

Electro-Mobility and Its Impact

Session Co-Chairs: Rachael Nealer; Department of Energy, and Amir Ebrahimi; Leibniz University Hannover

The Session “Electro-Mobility and its impact” covers the current state and future visions of Electro-Mobility. In order to increase the electric vehicle (EV) market certain barriers need to be overcome. This session will address solutions to barriers like infrastructure, range anxiety, and batteries with solutions including next generation inductive charging systems, advanced battery systems, the interaction of new mobility systems with EVs, and the impact and possible services EVs could provide the grid. Onur Misir is with the Volkswagen AG and researching on the battery systems for electrical and hybrid vehicles. He will discuss about the current state and future vision of battery systems for E-Mobility applications. Tobias Morciniec is with Daimler AG and responsible for inductive charging of electrical vehicles and will talk about the challenges and opportunities of contactless charging. Donna Chen is an assistant professor at the University of Virginia and will speak about the interactions of new mobility and electric vehicles, focusing on what trends may enable greater penetrations of electric vehicles. Colin Sheppard is a researcher at Lawrence Berkeley National Lab and will speak on the EV-grid interactions of the future including the possibility of using EVs as services to the grid.