-Chair: <i>Dr. Wael Hadi</i>		Session 1-B (Amman Hall) Track3: Renewable Energy Sources and Systems (RESS) Chair: <i>Prof. Ahmed Ghandour</i> Co-Chair: <i>Dr. Mohammed Abu Arqoub</i>
	12:30-12:50	PID: 1570383583 Title: Signal Filtering as a Way of Digital Data Processing to the Accuracy Increase of Ultrasonic Liquid Flow Measurement by the Zero-Crossing Method Authors: <i>Sergey Gerasimov, Igor Zhelbakov</i>	PID: 1570392068 Title: A Survey: Green Energy for Cellular Base Station and Small Cell Authors: <i>Mohammad Tala't, Chih-Min Yu, Kai-Ten Feng</i>
12:50-01:10	PID: 1570382569 Title: Rooftop Rainwater Harvesting System in Amman City Authors: <i>Ola M. Surakhi, Ahmad S. Sharieh</i>	PID: 1570389012 Title: Online Prediction of Voltage Collapse Using Subset of System Measurements Authors: <i>Tara Alzahawi, Mohindar S. Sachdev, G. Ramakrishna</i>	
01:10-01:30	PID: 1570383954 Title: EPSSR: Energy Preserving System for Smart Rooms Authors: <i>Khalid Nahar, Ra'ed M. Al-Khatib</i>	PID: 1570366778 Title: Optimization the Efficiency of Continuous Solar Adsorption Refrigeration System with Genetic Algorithm Authors: <i>Nibal Farman, Zeina Abdul Redha, Shaymaa A.Mahdi</i>	
01:30-01:50	PID: 1570383947 Title: Network level Quality of Service (QoS) challenges for Smart Grid Measurement and Control systems Authors: <i>Kashinath Basu, Ali Maqousi, Tatiana Balikhina, Frank Ball</i>	PID: 1570378728 Title: Development of theoretical bases for solving the problems of power supply system of autonomous rural consumer in Myanmar by using renewable sources of energy Authors: <i>Aung Ko, Shestopalova T.A., Malinin N.K.</i>	
02:00-03:00	Lunch		
03:00-03:30	Keynote Speech 2 Chair Dr. Hussein Al Bahadili	Prof. Tyagunov Mikhail Distributed energy – the future energy of the world National Research University "Moscow Power Engineering Institute" Moscow, Russia	
03:30-04:30	Session 2-A (Al Quds Hall) Track1: ICT Solutions and Support for Smart and Green Cities Chair: <i>Dr. Mwaffaq Otoom</i> Co-Chair: <i>Dr. Shakir Hussain</i>		Session 2-B (Amman Hall) Track2: Smart Renewable Energy Chair: <i>Dr. Mohammed Abu Arqoub</i> Co-Chair: <i>Dr. Nuha El Khalili</i>
	03:30-03:50	PID: 1570369489 Title: A Survey of Data Replication Techniques for MANET Databases Authors: <i>Inas Abuqaddom, Bassam Hammo</i>	PID: 1570384369 Title: SRT-GA: Smart Real-Time System using A Powerful Genetic Algorithm for School Bus Routing Problem Authors: <i>Ra'ed Al-Khatib, Khalid M.O Nahar</i>

0.3:50-04:10	PID: 1570393094 Title: Matrix Multiplication of Big Data Using MapReduce: A Review Authors: <i>Mais Haj Qasem, Alaa Abu Sarhan, Raneem Qaddoura, Basel A.Mahafzah</i>	PID: 1570383223 Title: Distributed energy system's is the future of the world's power industry Authors: <i>Mikhail Tyagunov</i>
04:10-04:30	PID: 1570408728 Title: Exploration of Development Projects of Renewable Energy Applications in the ISBSG Dataset: Empirical Study Authors: <i>Kenza Meridji, Khalid T. Al-Sarayreh, Mohammad Abu-Arqoub, Wael Hadi</i>	PID: 1570384468 Title: Multi-Agent Approach For Real-Time Optimal Control Of A Microgrid Authors: <i>Amin Abd Elraheem, Vladimir Shikhin</i>
04:30-04:50	Coffee Break	
04:50-05:30	Session 3-A (Al Quds Hall)	Session 3-B (Amman Hall)
	Track1: <i>ICT Solutions and Support for Smart and Green Cities</i> Chair: <i>Dr. Wael Hadi</i> Co-Chair: <i>Dr. Nawaf Ali</i>	Track3: <i>Renewable Energy Sources and Systems (RESS)</i> Chair: <i>Dr. Hani Obeid</i> Co-Chair: <i>Dr. Kenza Meridji</i>
4:50 – 5:10	PID: 1570384556 Title: Smart Grid for increasing the reliability of electric power supply of green cities by detecting electrical equipment faults and defects Authors: <i>Alexander Yu. Khrennikov, Igor N. Zhelbakov, Nikolay M. Aleksandrov, Tanya A. Khrennikova</i>	PID: 1570382662 Title: Automatic Voltage Regulation and Stability Analysis of Three-phase Self-excited Induction Generator or Wind Energy Authors: <i>K. Charafeddine, K. Sangov, S. Tsyruk</i>
5:10 – 5:30	PID: PID5142355 Title: System Architecture for Smart Home Meter Authors: <i>Tatiana Balikhina, Ali Al Maqousi, AbdElkarim AlBanna</i>	PID: 1570382930 Title: Determining the optimal placements of renewable power generation systems using regional geographic information system Authors: <i>Michael G. Tyagunov, Zay Yar Lin</i>

