

# Fundamentals of Battery Testing

## A&D Technology Workshop



### Overview

Cost: \$1300  
Duration: 2 Days

With rising gas prices and government incentives for high-mileage vehicles, everyone is talking about HEV/EV and batteries. What does this mean for the powertrain testing industry? Moving from traditional to advanced powertrain testing will not only change hardware requirements, but also testing methodologies. A&D has created a two-day seminar that will look at the battery systems for HEV and the challenges encountered when doing testing in this expanding industry.

### Course Outline

- HEV/EV Configurations Overview
- Evolution of battery system packaging and size
- Key components of battery systems
- Module configurations
- Thermal management
- Battery management
- Battery state estimation
- Testing & Validation
  - R&D vs. Production
  - Challenges of testing battery technology
  - Industry-standard tests
  - Need for certification centers
  - Age/Life characterization
  - Abuse testing
  - Test systems requirements
  - Test methodologies
  - Facilities
  - On-going challenges
  - Vehicle-level testing
- Summary of Battery Test Systems