DESCRIPTION

The latest developments in the field of hybrid electric vehicles

Hybrid Electric Vehicles provides an introduction to hybrid vehicles, which include purely electric, hybrid electric, hybrid hydraulic, fuel cell vehicles, plug-in hybrid electric, and off-road hybrid vehicular systems. It focuses on the power and propulsion systems for these vehicles, including issues related to power and energy management. Other topics covered include hybrid vs. pure electric, HEV system architecture (including plug-in & charging control and hydraulic), off-road and other industrial utility vehicles, safety and EMC, storage technologies, vehicular power and energy management, diagnostics and prognostics, and electromechanical vibration issues.

Hybrid Electric Vehicles, Second Edition is a comprehensively updated new edition with four new chapters covering recent advances in hybrid vehicle technology. New areas covered include battery modelling, charger design, and wireless charging. Substantial details have also been included on the architecture of hybrid excavators in the chapter related to special hybrid vehicles. Also included is a chapter providing an overview of hybrid vehicle technology, which offers a perspective on the current debate on sustainability and the environmental impact of hybrid and electric vehicle technology.

• Completely updated with new chapters
• Covers recent developments, breakthroughs, and technologies, including new drive topologies
• Explains HEV fundamentals and applications
Offers a holistic perspective on vehicle electrification

*Hybrid Electric Vehicles: Principles and Applications with Practical Perspectives, Second Edition* is a great resource for researchers and practitioners in the automotive industry, as well as for graduate students in automotive engineering.

**ABOUT THE AUTHOR**

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