

# Capillary Zone Electrophoresis

## **Schedule:**

**Week 1:** Introduction, history, theoretical foundations

**Week 2:** Theoretical foundations

**Week 3:** Causes and effects of zone broadening

**Week 4:** Structure and operation of HPCE instruments (capillaries, sample introduction)

**Week 5:** Structure and operation of HPCE instruments (detection)

**Week 6:** Principles of optimizing capillary zone electrophoresis methods

**Week 7:** CZE separations in capillaries with modified surfaces

**Week 8:** CZE for the separation of small ions and proteins

**Week 9:** Other CE techniques: MEKC, CGE, CITP, CIEF, CEC, coupled techniques

**Week 10:** Applications and expected trends

**Week 11:** Process of developing CZE methods

**Week 12:** Evaluation of electropherograms

**Week 13:** Validation of electrophoretic measurements