Modern laser and plasma-based methods in atomic spectroscopy (KDIT06)
syllabus

Lecturer: Dr. Gábor Galbács (galbx@chem.u-szeged.hu)

- The design, analytical characterization, interference effects, optimization, and applications of atomic emission spectrometry instruments based on electric discharge plasma atomic and excitation sources
- Atomic spectrometry instruments (emission and mass spectrometry) based on inductively coupled plasma sources, the effect of experimental parameters on analytical performance characteristics, applications
- Miniaturized plasma spectrometers
- Laser ablation devices in atomic spectrometry
- Llaser-induced plasma spectrometers, the effect of experimental parameters on analytical performance characteristics, possible applications
- Operation, performance characteristics, and applications of laser-excited absorption and ionization atomic spectrometry methods
- Characterization of laser-excited atomic fluorescence spectroscopy and its potential applications