

## **Transportation Electrification: From Vehicle to Grid Integration**

*Panel Organizers:*

*Dr. Shuhui Li, and Dr. Kumar Venayagamoorthy*

*Thursday, March 10<sup>th</sup> from 4:00-5:40 pm*

*Duration: 90 Minute Panel*

Rising fuel prices, depleting fossil fuels, and the long-term benefits of clean energy have all provided the opportunity to comprehensively address the transportation electrification and integration of transportation with electric utilities. Electric vehicles (EVs) have many benefits as compared to conventional gasoline cars. Moreover, electrification of transportation systems would enable increased electricity generation from carbon-free and renewable energy sources, such as wind, solar, and hydro. It is anticipated that the electric utility and transportation systems in the United States will become increasingly integrated and indistinguishable from each other due to the electrification of the transportation system.

This panel will consist of researcher coming from academy and industry. The presentations by the panel will give a broad coverage from electric vehicles to integration and impact of electric vehicles to the grid.

- *High Performance Traction Control Using Artificial Neural Network*  
Dr. Shuhui Li, The University of Alabama
- *Integration of Electric Vehicles into Electric Power System: Challenges and Opportunities*  
Mohammad Nikkhah Mojdehi, Microgrid Group, O'Brien & Gere
- *Improved Grid Resiliency with Smart Parks*  
Dr. G. Kumar Venayagamoorthy, Clemson University
- *Distributed Generators and Electric Vehicles- Framework to Integrate into the Electric Power Grid*  
Prasanta Ghosh, Syracuse University