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●主要研究領域 (Research Area)

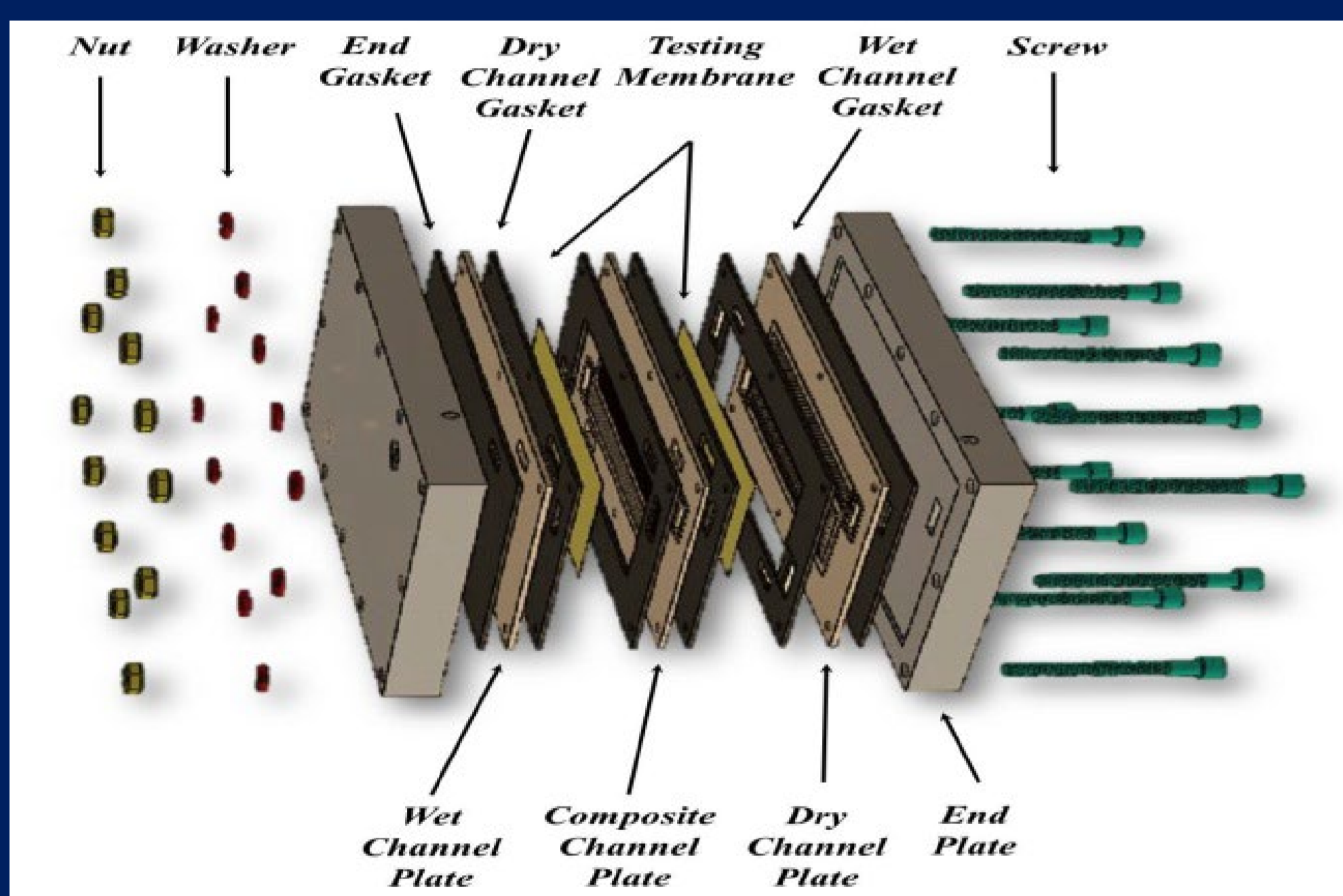
- 能源科技
Energy technology
- 機械熱流
Mechanical thermal-fluid
- 冷凍空調
Air-conditioning and refrigeration
