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| Level: master | | | | |
| Course title: Chromatography | | | | |
| Status: elective | | | | |
| ECTS: 6 | | | | |
| Requirements: none | | | | |
| Learning objectives The course is designed to introduce the principles of chromatography - modern physicochemical methods for separating of complex mixtures but also its application in the determination of various physical and chemical parameters of the molecules. | | | | |
| Learning outcomes Students should be familiar with the theory of chromatography, basic principles of gas and liquid chromatographic analysis (retention mechanisms, instrumentations, and related applications). | | | | |
| Syllabus <i>Theoretical instruction</i> The definition and the fundamental principles of chromatography. Types of chromatographic techniques. Liquid chromatography: stationary phases, high-performance liquid chromatography, adsorption and partition chromatography, normal and reversed phase chromatography, thin layer chromatography. Multidimensional chromatography. Gas chromatography: mobile and stationary phases, detectors. gas-liquid chromatography. Adsorption chromatography. Other types of chromatography: ion exchange, affinity, supercritical fluid chromatography, micellar chromatography. <i>Practical instruction</i> Obtaining and processing data from the analytical chromatographic process. | | | | |
| Weekly teaching load | | | | Other: |
| Lectures: 2 | Exercises: 2 | Other forms of teaching: 1 | Student research: | |