

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：樣品名稱及數量： _____

(注意：樣品必需可接受 150°C 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. 願遵守精密儀器及常用設備管理辦法。 借用人： _____

2. 儀器如有損壞，願意負責修復。 指導教授： _____

3. 儀器負責老師意見：

4. 技術員意見：(借用人此次申請應繳儀器維金 _____ 元

借用人本學年累計應繳 _____ 元。)

5. 外系或外校申請者請系主任簽名： _____

No. _____

核准使用時間： 年 月 日 時至 年 月 日 時

1. 請閱讀精密儀器及常用設備管理辦法。 借用人： _____

2. 使用前先在儀器保養維護記錄簿上登記。

3. 分析氣體由系採購再由使用者按登記使用時間比例分擔。

4. 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。

5. 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，其它違規狀況依系上規定而訂之。

6. 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。

7. 本系使用者需繳儀器維修基金：500 元/天，樣品委測 1,100 元/天 + 280 元/小時 (委測/教學)。若於一學年度內繳滿 10,000 元，該學年度內不需再繳交。儀器維修基金可於次一學年開始的兩個月內繳清，未繳清前不得再借用該儀器。全年度 N₂ 氣體與液態氮的總費用依使用比例，由使用的實驗室支付。

8. 校內外系每天 3000 元 + 280 元/小時 (委測/教學)；校外研究單位每件 3,000 元 + 280 元/小時 (委測/教學) (超過一天者，每小時加收 650 元)；校外營利機構每件 5,000 元 + 280 元/小時 (委測/教學) (超過一天者，每小時加收 800 元)。

9. 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 委測-李哲竭；儀器教學-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： _____

Application form for Surface Area and Porosimetry Analyzer

No. _____

Intended period of experiment: (month/date/hr) : 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 data needed :

Surface specific surface area (BET analysis) Adsorption / desorption curve

Essentials self-prepared by the user: Sample cells

1. I will follow all the regulations and instructions of the instrument. User's signature: _____
2. I am willing to take the repairing responsibility if the instrument is damaged.

Advisor's Signature: _____

3. Comments from the professor-in-charge:
4. Comments from the instrument technician: (usage fee to be charged: _____NT dollar.)

(Accumulated charged usage-fees of this academic year : _____NT dollar.)

5. Signature of the chairman of the Chemical Engineering Department : _____

(Required for applicants from departments/institutions other than Chemical Engineering)

No. _____

Scheduled usage (Month/Date/Year): _____ Scheduled usage time: _____

User name: _____

1. Please carefully read the instrument manuals and the regulations before the usage.
2. Be sure to take a record of the usage in the register before operating the instrument.
3. Consumption goods, such as paper and pens, will be provided by the department with the fee shared by all the users and charged to each user based on the accumulated usages.
4. 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.
5. Rates for instrumentation usage:
 - (1) Ch.E., NTUST users: NT\$500 per day for each application. For sample commissioning, the fee is NT\$1,100 per day + NT\$280 per hour is charged. 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.

- (2) The total annual cost of N₂ gas and liquid nitrogen is allocated and paid by the laboratories according to their usage proportion.
- (3) Users from other NTUST departments: 3000 NT dollars/day + NT\$280 per hour (assisted testing / instructional use).
6. Users from other research institutions: 3,000 NT dollars/day + NT\$280 per hour (assisted testing / instructional use) (Over 650 NT dollars/ hr.)
7. Users from other institutions: 5,000 NT dollars/day + NT\$280 per hour (assisted testing / instructional use). (Over 800 NT dollars/ hr.)
8. 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 are: Commissioned Testing – Che-Jie Li; Instrument Teaching – 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: _____