II 運用 MICRO CT 針對牡蠣殼體空腔化與殼體變形分析方法之建立
Application of 3D microCT analysis for Oyster shell thickening and chambering characterization

比對現生與考古坑層中野生牡蠣殼體之變形量與空腔化之情況。藉由斷層掃瞄 3D 數位影像分析來測量牡蠣殼體空腔化程度，找出可進行比對之形體參數。結合所有相關數據與資料後，探討史前與現生野生牡蠣殼體構造差異性為何。執行本計畫學生將會學到前人文獻閱讀，採樣，三維結構分析，結果討論撰寫論文。

Abnormal thickening and chambering of oyster shells were widely adopted as bioindicators of heavy metal pollution in coastal waters. However, the shell abnormality can not only due to pollution, but also natural causes. Present and archeological oyster shells are collected and scanned through microCT. The 3D structural analysis will be conducted and compared between present and archeological oyster shells to decipher the natural and pollution caused shell obnormality.