Short Course 5: Electrified Powertrain, an Overview for Plug-in Hybrids and Electric Vehicles
Friday, June 21st, 2019
8:30AM - 12:00PM (Coffee Break at 10:00AM-10:30AM)
Venue: Legacy 1

Instructor:
Mengyang Zhang – Hynovation Technologies

Short Biography:
Dr. Mengyang Zhang had 22 years with US auto companies including Fiat Chrysler, GM, Delphi Automotive, and Visteon Corp. His technical experience includes research and development of electrified powertrains, and automotive system controls. He was leading advanced development for Fiat Chrysler Electrified Powertrain before joined Skywell Automobiles as VP and CTO in 2016 where Mr. Zhang was responsible for R&D in electrification technologies and intelligent vehicle technologies. Mr. Zhang is the president of Hynovation Technologies Inc. in Shenzhen China, developing fuel cell systems for transportation and stationary applications.

Summary:
The course will provide an overview of some of plug-in hybrid electric vehicles, battery electric vehicles and fuel cell electric vehicles, particularly from powertrain perspectives regarding architectures, performances, fuel economy and emissions etc. The course will cover technical discussions on electrified powertrain design and controls, system operating strategies, regulations and test procedures. The class will also provide introductions to some of critical subsystems such as electric propulsion systems, battery systems and fuel cell systems.