

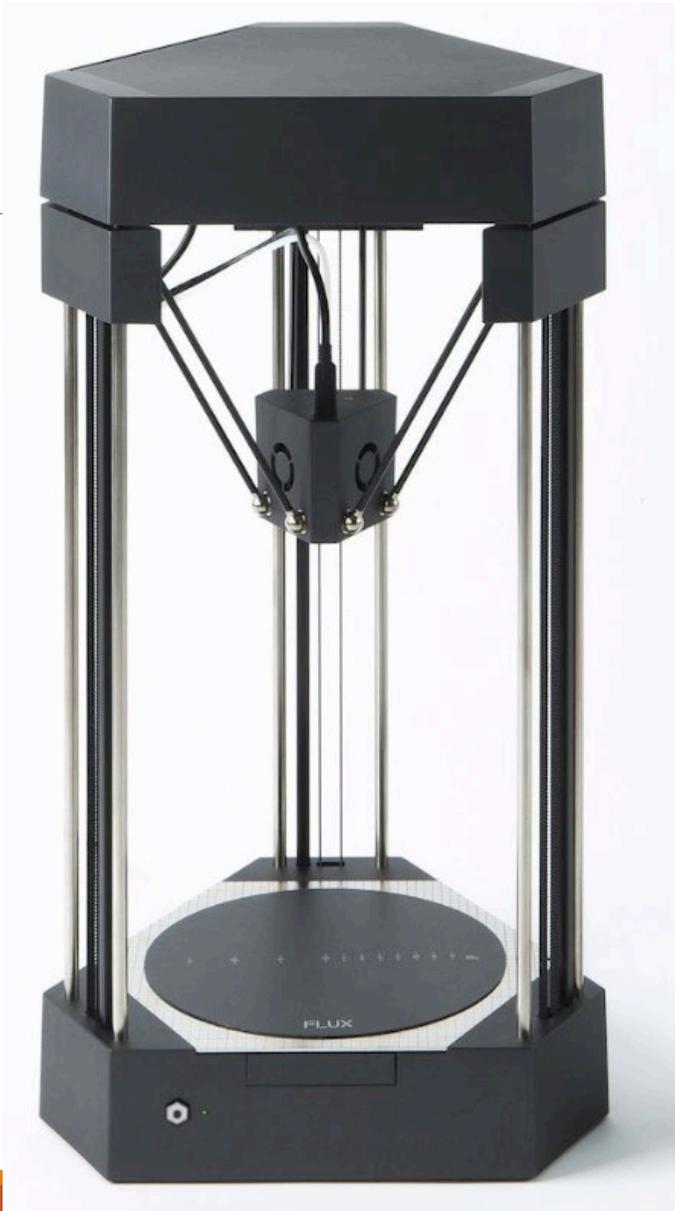
# 以3D列印填充物及其 在CO<sub>2</sub>吸收塔效率之研 究

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3DRP Printer

列印填充物

Feature Tree Icons: 伸長填充/基材, 旋轉填充/基材, 抽出填充/基材, 疊層拉伸填充/基材, 邊界填充/基材, 伸長除料, 異型孔精圓, 旋轉除料, 抽出除料, 疊層拉伸除料, 邊界除料, 圓角, 直線複製排列, 肋材, 拔模, 薄殼, 鏡射, 包圍, 相交, 參考幾何, 曲線, Instant3D

