

製造科技研究所
Institute of Manufacture
Technology

先進量測與分析
Advanced Measurement
and Analysis

雷射超音波實驗室
Laser Ultrasound Lab.



O: 綜科 213-1
#4814

L: 綜科 706
#4817

楊哲化教授
Prof. Che-Hua Yang

約翰霍普金斯大學
Johns Hopkins University

chyang@ntut.edu.tw

<http://www.me.ntut.edu.tw/LUT/index.html>

■ 研究領域

雷射超音波技術、超音波技術、非破壞檢測、有限元素分析

■ 近期研究主題

- 定量超音波可視化
- 光聲三維醫學影像
- 鑄件殘留應力檢測
- 核能管線導波檢測
- 石化儲槽健康監測
- 壓力容器音洩檢測
- 海量資料處理
- 聲波感測器開發

■ Research Area

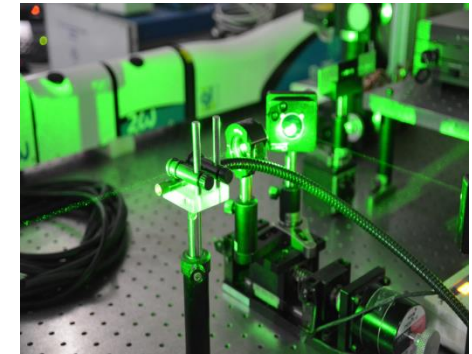
Laser ultrasound technique, ultrasonics, nondestructive testing, finite element analysis

■ Recent Topics

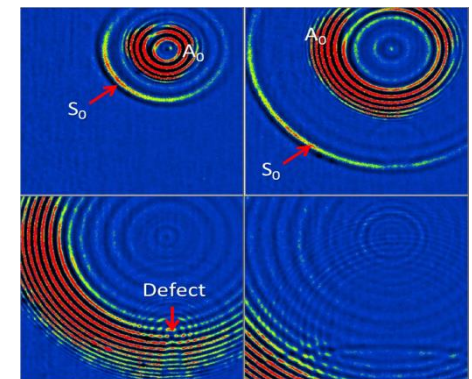
- Quantitative laser ultrasound visualization
- Photoacoustic medical imaging
- Inspection of residual stresses in cast irons
- Nondestructive testing for nuclear pipings
- Structural Health Monitoring of petrochemical reservoirs
- Acoustic emission testing for pressured vessels
- Data mining for transformers
- Development of new acoustic sensors



OLED線上薄膜量測系統開發
Developing On-line OLED thin film thickness monitoring system



雷射超音波系統
Laser ultrasound system



雷射超音波可視化
Laser ultrasound visualization