

543 M3020

EXPERIMENTS ON APPLIED MECHANICS (I) 應用力學實驗(一)

Part A. Dynamics

- A1\*. Gyroscopic motion of a rigid body
- A2\*. Modal testing
- A3. Vibration of coupled oscillators
- A4. Calibration of displacement sensors

Part B. Mechanics of Materials

- B1\*. Uniaxial tensile test
- B2\*. Torsion test
- B3. Residual stress measurement
- B4. Acoustoelastic effects in solids
- B5. Stress analysis by photoelasticity

Part C. Fluid Mechanics

- C1\*. Drag on a circular cylinder
- C2\*. Air-Jet measurement
- C3. Thermal anemometry
- C4. Measurement of LED temperature and thermal conductivity

Part D. Nano-Biomechanics

- D1\*. Culture of bacterial cells : media preparation, bacterial isolation, incubation and stocks (細菌培養-培養基製備，單一菌株分離，培養及保存)
- D2\*. Mass diffusion in a microchannel (微流體之擴散作用)
- D3. Passive mixing in a microchannel (被動式混合於微流道中之特性探討)