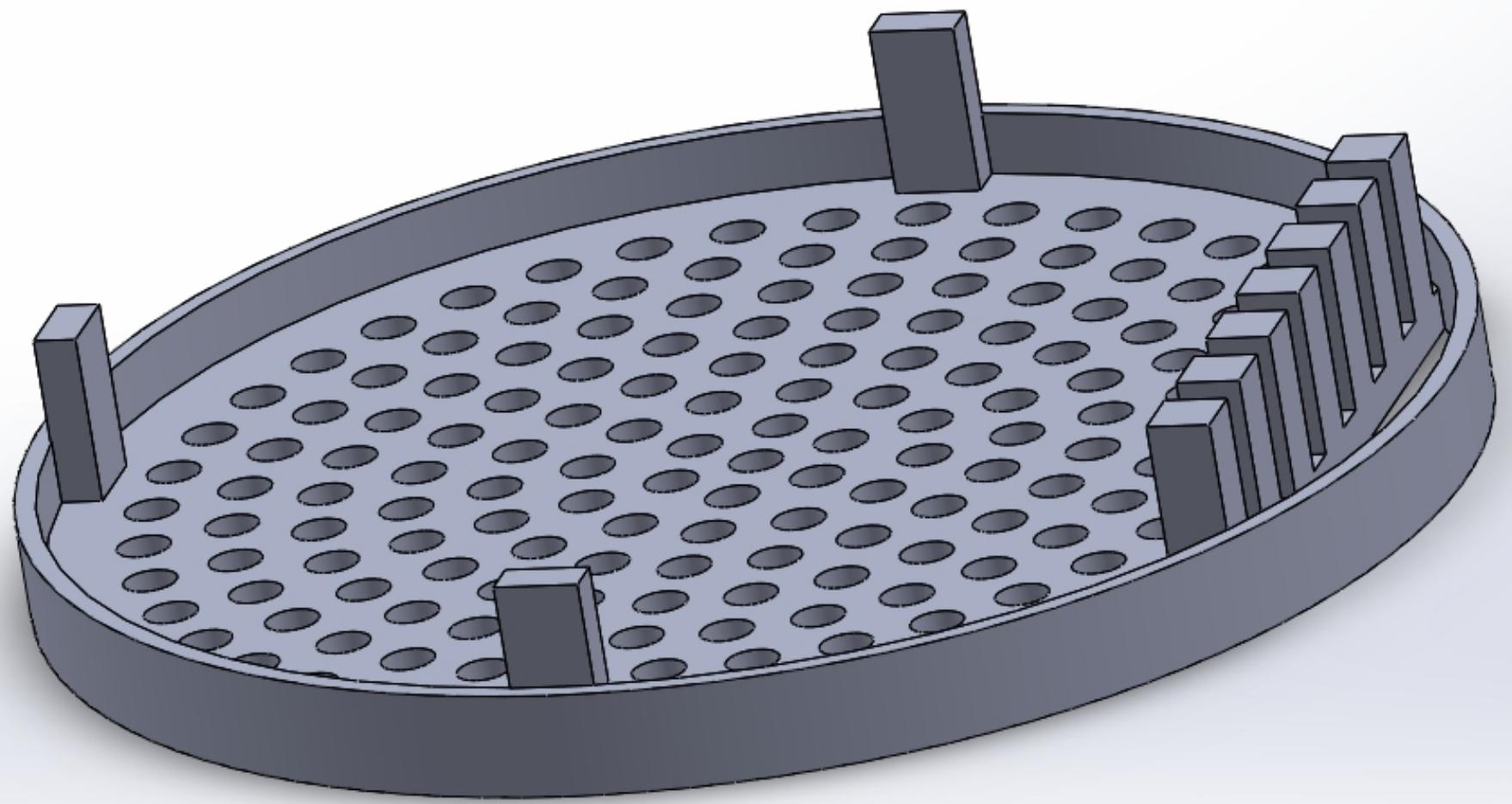
Navigation Tools: Rotate, Zoom, Pan, Move, Hide, Show, Isolate, Hide All, Show All, Hide Edges, Show Edges, Hide Surfaces, Show Surfaces, Hide Assembly, Show Assembly, Hide Components, Show Components, Hide Bodies, Show Bodies, Hide Faces, Show Faces, Hide Edges, Show Edges, Hide Surfaces, Show Surfaces, Hide Assembly, Show Assembly, Hide Components, Show Components, Hide Bodies, Show Bodies, Hide Faces, Show Faces

Navigation Tools: Home, Isolate, Hide, Show, Hide Edges, Show Edges, Hide Surfaces, Show Surfaces, Hide Assembly, Show Assembly, Hide Components, Show Components, Hide Bodies, Show Bodies, Hide Faces, Show Faces

Filter Icon

零件1 (預設 << 預設 >>\_顯示狀態 1)

- 歷程
- 感測器
- 註記
- 材質 <未指定>
- 前基準面
- 上基準面
- 右基準面
- 原點
- 填充-伸長1
- 除料-伸長1
- 除料-伸長5
- 填充-伸長2
- 除料-伸長6
- 填充-伸長3

