# **Capillary Electrophoresis system**

# Description

Beckman Coulter PA 800 plus (More details)

#### Location

Rm510A, Biotech Centre 1

## Features

#### Multiple modes of electrophoresis

- Capillary Zone Electrophoresis (CZE)
  - Separation of charged particles
- Micellar Electrokinetic Capillary Chromatography (MEKC)
  - Separation of neutral molecules through the use of micellar additives (eg. SDS)
- Capillary Gel Electrophoresis (CGE)
  - > Separation of molecules based on size, shape and charge
- Capillary Isoelectric Focusing (cIEF)
  - > Separation of molecules based on their isoelectric point
- Capillary Electrochromatography (CEC)
  - > Separation of small molecules through a packed capillary

## Temperature control of capillary

- By recirculating liquid coolant
- Regulated between 15-60 °C

## Wide range of detectors

- PDA (190-600 nm)
- UV (200 nm, 214 nm, 254 nm, 280 nm)
- LIF (488 nm and 635 nm)

## Automated sample introduction

- Typical actual injection volume: 5-50 nL
- Injection by electrokinetic, pressure and vacucm

# Applications

- Protein purity determination
  - High resolution SDS-gel separation
- Quantitative IgG purity analysis
- Charge heterogeneity analysis
- Carbohydrate profiling

Contact bsc@hkstp.org

