



AT-SGIRE: Advanced Teaching and training on Smart grid and Grid Integration of Renewable Energy Systems

Energy Trading/Exchange in a Neighborhood/Digitization

AGENDA

Middle East University

AT-SGIRE: Advanced Teaching and training on Smart grid and Grid Integration of Renewable Energy Systems

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Review table

Version	Date of Submission	Quality check		Technical check	
		Reviewer	Date	Reviewer	Date
V01	26.05.2020	Adib Allahham	04.06.2020	Adib Allahham	04.06.2020
V02	13.07.2020	Adib Allahham	20.07.2020	Adib Allahham	20.07.2020

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1.1 Workshop Description

This workshop focuses on the main topic entitled “Energy Trading/ Exchange in a Neighborhood/ Digitization”. Further, the workshop will cover the following topics:

- PV Energy Forecasting which is used for Energy Trading
- Trading Energy in Smart Grid Neighborhoods
- Peer to Peer Distributed Energy Trading in Smart Grids & the Role of Hardware-In-the Loop for testing new Algorithms
- Modelling and simulation of multi-energy smart local energy systems: methods and applications
- Transforming the Grid: Artificial Intelligence, Renewables, Storage and Electrical Vehicles
- Why Renewable Energy? Potential and Future of Renewable Energy in Jordan
- Energy Management in the Jordanian Water Sector

1.2 Learning Outcomes

At the end of the workshop, participants will be able to:

- Understanding the trading energy in smart grid neighborhoods.
- Knowing about the PV Energy Forecasting which is used for Energy Trading.
- Understanding how multi-energy smart local energy systems have modelling and simulation.
- Understanding the role of Hardware-In the loop for testing new Algorithms and knowing how energy trading is distributed in Smart Grids
- Knowing about transforming the grid: Artificial Intelligence, Renewables, Storage and Electrical Vehicles
- Knowing about Potential and Future of Renewable Energy in Jordan.
- Understanding how to manage energy in the Jordanian Water Sector.

1.3 Target groups and basic background

The workshop is targeting industrial stakeholders such as engineers working in a company engaged in the energy sector. The participants should have a basic background in:

- Renewable engineering
- Power systems

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- Smart grid
- Energy
- Energy Trading
- Digitization

1.4 Keynote speakers

1. Dr. Adib Allahham (University of Newcastle – United Kingdom)
2. Dr. Neal Wade (University of Newcastle – United Kingdom)
3. Dr. George Georghiou (University of Cyprus – Cyprus)
4. Dr. Samer Rabih (Al-Baath University – Syria)
5. Dr. Iyad Muslih Alsartawi (Industry, Center and a Consultant in Renewable Energy – Jordan)
6. Dr. Samer As'ad (Middle East University – Jordan)
7. Dr. Louy Qoaidar (German Agency for International Cooperation (GIZ) – Jordan)

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1.5 Agenda of Energy Trading/Exchange in a Neighborhood/Digitization Workshop over zoom application

Day 1

14th September, 2020

Zoom Meeting ID: 849 8930 3974

Passcode: 107512

Location Online Workshop via Zoom Application (11:00 AM – 2:00 PM Amman Time)

Start Time	Stop Time	Duration (minutes)	Content
11:00	11:30	30	Welcoming (Prof. Alaaldeen Al-Halhouli)
11:30	12:00	30	PV Energy Forecasting which is used for Energy Trading (Dr. George Georghiou)
11:00	12:30	30	Break
12:30	1:00	30	Peer to Peer Distributed Energy Trading in Smart Grids & the Role of Hardware-In-the Loop for testing new Algorithms (Dr. Adib Allahham)
1:00	1:30	30	Transforming the Grid: Artificial Intelligence, Renewables, Storage and Electrical Vehicles (Dr. Iyad Muslih Alsartawi)
1:30	2:00	30	Complementary discussions and closure



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Day 2

21st September, 2020

Zoom Meeting ID: 889 1031 4800

Passcode: 375816

Location **Online Workshop via Zoom Application (11:00 AM – 2:00 PM Amman Time)**

Start Time	Stop Time	Duration (Minutes)	Content
11:00	11:30	30	Trading Energy in Smart Grid Neighborhoods (Dr. Samer Rabih)
11:30	12:00	30	Why Renewable Energy? Potential and Future of Renewable Energy in Jordan (Dr. Samer As'ad)
12:00	12:30	30	Break
12:30	1:00	30	Modelling and simulation of multi-energy smart local energy systems: methods and applications (Dr. Neal Wade)
1:00	1:30	30	Energy Management in the Jordanian Water Sector (Dr. Louy Qoaider)
1:30	2:00	30	Complementary discussions and closure