

# **CHEM-E4120 Quantitative Instrumental Analysis**

## **Examination**

**Choose 6 questions to be answered upon your own choice, answer either in English or Finnish.**

1. Monochromators and polychromators in optical spectrometry?
2. Light sources in spectrofotometry and photoluminence?
3. Electron and ion detectors in electron spectrometry and mass spectrometry?
4. X-ray fluorescence with X-ray excitation?
5. Auger Electron Emission Spectrometry compared with Electron Probe Microanalysis?
6. Atomic absorption and optical emission spectrometry?
7. Capillary electrophoresis, the separation principles and detection and quantification of analytes?