凝膠滲透層析儀-Waters

Gel Permeation Chromatograph

Model: Waters

一、測試目的:

- 1. 測量水溶性高分子分子量分佈及分離水溶性高分子。
- 二、樣品準備須知及注意事項:
 - 1.溶劑必需使用二次超純水。
 - 2.實驗前溶劑及樣品應按照規定過濾 (0.2 μm 過濾膜)及除氣。
 - 4. 樣品注射時,注射針不能有氣泡。
 - 5.注射針、溶劑及過濾器材應自行準備。
 - 6. 樣品建議濃度: 0.1~0.2% ,注射量 100 μL

三、限制:

- 1. 只適合水溶性高分子樣品。
- 2. 樣品須溶於超純水,才能進行分析。

四、使用方法:

- 1. 系內使用以登記申請,由專責技術員指導自行分析為原則。
- 2.系外單位使用,須經登記申請,並經系主任及負責老師同意後,始可 測試。

五、負責老師:邱昱誠

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I. Purpose:

- 1. Water-soluble polymer molecular weight distribution determination.
- 2. Separation of water-soluble polymer and calculate the absolute molecular weight.

II. Sample preparation instructions and precautions:

- 1. Mobile phase should be prepared with ultra-pure water.
- 2. The aqueous mobile phase and samples solution should be microfiltered with a 0.2 µm membrane filter and degassed.
- 3. Flow rate of mobile phase should not be higher than 0.8 ml / min.
- 4. No air bubble is allowed in the injected sample.
- 5. Injection needles, solvent and membrane filter should be provided by the user.
- 6. Suggested sample concentration: $0.5 \sim 2$ mg / ml, injection volume $200\mu l$.

III. Restrictions:

- 1. Only for suitable water-soluble polymer samples.
- 2. Sample should be dissolved in ultra-pure water.

IV. Application:

- 1. Registration for application in advance is required. Users are required to operate the instrument themselves.
- 2. For users outside the department application should be signed by the chairman of the Chemical Engineering Department and the professor-in-charge for the equipment.

V. Professor-In-Charge: Yu-Cheng Chiu