- 燃料電池
Fuel cell
- 地熱發電
Geothermal power
- 馬達散熱
Motor cooling
- 薄膜增濕及除濕技術
Membrane humidification and dehumidification technology

●近期研究主題(Recent Topics)

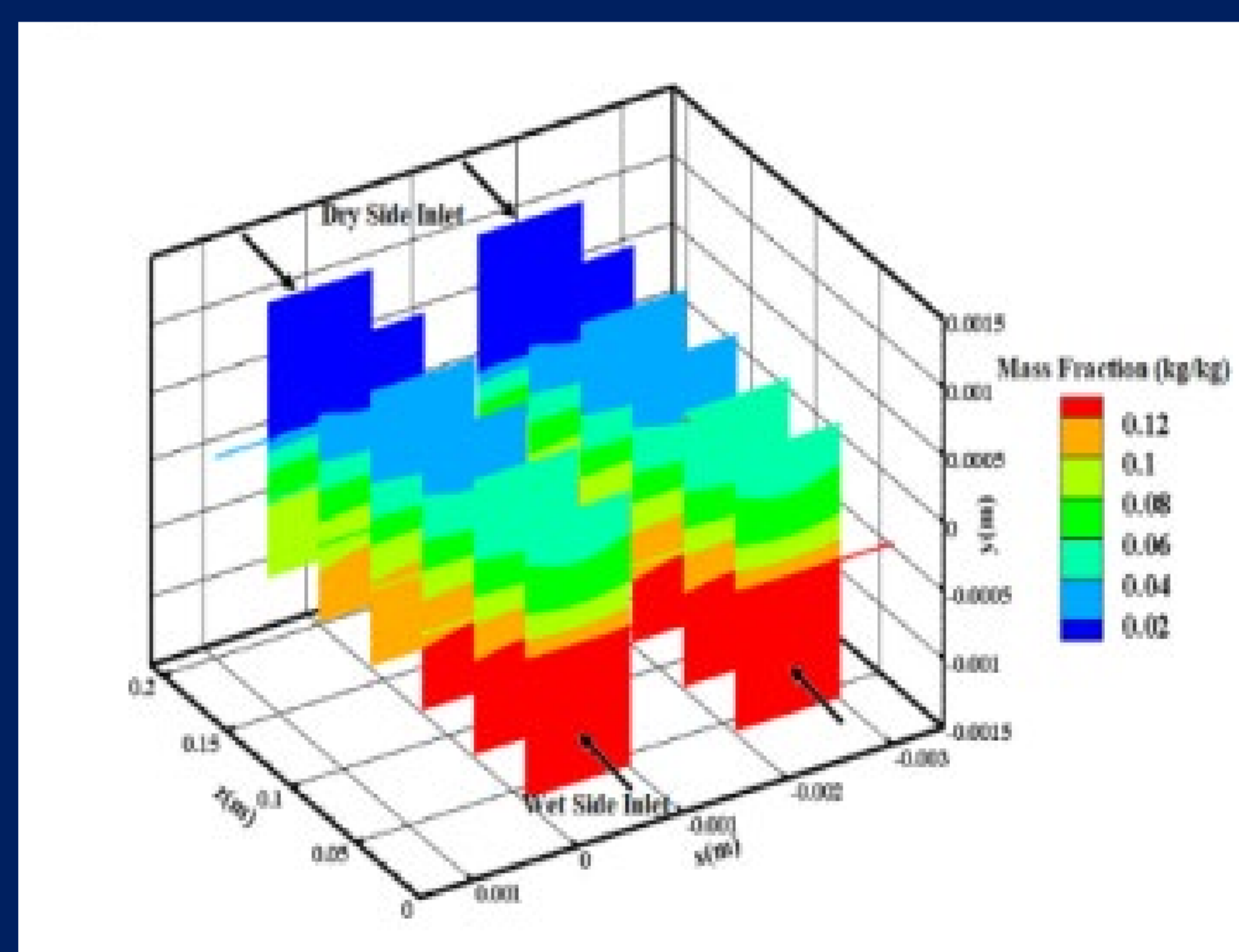
- 建材儲能熱傳特定