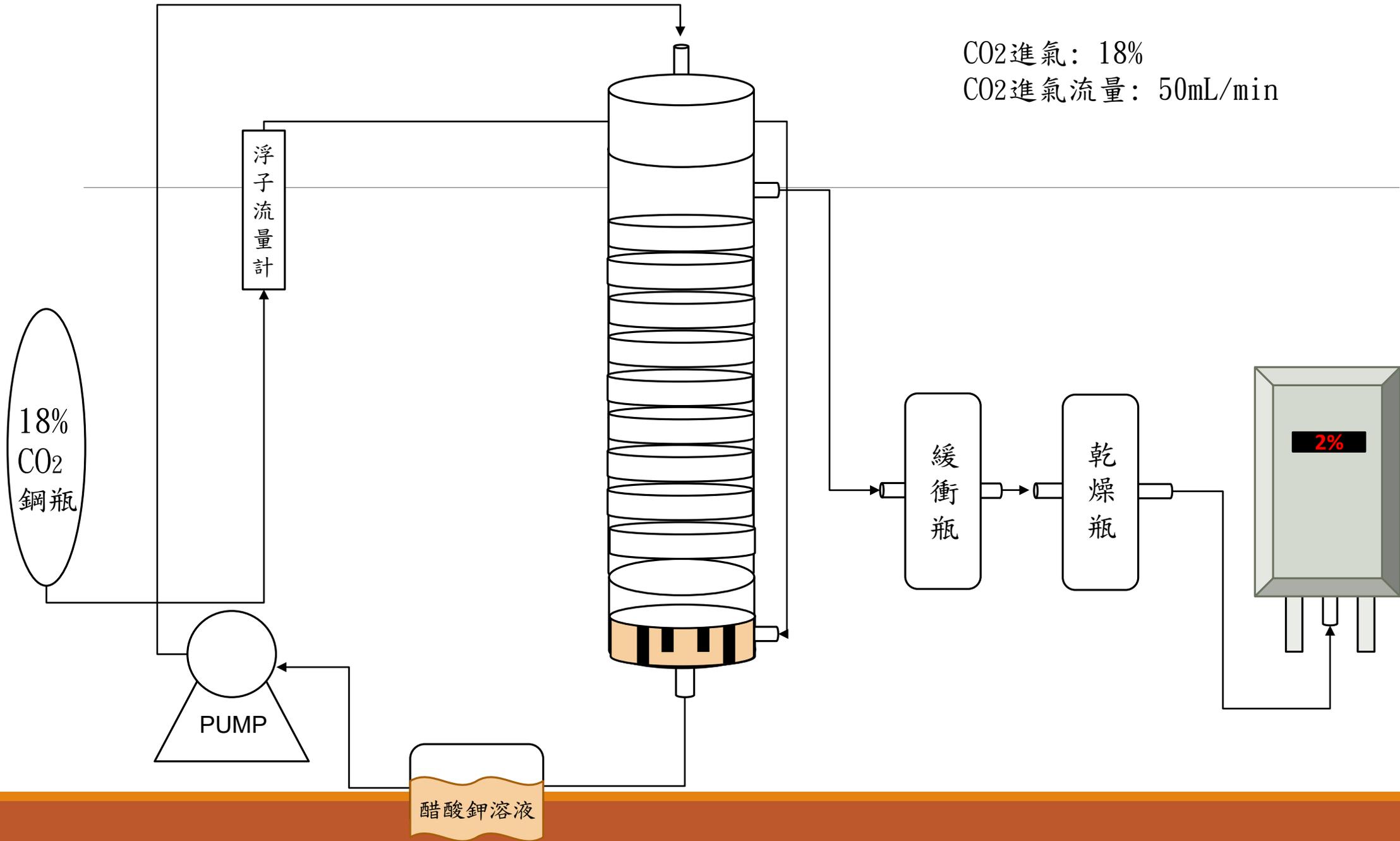


# PLA

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- 耗材便宜維護簡單
- 材質不黏手
- 列印PLA無毒氣
- 可用溶劑粘接

