附件1-1、化工系傅立葉紅外線光譜儀（FTIR Tracer-100）使用申請單

No. _____

申請日期：　　年　　月　　日　　時

測試日期：　　年　　月　　日　　時 至　　年　　月　　日　　時

實驗條件：1. Measurement method :　☐Penetration mode ☐ATR ☐Grazing Angle

2. Detector :　☐DGS　☐MCT

3. Sample Types : ☐Solids　☐Powders　☐Liquids　☐Others

待測樣品:_____

自備零件及藥品：液氮500ml、KBr、Alcohol、NaCl Cell、拭鏡紙、夾子、特殊零件

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(即使已完成實驗室內部的儀器操作交接，仍須通過 Superuser的操作資格考核。);

☐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，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.使用前先填寫借用單，並同時於網路表單進行登記，使用後務必確實清潔並將儀器及其配件歸位，將清潔完的載台與歸還的設備配件拍照，並把照片上傳至網頁表單中，未完成者視同違規。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。

4.測固體樣品，與KBr混合打片時，KBr pellet die使用應謹慎，以免造成損壞。

5.本系使用者需繳儀器維修基金：600元/半天(自操)，840元/半天+330元/小時(委測/教學)，一學期年繳滿20000元者，則該學年內不需再行繳交。校內外系：1500元/半天+330元/小時(委測/教學)，校外研究單位：3000元/半天+330元/小時(委測/教學)。

6.於使用時間內如超過24小時不使用，應通知技術員，否則即取消該次使用權利，且照常收費，並縮短其往後登記使用該儀器之最長期限。

7.嚴禁自行移動儀器之任何元件，由技術員或Superuser操作。違者，禁止再使用該儀器。

*本儀器目前負責之Superuser為 張容甄 與 王聖涵 (E2-303)

*本儀器目前負責之老師為 何明樺 (E2-304)

☐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 Use of the FTIR Tracer-100 Infrared Spectrometer in the Department of Chemical Engineering

Registration date (Month/Date/Year):_____

Registration time:_____

Analysis details:

1. Measurement method : ☐Penetration mode ☐ATR ☐Grazing Angle

2. Detector :☐DGS ☐MCT

3. Sample Types : ☐Solids ☐Powders ☐Liquids ☐Others

Essentials self-prepared by the user: **Delicate task wipers, NaCl Cell, Spatulas, KBr, Alcohol, Liquid N2**、

Test sample:

1. User's proficiency level regarding instrument use:

☐ First-time user requiring assistance or training from a Superuser;

☐ Non-first-time user still requiring assistance or training from a Superuser;

☐ Qualification;

☐ User capable of operating the instrument independently;

2. ☐ If the borrower causes damage to the instrument or its accessories due to improper operation during the borrowing period, thereby affecting the borrowing rights of subsequent users, the borrower shall be solely responsible for any resulting compensation.

3. Before use, please complete the equipment loan form and register simultaneously via the online form. After use, be sure to thoroughly clean the instrument and return it, along with all accessories, to their proper places. You must also take photos of the cleaned stage and the returned accessories, and upload these photos to the online form. Failure to complete these steps will be considered a violation.

For a first violation, the user's access will be suspended for one month. Repeated violations will result in more severe penalties depending on the circumstances, with suspension periods ranging from one semester to one year, or even permanent revocation of access. In cases of serious violations, the usage privileges of the entire laboratory may also be affected.

4. When testing solid samples, the KBr pellet die should be used with caution when mixed with KBr to avoid damage.

5. Users within this department are required to pay an instrument maintenance fund: NT$600/half day (self-operation), NT$840/half day plus NT$330/hour (commissioned testing/teaching). Users who pay NT$20,000 or more in a semester are exempt from further payments for that academic year. For departments within and outside the university: NT$1500/half day plus NT$330/hour (commissioned testing/teaching); for external research units: NT$3000/half day plus NT$330/hour (commissioned testing/teaching).

6. If the instrument is not used for more than 24 hours within the designated usage time, the technician must be notified. Otherwise, the usage right will be cancelled, and the normal charges will apply, and the maximum registration period for future use of the instrument will be shortened.

7. It is strictly forbidden to move any component of the instrument yourself. Operation must be performed by the technician or superuser. Violators will be prohibited from using the instrument again.

*The current Superusers of this instrument are Jung-Chen Chang , Sheng-Han Wang (E2-303).

*The professor currently in charge of this instrument is Ming-Hua Ho (E2-304).

☐I have read and agree to the above terms and undertake to comply with the Regulations on the Management of Precision Instruments and Common Equipment.

User's signature:_____

Advisor's Signature:_____

Signature and comment from Professor-in-charge of the instrument:_____

Signature of the chairman of the Chemical Engineering Department: _____

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