Thermal storage of construction materials
- 相變材料熱傳增益
Heat transfer enhancement via MEPCM and Nano-fluids
- 微型散熱座優化設計
Optimal design of micro heat sinks
- 燃料電池老化量測
Degradation measurement of PEM fuel cells
- 薄膜增濕及除濕性能
Membrane humidification and dehumidification performance

●研究成果(Research Achievement)

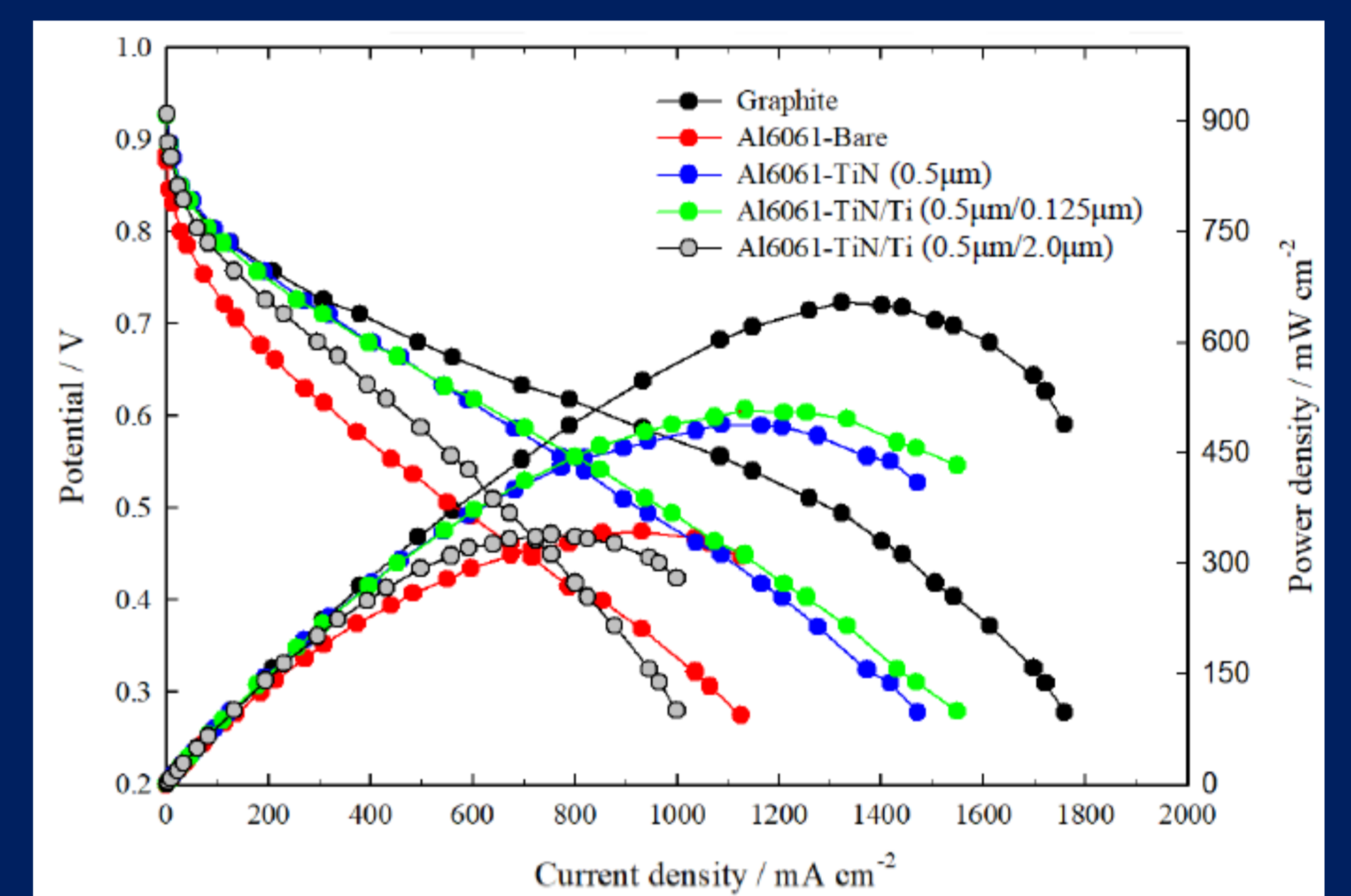
- H-index: 63
- Citations: 12,000



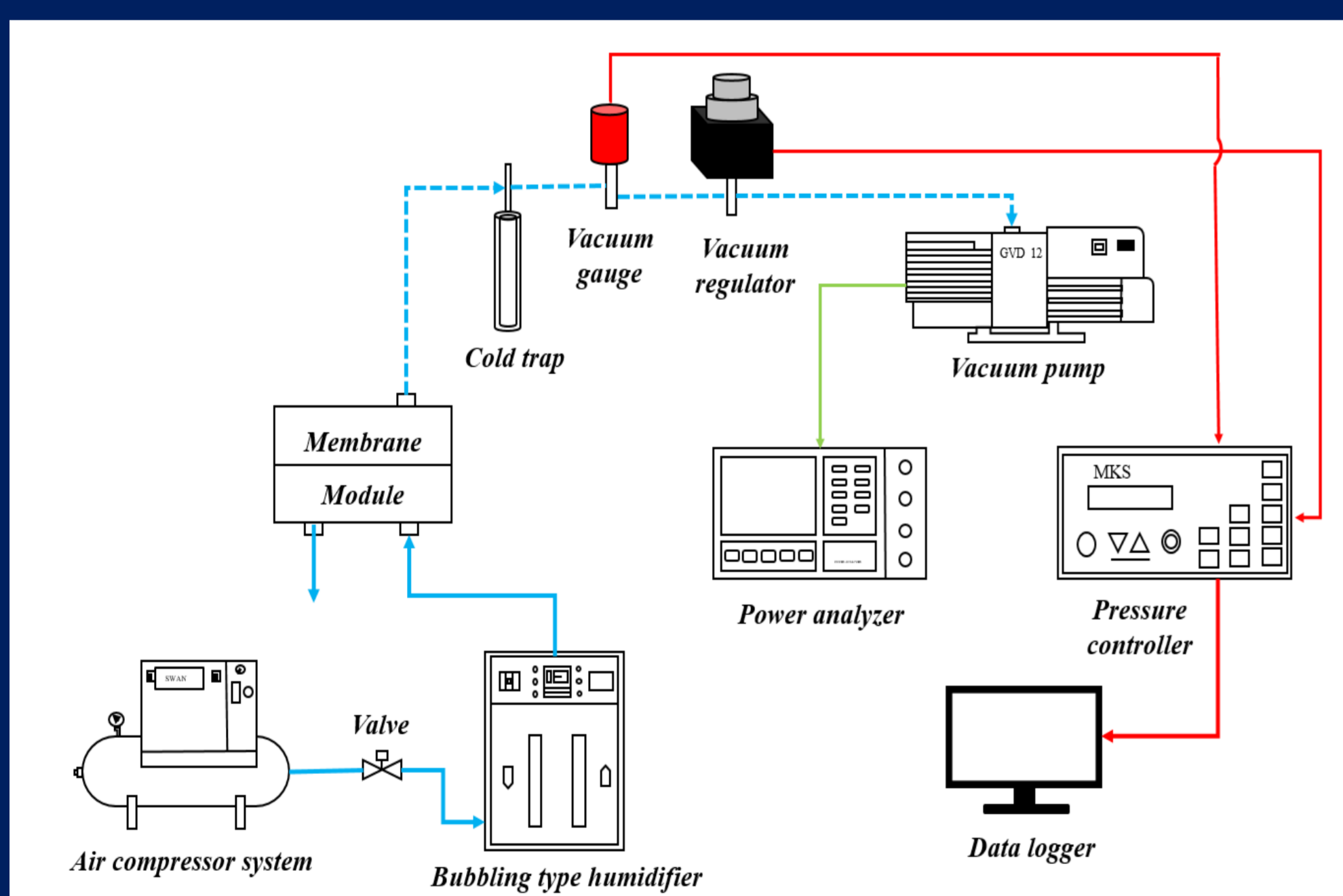
多級式平板式薄膜除濕器之熱質傳實驗研究
