化工系表面積及孔徑分析儀使用申請單

No._____

申請使用時間： 年 月 日 時 至 年 月 日 時

實驗條件：樣品成份: _____ 樣品數量: _____

(注意: 樣品必需可接受150℃加熱degas，若樣品怕熱則不接受量測。)

□比表面積(BET analysis)

□吸脫附曲線(Adsorption / desorption curve)

自備零件及藥品：Sample cells

1. 使用者對儀器之熟稔情形:

□首次使用需Superuser協助或教學;

□非首次使用仍需Superuser協助或教學;

□Superuser考核;

□可獨立操作之使用者;

2. 借用人在借用期間若因操作不當造成儀器或其配件損壞或遺失，並影響後續使用者之借用權益，需自行負擔相關賠償責任。

3. 樣品管（sample holder）使用損壞，由損壞者負責賠償。樣品使用前務必乾燥，以減少脫氣（degassing）時間。有機樣品易於分析中分解，應避免使用。

4. 一般所需量測時間：BET表面積5小時；中孔徑分布8小時；微孔徑分布2-3天。

5. 使用前需先填寫借用單，並在儀器保養維護記錄簿上登記。使用後務必確實清潔並將儀器及其配件歸位。初次違規者，將停止個人使用權一個月；如再犯，將視情節加重處分，停權期間可能為一學期、一年，甚至永久停止使用。違規情節嚴重者，亦可能連帶影響該實驗室之使用權限。

6. 本系使用者需繳儀器維修基金：500元/天（自操），委測樣品1100元/天+330元/小時（委測/教學）。一學期年繳滿10,000元者，則該學年內不需再行繳交。關於儀器維修基金之繳交，本系使用者得於次一學年開始之兩月內繳清，未繳清前，不得再借用該儀器。全年度 N_2 氣體與液態氮的總費用依使用比例，由使用的實驗室支付。

7. 校內外系每天**3,000**元加330元/小時（委測/教學），校外研究單位每件**3,000**元加330元/小時（委測/教學）（超過一天每小時加收650元），校外營利機構每件**5,000**元加330元/小時（委測/教學）（超過一天每小時加收800元）。

8. 預約期間若超過**24**小時不使用，應通知技術員，以增加儀器使用效率並減免使用費。

*本儀器目前負責之Superuser為 劉嘉源 (E2-619)

*本儀器目前負責之老師為 胡哲嘉 (E2-610)

□本人已詳閱並同意上述內容並願遵守精密儀器及常用設備管理辦法。

借用人簽名：_____

指導教授簽名：_____

儀器負責老師意見及簽名：_____

外系或外校申請者，請化工系主任簽名：_____

化工系表面積及孔徑分析儀使用申請單
Application form for Surface Area and Porosimetry Analyzer

No._____

Using of experiment: (Month/date): From: _____to: _____

Sample material: _____ Number of samples: _____

[Note: Sample to be measure must resist 150°C for degas process. If your sample cannot withstand 150°C or above, application for measurement will be rejected.]

Check the item needed:

☐ Surface specific surface area (BET analysis)

☐ Adsorption / desorption curve

Essentials self-prepared by the user: Sample cells

1. **User's familiarity with the instrument:**
   - ☐ First-time user; requires assistance or training from a Superuser
   - ☐ Not a first-time user but still requires Superuser assistance or training
   - ☐ This session will be evaluated by a Superuser
   - ☐ Qualified to operate the instrument independently
2. During the loan period, if the borrower causes damage to or loss of the instrument or its accessories due to improper operation—thereby affecting subsequent users—the borrower shall bear full responsibility for compensation.
3. Before use, a application form must be completed and the usage must be recorded in the instrument maintenance logbook. After use, be sure to thoroughly clean the equipment and return it and its accessories to their proper places after use. First-time offenders will have their individual usage privileges suspended for one month; repeat offenders will face more severe penalties depending on the circumstances, with suspensions ranging from one semester to one year, or even permanent suspension. Serious violations may also result in the revocation of the laboratory's usage privileges. Other violations will be handled in accordance with departmental regulations.
4. Users are responsible for compensation for any damage to the sample holder caused by improper use. Samples must be thoroughly dried before use to reduce the time required for degassing. Organic samples should be avoided, as they may decompose during analysis.
5. Rates for instrumentation usage:
   (1) Ch.E., NTUST users: NT$500 per day (self-operation)；NT$1100 per day + NT$330 per hour (assisted testing / instructional use). Maximum charges for an academic year: 10,000 NT dollars. NO registration will be allowed if the charged fees of the previous year are not paid off within the first two months of the new academic year. The total annual cost of N_2 gas and liquid nitrogen is allocated and paid by the laboratories according to their usage proportion.
   (2) Users from other NTUST departments: 3,000 NT dollars/day + NT$330 per hour (assisted testing / instructional use).
   (3) Users from other research institutions: 3,000 NT dollars/sample (Over 650 NT dollars/ hr.) + NT$330 per hour (assisted testing / instructional use).
   (4) Users from other institutions: 5,000 NT dollars/sample. (Over 800 NT dollars/ hr.) + NT$330 per hour (assisted testing / instructional use).
6. DO inform the technician within 24 hours of the scheduled time if you want to cancel the reservation. Otherwise you will still be charged.

*The current Superusers of this instrument is Chia-Yuan Liu (E2-619)

*The professor currently in charge of this instrument is Che-Chia Hu (E2-610).

☐ I have read and agree to the above terms and am willing to comply with the regulations for the management of precision instruments and general equipment.

Borrower's Signature: _____

Advisor's Signature: _____

Comments and Signature of the Responsible Faculty Member: _____

For applicants from other departments or institutions, please obtain the signature of the Chair of the Department of Chemical Engineering: _____