

Sensors and Biosensors - lecture + exercises (15 h + 15 h, ECTS 2, written exam and presentations)

Lecture:

1. Introduction to (bio)sensors.
2. (Bio)recognition of analytes.
3. Types of recognition layers.
4. Transducers and measurement systems (electrochemical, optical, etc.,).
5. Working parameters and factors affecting response of (bio)sensors.
6. Chemical sensors for bioanalyte determination.
7. Application of (bio)sensors in analytical control of bioprocesses, medical diagnostics, environmental protection, etc.
8. Trends in (bio)sensors developments.