

Global Power, Energy and Communication Conference Cappadocia/TURKEY June 12-15, 2019

## **Special Session on**

# **Electric Vehicles and Smart Buildings**

Recently, there is a problem between increasing demand for electricity and requirement for reducing dependence on fossil fuel. Suitable usage of renewable energy (such as PV array, wind turbine or etc.) is proposed as an efficient solution to address this problem. So, in the near future, Electric Vehicle (EV), Vehicle to Grid (V2G), Pug in Hybrid Electric Vehicles (PHEVs) or Smart Buildings (SB) terms will be used mostly. PHEVs are environmentally friendly compared with the conventional vehicles. On the other hand, charging and discharging of the batteries, energy storage system and other issues of EVs are improving areas. Traditional buildings use energy more than necessary and generate waste and emission with increased energy demands. These problems can be solved by using smart and green buildings. Furthermore, the other important issue is developing intelligent energy management systems for SBs. The effective and efficient use of energy ensure minimizes energy wastes and environmental pollution. However buildings are complex systems and many factors affect the total energy consumption in buildings. It is logical to observe real energy consumption data and use them for designing different type of SBs.

Research papers describing new approaches and investigation of the electric vehicles and smart buildings in renewable energy source applications will be welcomed for this session

#### Topics of interest include, but are not limited to:

- Vehicle power systems,
- Smart speed controls,
- Mobile systems for transportation logistics,
- Intelligent transportation systems,
- > Control and design of intelligent buildings,
- > Networking for the home and the building,
- ➢ Heat and water recovery systems,
- Climate change simulations,
- > High power DC/DC converter for home energy management,
- Combined heat and power systems.

#### **Organizer(s):**

### Organizers Name: Asst. Prof. Dr. Ayse Kocalmis Bilhan

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#### **Deadlines of the special session:**

Full paper submission (maximum 6 pages):	February 1, 2019
Notification of acceptance:	April 15, 2019
Final submissions due:	May 1, 2019

All the instructions for paper submission are included at the conference website. http://www.gpecom.org/index.php/guidelines/