

製造科技研究所  
Graduate Institute of  
Manufacturing  
Technology

先進製造與量測技術  
Advanced Manufacturing  
and Measurement  
Technology

先進奈米材料與製程實驗室  
Advanced Nanomaterial and  
Manufacturing Processes Lab.



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<http://140.124.30.1/introduction/lab/anmp/index.html>

研究領域

奈米材料與元件製造、能源材料與元件研發、生醫工程、機器人

近期研究主題

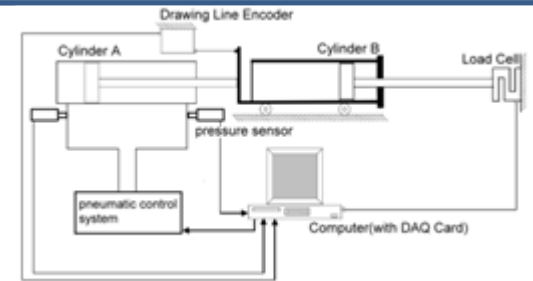
- 氣壓缸摩擦特性
- 奈米潤滑脂合成
- 染料敏化太陽能電池研發
- 熱電材料製備
- 直接甲醇燃料電池研發
- 可拋棄電子式內視鏡研發
- 肋膜內壓量測裝置研發
- 管道機器人研發

Research Area

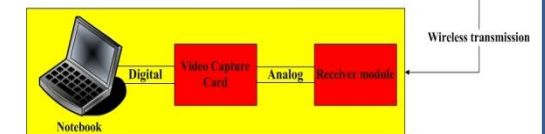
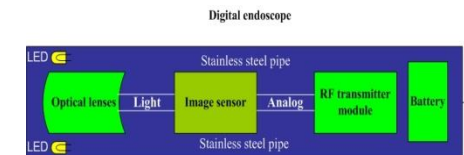
Fabrication of nanomaterial and nanodevice, Synthesis of thin film and device for energy application, Biomedical Engineering, Robot

Recent Topics

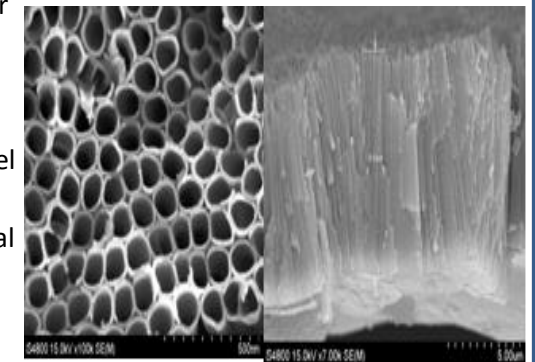
- Dynamic friction behaviors of pneumatic cylinders
- Synthesis of nanogrease
- Development of dye-sensitized solar cell
- Fabrication of Thermoelectric materials
- Development of direct methanol fuel cell
- Development of disposable electrical non-fiber optic endoscope
- Development of intrapleural pressure measurement device
- Development of pipeline robot



氣壓缸摩擦特性量測系統  
Measurement system of  
frictional force characteristics for  
pneumatic cylinders



可拋棄電子式內視鏡系統  
Illustration of electrical non-fiber  
optic endoscope system



陽極氧化法製備 TiO<sub>2</sub> 奈米管  
SEM image of TiO<sub>2</sub> nanotubes prepared  
by anodic oxidation process