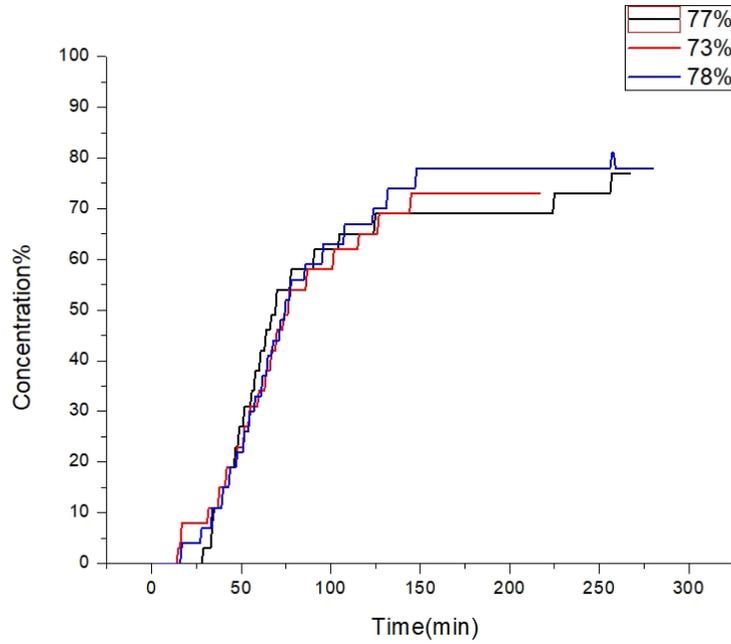




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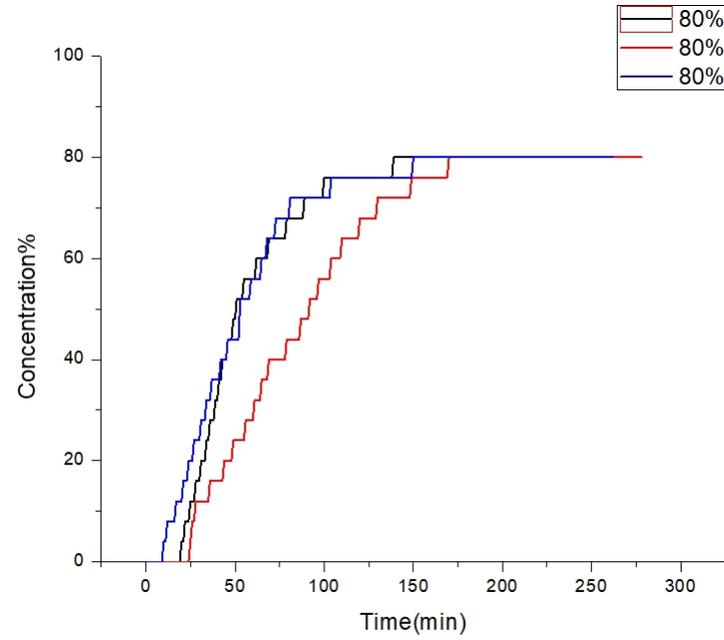
# 實驗數據及成果

