

車輛工程系  
Department of Vehicle  
Engineering

熱流、振動及噪音分析  
Thermal fluid, vibration  
and noise control

振動與噪音實驗室  
Vibration & Noise Lab.



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#3617  
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■ 研究領域 燃燒及流體力學、振動及噪音  
診斷、光學量測方法、內燃機

- 近期研究主題
- 流場燃燒分析
  - 磁性流體力學分析
  - 渦流管能量分離解析
  - 液壓混合動力車開發
  - 流場拓撲可視化研究
  - 生物運動流場模擬分析
  - 電子零件散熱系統開發
  - 汽車空氣阻力減阻機制設計

■ Research Area Combustion, Fluid Mechanics,  
Diagnosis of Vibration and Noise,  
Optical Measurements & Internal  
Combustion Engine

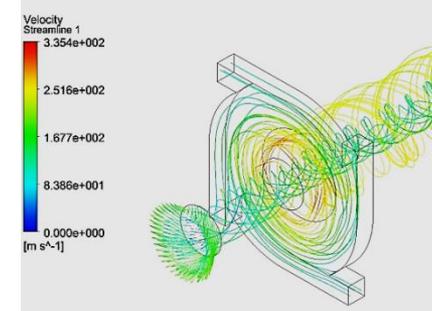
- Recent Topics
- Analysis of fluid and combustion
  - Analysis of ferrofluid
  - An investigation of energy separation process in vortex tube
  - Hydraulic vehicle system
  - Topology visualization of flow field
  - Bionics
  - Electronic cooling techniques
  - Vehicle aerodynamic drag reduction



頻譜分析儀與B&K麥克風  
Spectrum Master &  
B&K Microphone



聲學人偶與半無迴響室  
Sound Quality Head and Torso  
Simulator & SEMI Anechoic Chamber



渦流管能量分離可視化  
An investigation of energy separation  
process in vortex tube