Thursday, 7th Dec 2017

09:00-09:30	Registration (Petra Hall)		
09:30-10:00	Keynote Speech 3 Chair Dr. Ali Al Maqousi	Prof. Andrés Monzón Smart Urban Mobility solutions: converting Cities in innovation platforms Director of TRANSyT-UPM, Transport Research Centre-Technical University of Madrid Madrid Spain	
10:00-10:30	Keynote Speech 4 Chair Dr. Hussein Al-Bahadili	Dr. Raed Bkayrat Overview of thin film PV technology roadmap and value for utility scale power plants Vice President, Business Development, Middle East and Saudi Arabia, First Solar	
10:30-11:00	Coffee Break		
11:00-01:00	Session 4-A (Al Quds Hall)	Session 4-B (Amman Hall)	
	Track1: <i>ICT Solutions and Support for Smart and Green Cities</i> Chair: <i>Dr. Frank Ball</i> Co-Chair: <i>Dr. Ahmed Awad</i>	Track3: <i>Renewable Energy Sources and Systems (RESS)</i> Track5: <i>Smart and Green Cities Management, Economics, and Future Challenges</i> Chair: <i>Dr. Shestopalova T.A.</i> Co-Chair: <i>Dr. Nesreen Otoum</i>	
11:00-11:20	PID: 1570383582 Title: Toward an IoT-Enabled Adaptive Interactive Bus Transportation system Authors: <i>Muhannad Al-Jabi</i>	PID: 1570384024 Title: Trends in the Development of an Ultrasonic Method For the Liquid Flow Measuring Authors: <i>Sergey Gerasimov, Vladimir Glushnev, Mikhail Panov</i>	
11:20-11:40	PID: 1570409684 Title: Internet of Things: A Review to Support IoT Architecture's Design Authors: <i>Huda Saadeh, Wesam almobaideen, Khair Eddin Sabri</i>	PID: 1570383854 Title: Solar Cooling: Influence of the carbon properties and the thickness of carbon bed in the performance of a solar ice maker Authors: <i>Andrei B. Gariaev, Rodolfo M. Echarri, Inna F. Samson, Mariella Mateo</i>	

11:40-12:00	PID: 1570384047 Title: IoT-Enabled Citizen Attractive Waste Management System Authors: <i>Muhannad Al-Jabi, Mohammad Diab</i>	PID: 1570383809 Title: Research of influence of integral ADC nonlinearity for a measurement error of active power Authors: <i>Andrey Serov</i>
12:00-12:20	PID: PID5138187 Title: Clicker: Converting Modern Homes to Smart Modern Homes through the Use of IoT Authors: <i>Nawaf Ali, Abdel Kareem Albanna, Mohammed Abu Arqoub, Ghassan Issa</i>	PID: 1570383821 Title: A method to reduce the measurement error of the active, reactive and apparent power in nonsimultaneous sampling of voltage and current Authors: <i>Andrey Serov, Aleksander Shatokhin</i>
12:20 – 12:40	PID: 1570384037 Title: Utilization of RFID Analytics in Assessing Student Engagement Authors: <i>Alrence Halibas, Indu Pillai, Anju Cherian Matthew</i>	PID: 1570369476 Title: An Evaluation of the University of Petra Green Campus Authors: <i>Nuha El-Khalili, May Al-Nashashibi</i>
12:40 – 1:00	PID: PID5142975 Title: An Adaptive System Architecture for Devising Adaptive User Interfaces for Mobile ERP Apps Authors: <i>Khalil Omar, Jorge Marx Gómez</i>	PID: PID5114743 Title: Procedural Model of Software Quality, Improvements for Sustainable Applications, Process of Renewable Energy Systems (Development & Enhancement) Authors: <i>Khalid T. Al-Sarayreh, Kenza Meridji, Ghassan Issa, Mohammad Abu-Arqoub</i>
1:00-2:00	Lunch	
2:00-03:0	Session 5-A (Al Quds Hall)	
	Track1: <i>ICT Solutions and Support for Smart and Green Cities</i>	
	Chair: <i>Dr. Khalid T. Al-Sarayreh</i> Co-Chair: <i>Dr. Abdel Raouf Ishtawi</i>	
2:00 - 2:20	PID: 1570416244 Title: A Fair Trus-Based Malicious Node Detection and Isolation Scheme for WSNs Authors: <i>Firas Zawaide, Muhammed Salamah, Hussein Al Bahadili</i>	
2:20 -2:40	PID: 1570416243 Title: Vulnerability Scanning of IoT Devices in Jordan using Shodan Authors: <i>Haneen Al-Alami, Ali Hadi, Hussein Al Bahadili</i>	
2:40 – 3:00	PID: 1570416720 Title: A DNA-Based Smart Meter Authentication Scheme Authors: <i>Shakir Hussain, Hussain Al Bahadili, Hadi Al Saadi</i>	
03:00-03:15	Coffee Break	
03:15-04:00	Closing Ceremony (Petra Hall)	
8:00 -10:00	Gala Dinner for Invited Guests	

