

## Special Issue

# Design and Monitoring Technology for Diesel-Electric Hybrid Power System

### Message from the Guest Editors

The most advanced mild hybrid diesel engines offer modest savings (in the order of 10 percent) in the field of city emissions, but just outside urban centres, the technologies with an integrated starter alternator and sailing functions in force of the most advanced large models have countless advantages. Among these, with distances of more than 1000 kilometres with a full tank, Euro 6-Dtemp light hybrids that are currently on the market are fluid, silent, and powerful and suffer very little from the driving style. Moreover, not having heavy battery packs to transport as happens with full or plug-in hybrid cars, fuel consumption on the highway (when the contribution of any hybrid system is very low due to high speeds) remains low even when driving D and E segment models. The extra costs required for plug-in cars are justified only in the daily recharging of the battery pack in order to take advantage of the full-electric distance (between 40 and 100 km depending on the model) in urban centres and surroundings. However, it must be said that when traveling without residual electrical sap, the battery pack of the plug-ins is a substantial additional weight.

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