

ELECTRICITY FROM VEHICLES TO BUILDINGS (V2B): TECHNOLOGIES, DESIGN AND APPLICATIONS

ORGANIZED BY

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The rapid expansion of electric vehicles sets the scene of new opportunities for environmentally sustainable growth and development in the field of mobility. The critical aspect of vehicle charging is liable to significantly impact public distribution networks, given the ever-increasing charging capacity and battery size of new electric cars. Therefore, it is of paramount importance to analyze the issue of Vehicle to Building, i.e., the possibility of using one's electric vehicle in a smart way and having the ability, for convenience, to be able to send energy as well as receive it from the grid. This special session focuses on the integration of electric vehicles within microgrids connected to buildings. Strategies, possible configurations, real applications and scenarios that provide an economic and environmental benefit from the possibility of actively using electric car batteries to support the microgrids connected to them while charging will be analyzed.

Topics include, but not limited to, the following:

- Electric Vehicles and Electric Vehicles charging stations
- V2X applications (vehicle to everything)
- Electric Vehicles integrated in microgrids
- Integration between photovoltaic and Electric Vehicles
- Electric Vehicles car parks