Opening Ceremony

Wednesday, 6th December 2017

10:00	Royal Anthem
10:05 – 10:10	Introduction & Versus from the Holly Quran
10:10 – 10:15	Short Video
10:15 – 10:25	General Chair Message Prof. Ghassan Issa
10:25 – 10:35	Message from the General Manager of National Electric Power Company (NEPCO) Eng. Abdel Fatah Al Daradkeh
10:35- 10:45	University of Petra President Prof. Marwan Muwalla
10:45 – 11:05	Speech by Guest of Honor H.E. Professor Adnan Badran
11:05 – 11:25	Introducing Keynote Speakers
11:25 – 11:30	Conference program (brief look)
11:30 -12:00	Coffee Break



The 2nd International Conference & Exhibition on the Applications of Information Technology to Renewable Energy Processes and Systems

(IT-DREPS 2017)

Amman-Jordan, 6-7 December 2017

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University of Petra
Faculty of Information Technology
Amman, Jordan



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You are invited to participate in *The 2nd International Conference on the Applications of Information Technology in Developing Renewable Energy Processes & Systems (IT-DREPS 2017)*, which will be held at University of Petra, Amman, Jordan on 6-7 December, 2017.

IT-DREPS 2017 focuses on the highly evolving topic of Smart and Green Cities, and aims to provide a platform for academicians, researchers, professionals, and decision makers who are interested in the areas of Information and Communication Technology (ICT) and Renewable Energy (RE) to disseminate knowledge and interchange information for better future collaboration on developing more cost-effective, efficient, reliable, and automated renewable energy processes and systems.

Main Tracks:

IT-DREPS 2017 splits into a number of tracks, where each track covers a number of related topics as below:

Track 1: ICT Solutions and Support for Smart and Green Cities

- Modeling and simulation
- Advanced computational methods
- Computer-aided design tools
- Embedded programming
- Artificial intelligence systems and applications
- Software engineering and technology
- IoT for smart and green cities
- Green wireless sensor networks
- Green cellular and communication networks
- ICT systems for power control and management
- Building and housing automation
- Smart grid control and SCADA systems
- Management information systems
- Decision support systems
- Data mining algorithms and applications
- Big data analytics
- Safety, privacy, and security
- Bioinformatics

Track 2: Smart Renewable Energy

- Smart grids
- Smart buildings
- Smart scheduling systems
- Smart grid stability and robustness
- Renewable energy systems in smart cities
- Experts and intelligent systems for sustainability

Track 3: Renewable Energy Sources and Systems (RESS)

- Photovoltaic (PV)
- Concentrated solar power (CSP)
- Wind power
- Hydropower
- Biomass
- Biofuel
- Geothermal energy
- Wave energy
- Tidal energy
- Osmotic energy

Track 4: Applications of Renewable Energy in Smart and Green Cities

- Buildings services
- Freshwater production
- Waste water treatment
- Industrial applications
- Oil and gas industry
- Agriculture and irrigation systems
- Heating/cooling systems
- Smart and green lighting
- Electrical vehicles and components
- Transportation and traffic control systems

Track 5: Smart and Green Cities Management, Economics, and Future Challenges

- Energy efficiency systems
- Economic of renewable energy systems
- Hybrid energy management
- Systems for integrated energy management
- High efficiency power storage systems
- Strategies and Policies
- Standardization and regulations
- Public awareness and education
- Future trends, challenges and directions

Paper submission

Authors are invited to submit their papers through www.edas.info or conference website (www.it-dreps.org) following the conference submission guidelines.

Registration fees

At least one of the authors of any accepted paper is requested to register through the conference website (www.it-dreps.org). The registration fees and methods of payment are explained on the conference website.

Publications

All accepted and presented papers will be published in printed/electronic proceedings that will be available to registered participants during the conference. Published papers will appear in IEEE XPLORE Digital Library.

A number of selected papers will be published as extended papers in:

- International Journal of Information Technology and Web Engineering(IJITWE), IGI-Global
- Jordan Journal of Mechanical and Industrial Engineering (JJMIE)

Committees

General Chair: Prof. Ghassan F. Issa (gissa@uop.edu.jo)

General Co-Chair: Dr. Ali Al Maqousi (amaqousi@uop.edu.jo)

Scientific Committee Chair: Dr. Hussein Al-Bahadili (hbahadili@uop.edu.jo)

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Organization Committee Chair: Dr. Mohammad Abu Arqoub (abu-arqoub@uop.edu.jo)

Organization Committee Co-Chair: Dr. Shestopalova Tatyana A. (tatyana64.08@mail.ru)

Important Dates:

Paper submission deadline ~~15th July 2017~~ **August 1st, 2017**

Acceptance notifications: 1st October 2017

Camera ready form: 1st November 2017

Conference Date: 6th & 7th December 2017

For further information, please contact:

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