表面積1039.7mm<sup>2</sup>



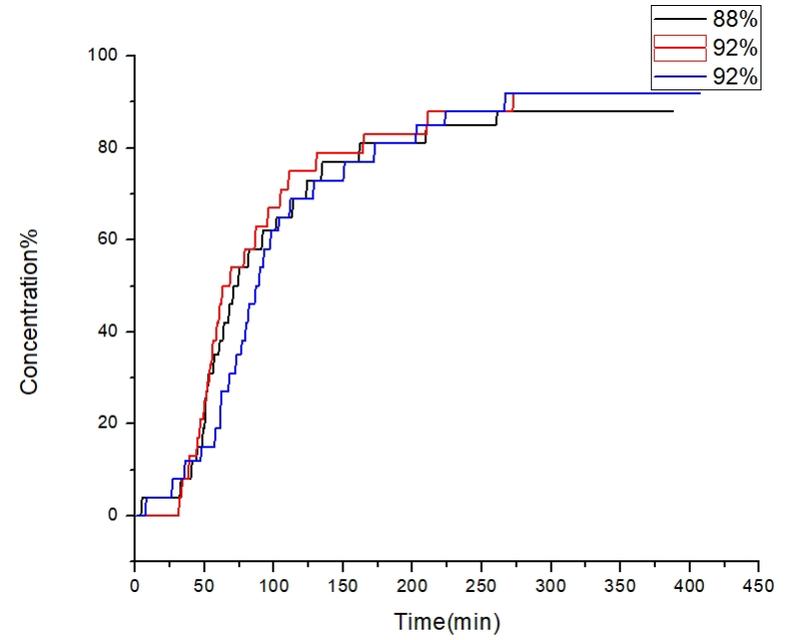
圖A、板數10

表面積1559.5mm<sup>2</sup>

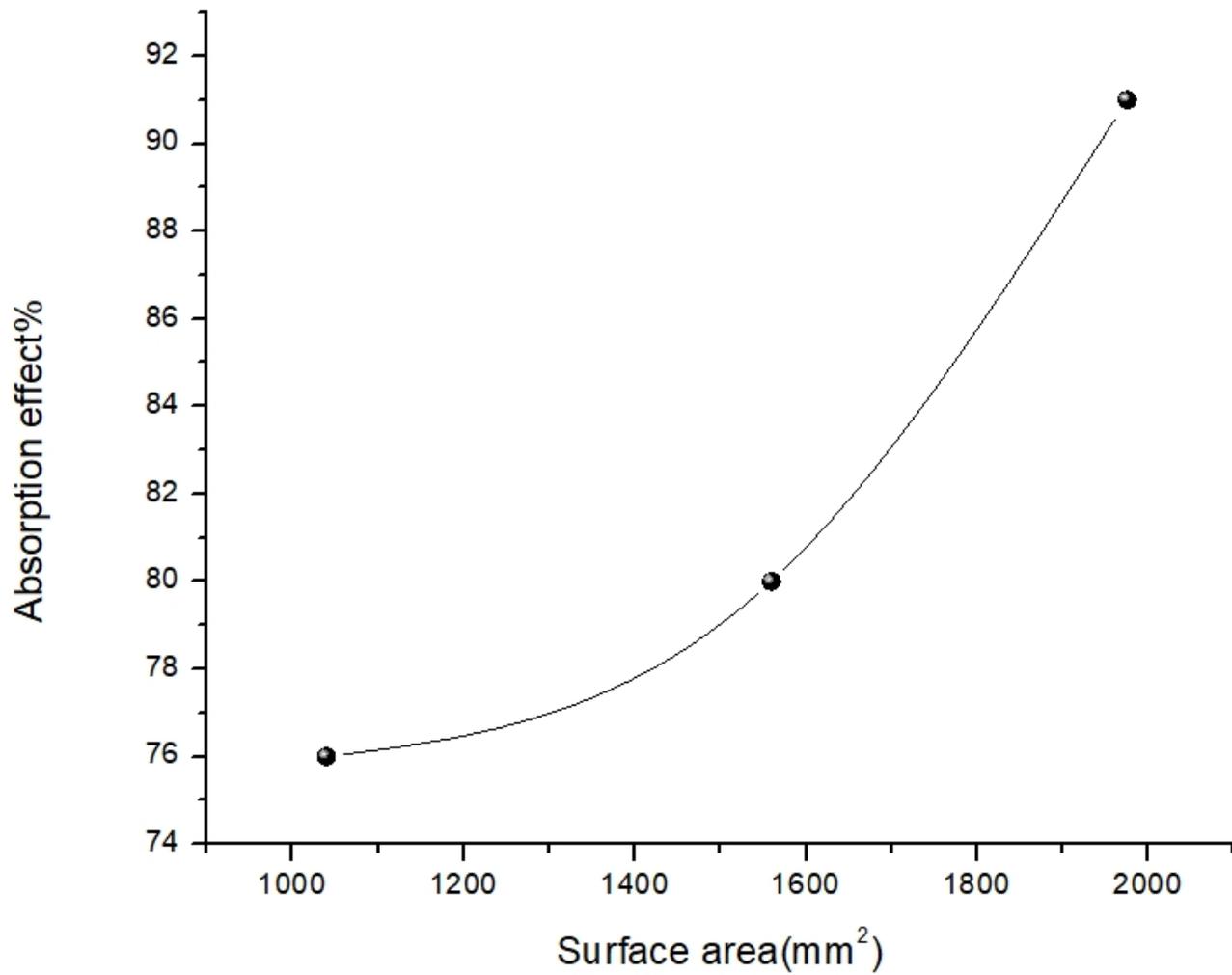


圖B、板數15

表面積1975.4mm<sup>2</sup>