Experimental study on heat and mass transfer of a multi-stage planar dehumidifier



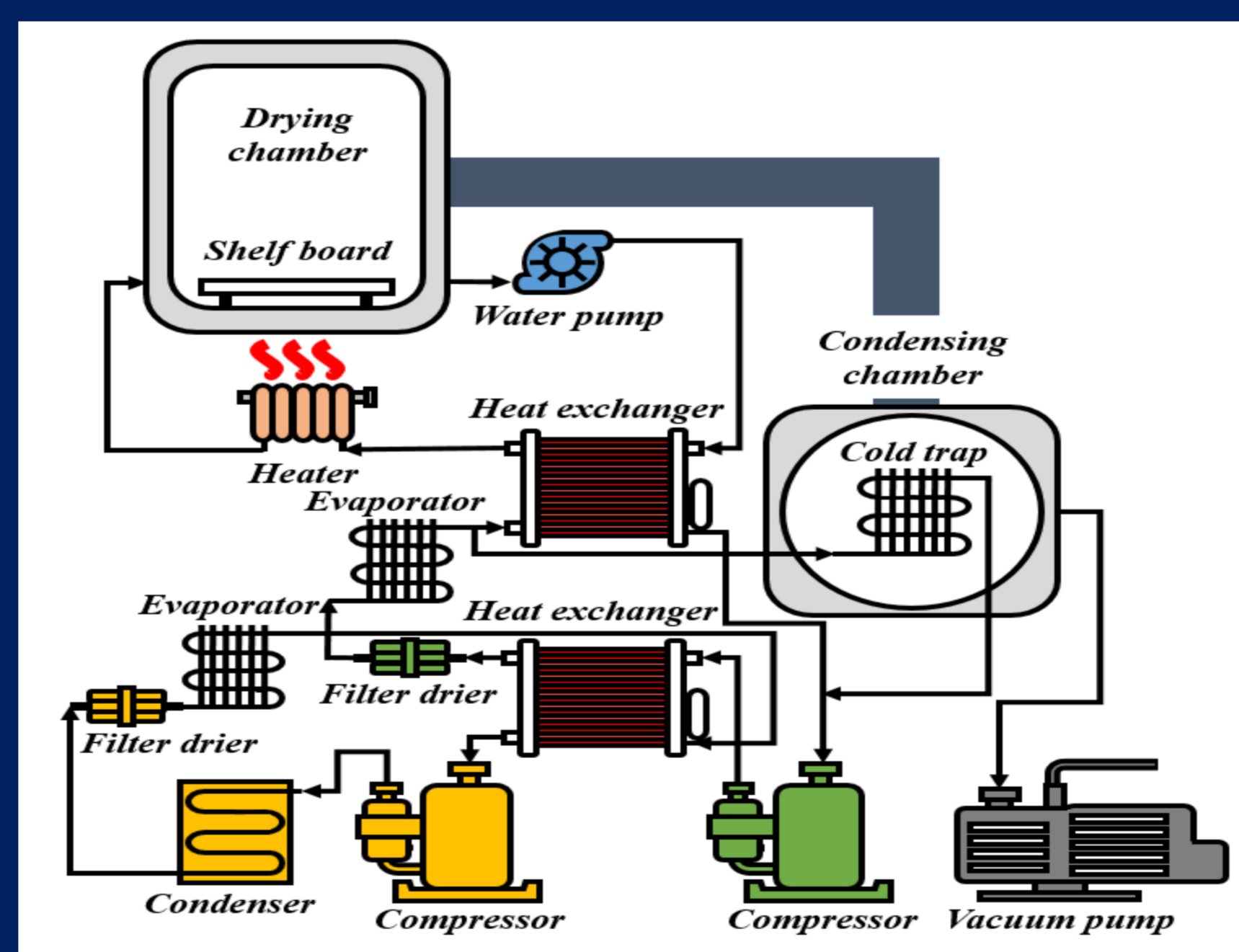
板式薄膜增濕器之熱質傳數值研究
Numerical study on heat and mass transfer performance of the planar membrane humidifier



