

車輛工程系 Department of Vehicle Engineering

跨領域系統整合與最佳化以及
先進技術應用開發

Cross-Attribute Vehicle
Integration and Optimization,
and Advanced Technology
Application and
Development

結構與最佳化實驗室 Structure & Optimization Lab.



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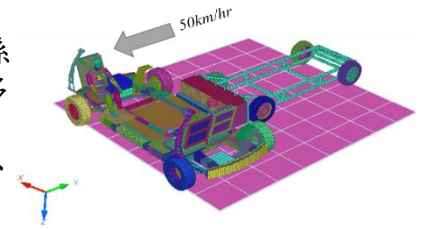
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研究 領域

- (1) 電動車及複合動力車整合設計與優化；
- (2) 車輛系統整合—車輛結構設計與輕量化、系統優化、振動噪音、安全、耐久、跨領域多重物理分析、系統整合與最佳化；
- (3) 前瞻性應用技術研究—汽車電池模組散熱、軌道車輛分析。



車輛安全設計與輕量化
Vehicle Safety and Lightweight Design

近期研 究主題

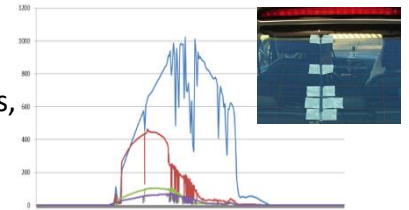
- 油電混合動車結構設計與分析
- 油/電車振動噪音改善
- 油電混合動車系統優化設計
- 輪胎噪音分析
- 車輛電池系統散熱設計與分析
- 特殊車輛設計與分析
- 電動巴士系統設計與分析
- 車輛安全設計與最佳化
- 電池盒結構安全以及散熱設計與最佳化



電動車、巴士設計分析
Electric Vehicle/ Bus
Design and Analysis

Research Area

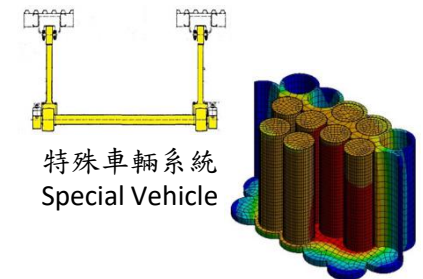
- (1) Hybrid and Electrical Vehicle Integration and Optimization;
- (2) Vehicle Integration – Vehicle Structure Analysis, Lightweight Design, NVH, Safety, Durability, Cross-Attributes, Multi-Physics, System Integration and Optimization
- (3) Advanced Technology Development and Application – Battery Heat Management, Rail Vehicle, Special Vehicle



隔熱效能分析
Vehicle Thermal insulation

Recent Topics

- Structural Analysis and Design Optimization of Hybrid Electric Vehicle
- Vehicle Vibration and Noise of Reduction
- Optimization of Hybrid Electric Vehicle System
- Tire Noise Analysis
- Heat Dissipation Design and Analysis of Vehicle Battery System
- Special Vehicle Design and Analysis
- Design and Analysis of Electric Bus
- Vehicle Safety Design and Optimization



特殊車輛系統
Special Vehicle

電池盒散熱設計與最佳化
Heat Dissipation Design
Optimization of Battery