圖C、板數19

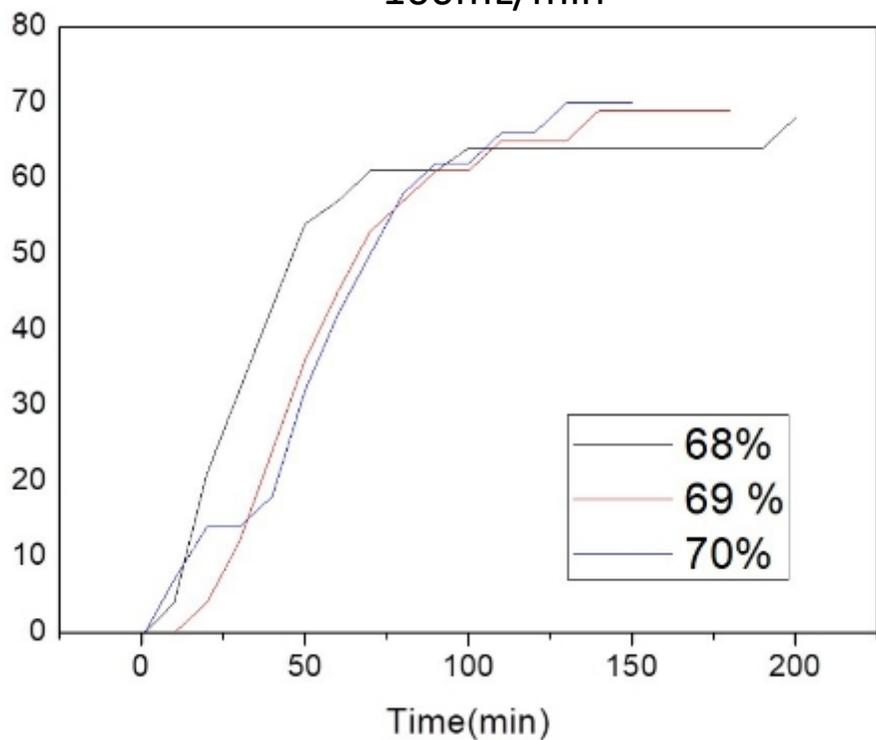


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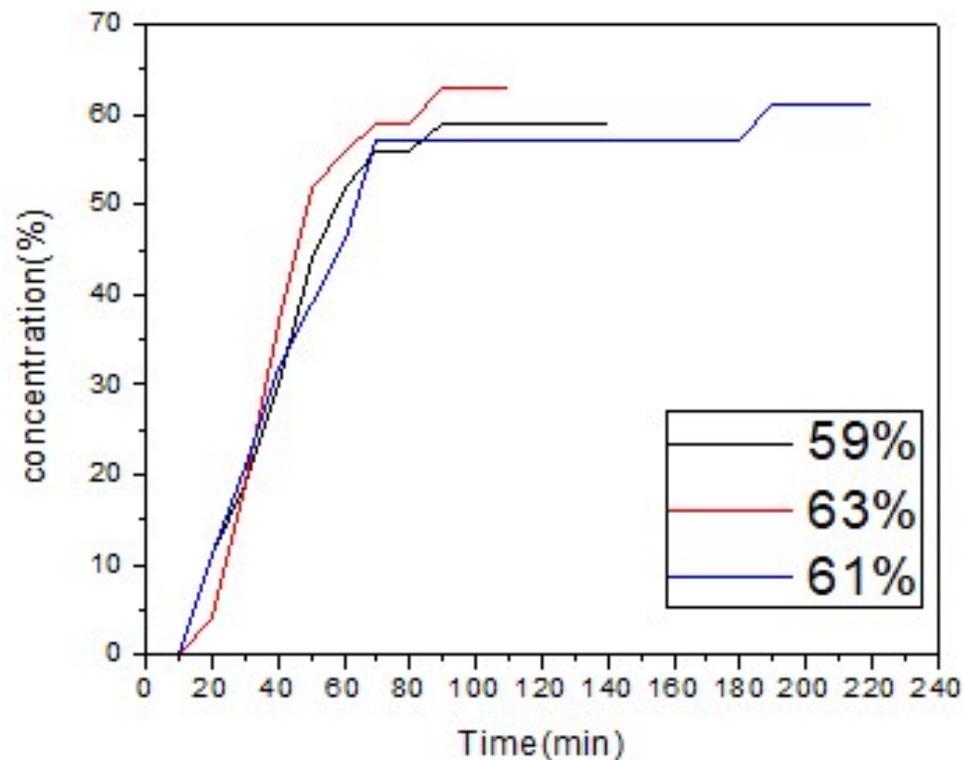
圖A、圖B、圖C，  
吸收效果與表面積作圖