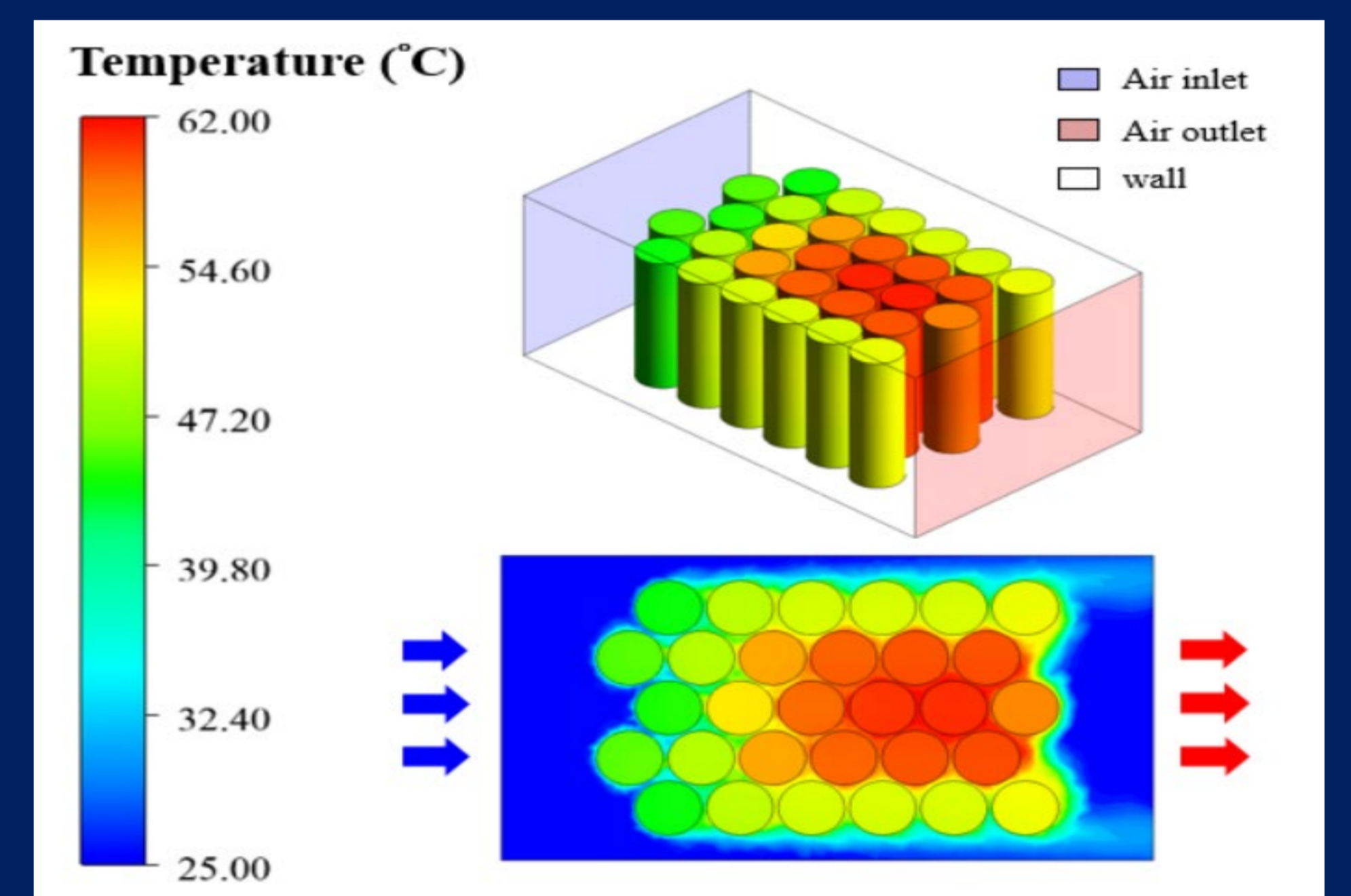
燃料電池老化性能量測
Degradation measurement of PEM fuel cells



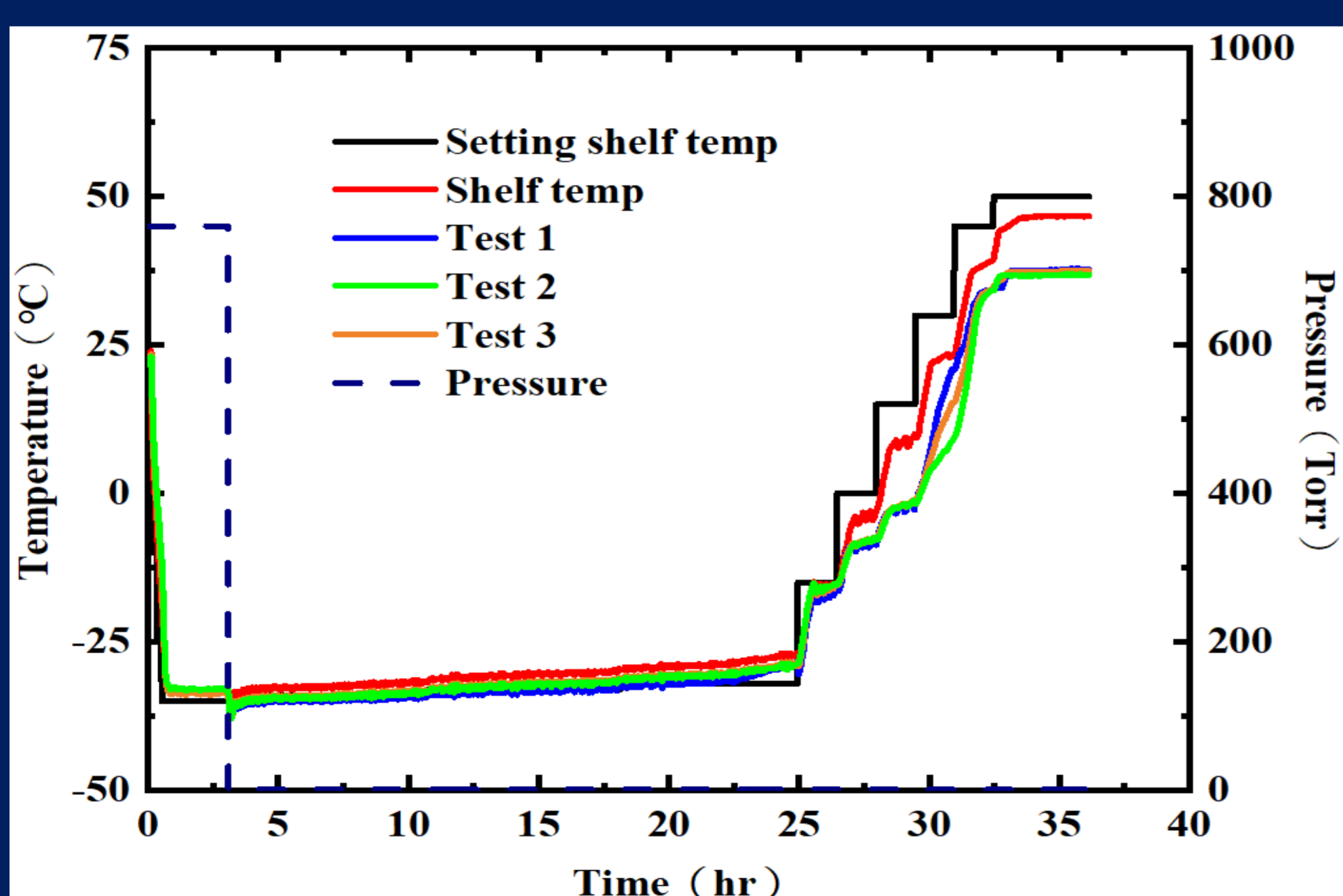
真空薄膜除濕實驗流程示意圖
Schematic diagram of dehumidification test setup



