Level: PhD

Course title: Liquid Chromatography (DSH-613)

Status: elective

ECTS: 15

Requirements: None

Learning objectives

The aim of this course is to provide upgraded and wide knowledge of liquid chromatography, contemporary theories and applications of liquid chromatography in structure-activity correlation studies.

Learning outcomes

Upon completion of the course, students are expected to demonstrate knowledge of theories in liquid chromatography and to explain the retention mechanisms. In addition, students will be familiar with application of liquid chromatography in physico-chemical characterization of various compounds.

Syllabus

Theoretical instruction

Theoretical principles and retention mechanisms in liquid-liquid and liquid-solid chromatography. Thin layer chromatography and column HPLC liquid chromatography. Application of liquid chromatography in lipophilicity determination. The quantitative relationship between structure and retention (QSRR - Quantitative Structure-Retention Relationships). Application of chromatography in the physical and chemical characterization of the newly synthesized, potentially biologically active substances.

Weekly teaching load				Other:
Lectures: 5	Exercises:	Other forms of teaching:	Student research: 5	