# 實驗變因:改變氣體流量

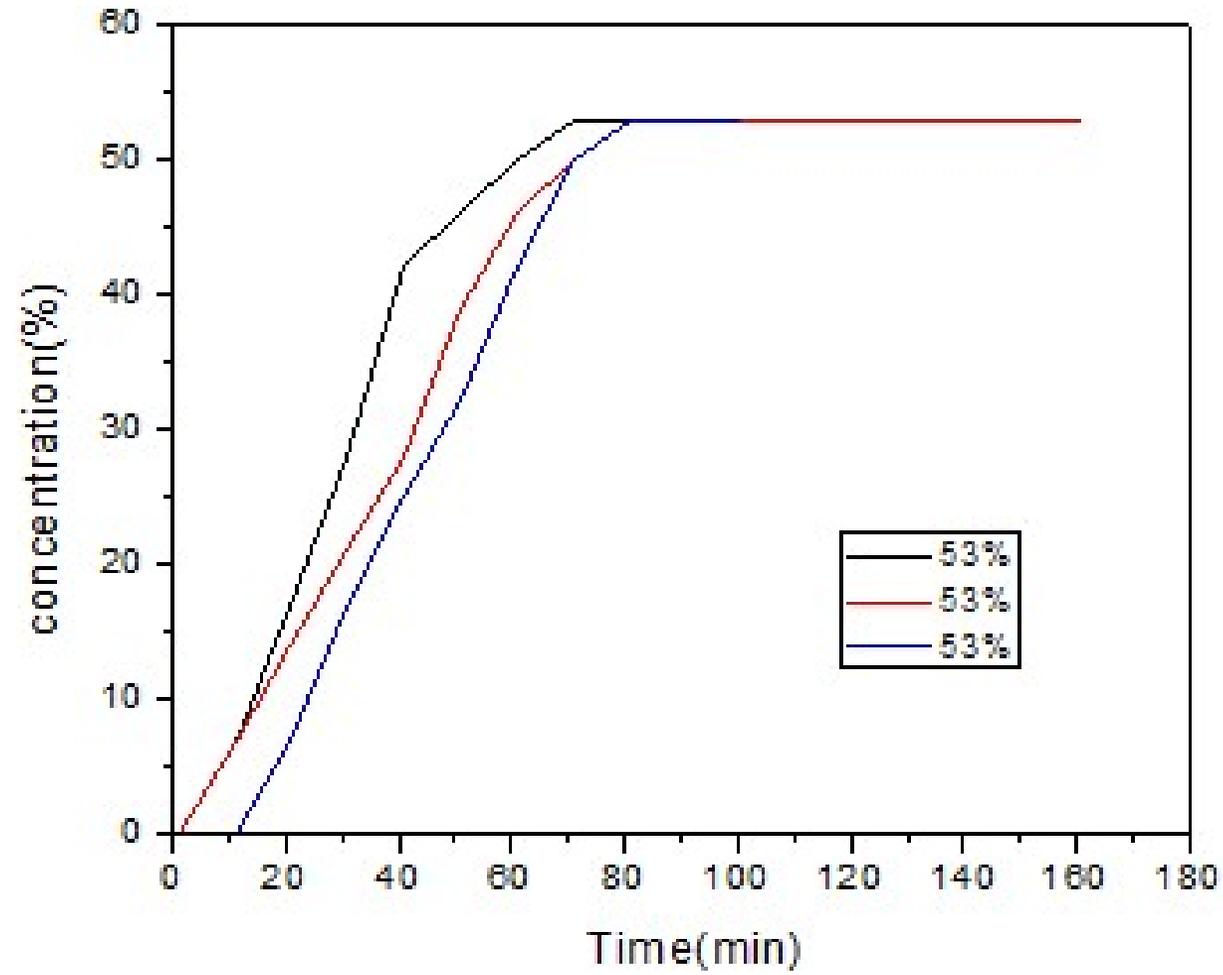
100mL/min

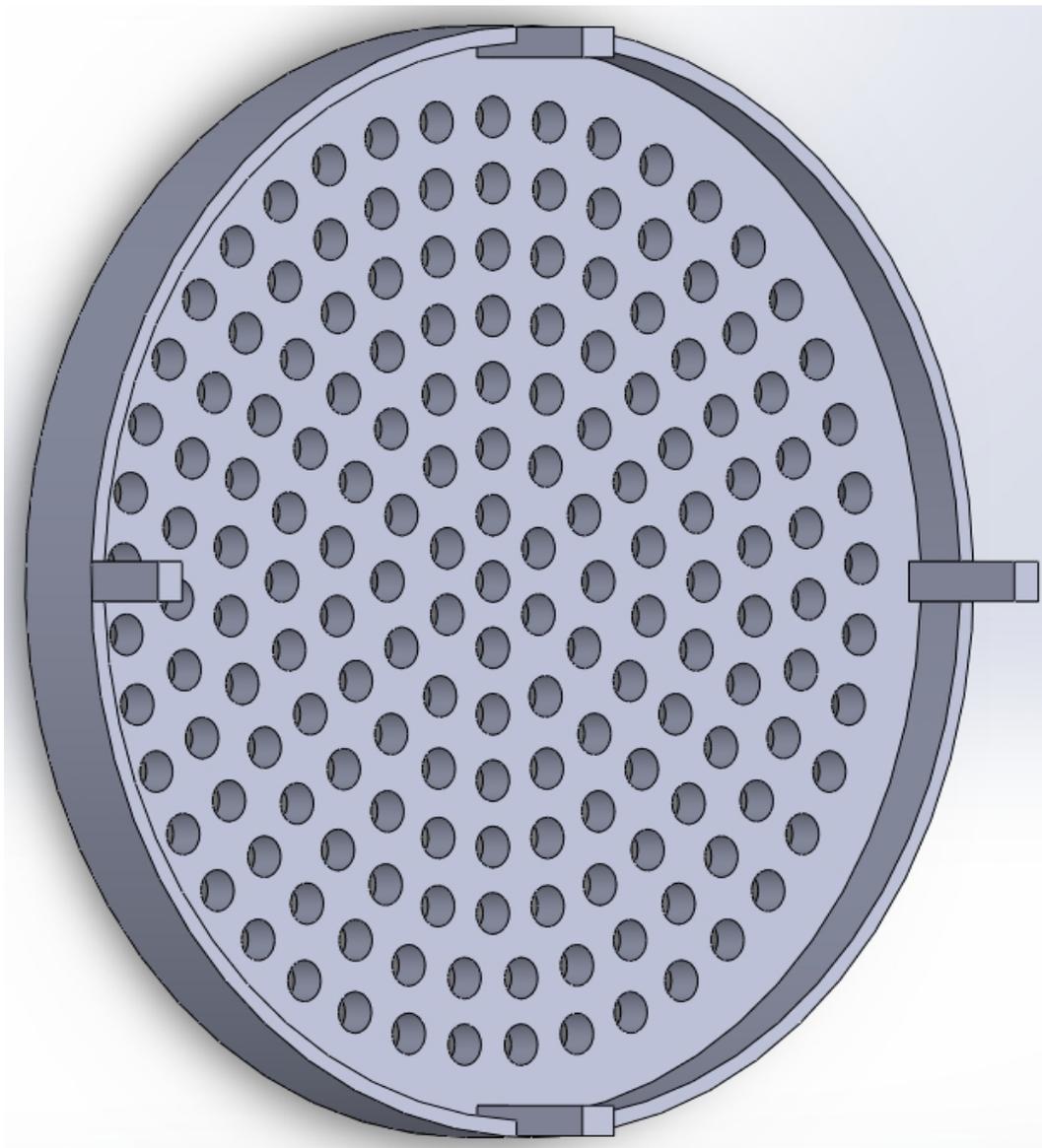


150mL/min



200mL/min





因為在實驗中，我們觀察到醋酸鉀水溶液在吸收 $\text{CO}_2$ 後，液體仍然可以經過原本的填充物，比較不會因黏度過高，而走向較大的缺口，所以為了提升吸收度，我們‘將缺口補上，增加孔洞。