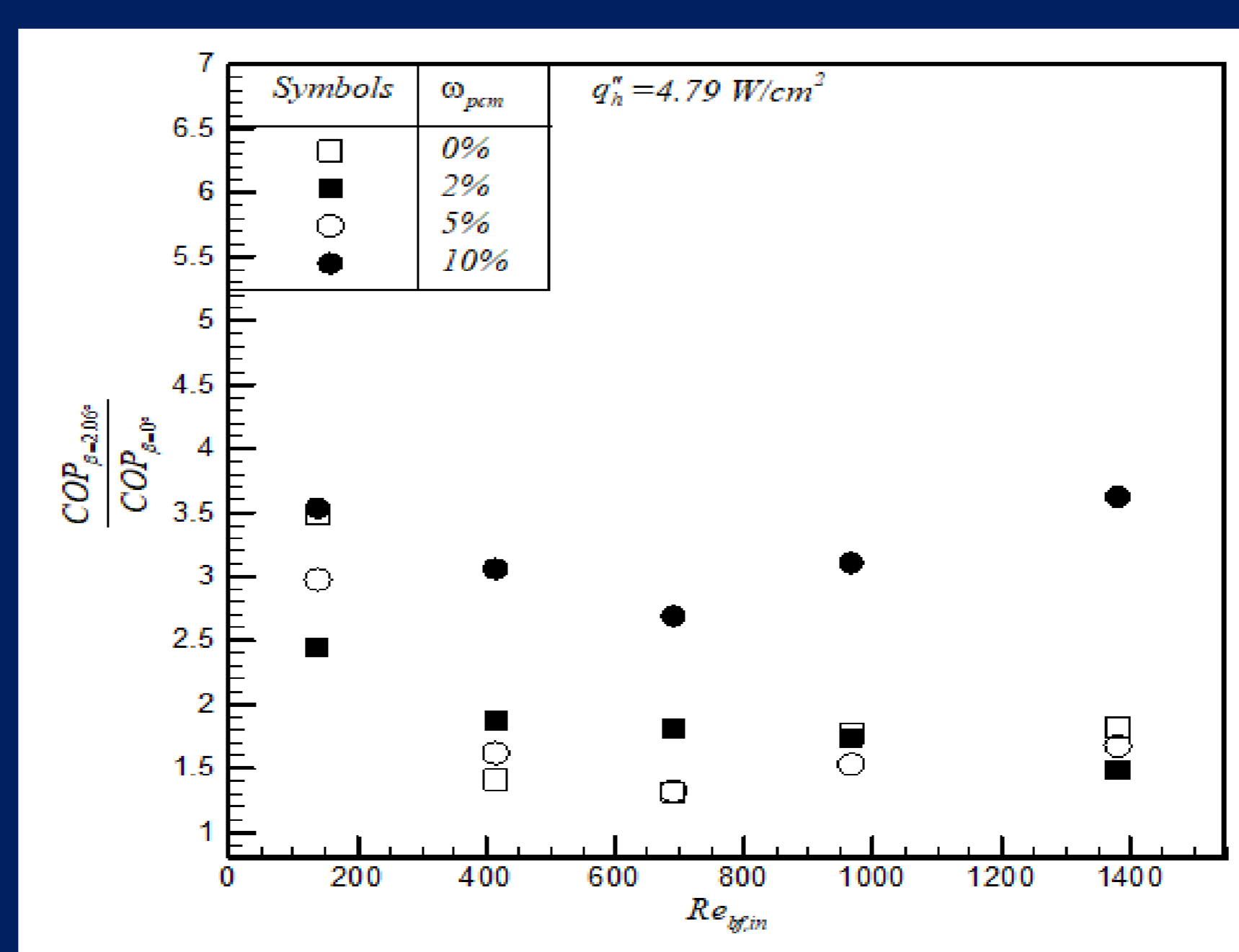
棚板式真空冷凍乾燥機架構圖
Shelf board type vacuum freeze dryer



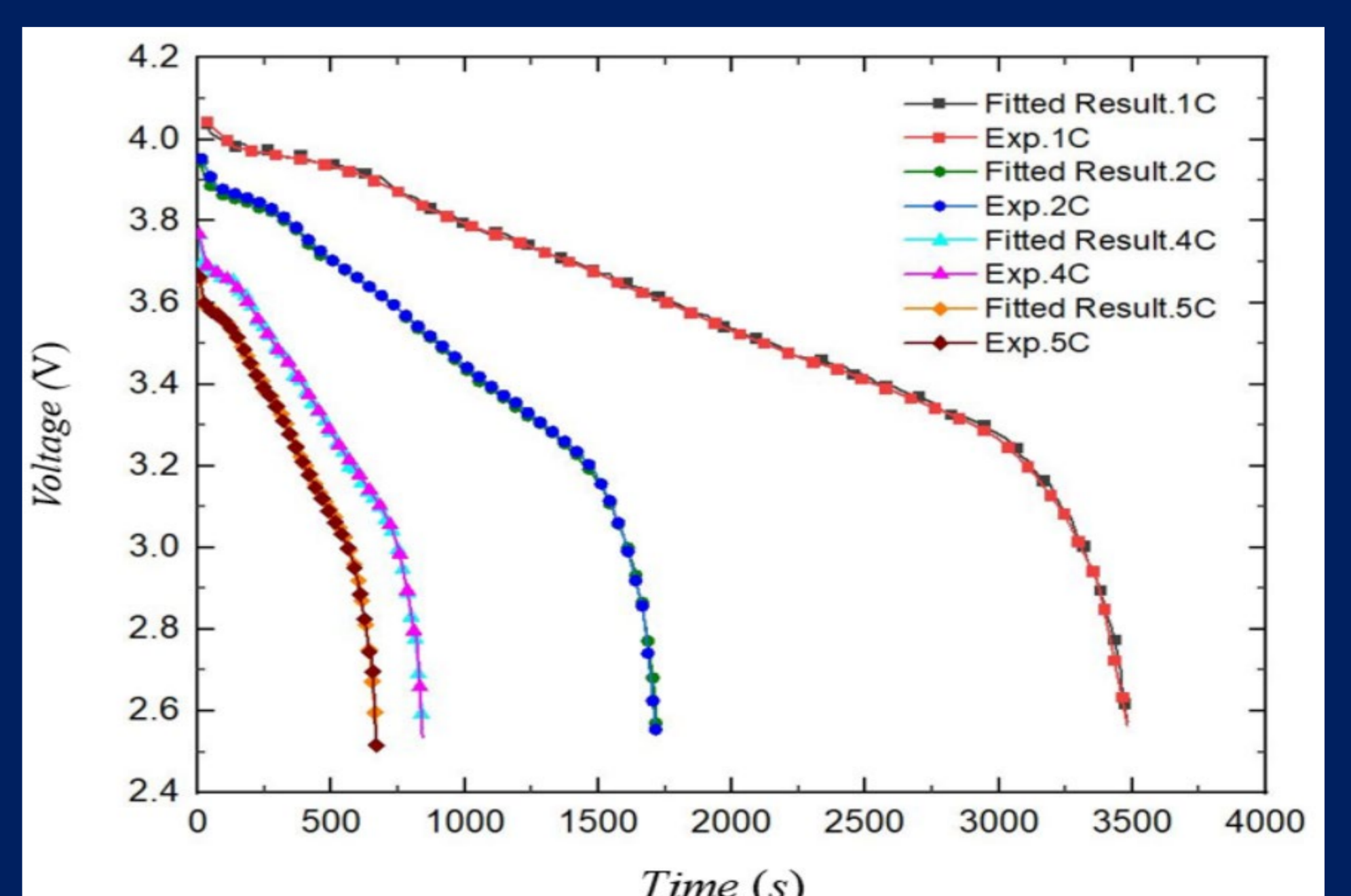
鋰電池組熱分析
Thermal analysis of Lithium-ion battery pack



凍乾製程中溫度與壓力隨時間變化圖
Diagram of temperature and pressure changing with time in freeze-drying process



毫米流道散熱座冷卻特性研究
Study on cooling performance in multichannel heat sinks with rectangular mini-channel



鋰電池電化學分析
Electrochemical analysis of Lithium-ion battery