



KAPITAŁ LUDZKI
NARODOWA STRATEGIA SPÓJNOŚCI

UNIA EUROPEJSKA
EUROPEJSKI
FUNDUSZ SPOŁECZNY



Workshop: Chromatography of Polar and Ionic Compounds

Dr. Joachim Weiss (Thermo Fisher Scientific GmbH)

Course contents:

The lecture will give a general introduction of ion chromatography covering the definition of this term and the positioning of IC in comparison to other liquid chromatographic techniques. A major part is devoted to the basics of anion and cation exchange chromatography, which highlights the exchange processes and retention-determining parameters as well as a discussion of the various stationary phases. Typical eluents used in anion and cation exchange chromatography for common inorganic and organic anions and cations as well as the concept of electrolytic eluent generation will be reviewed. Anion and cation exchange chromatography applications will include the analysis of common inorganic anions and cations. Ion-exchange separations of carbohydrates, amino acids, oligonucleotides, and proteins will be covered separately, because the respective eluents and stationary phases differ fundamentally from those used for separating low-molecular weight ions.

Another major chapter will review the most important electrochemical and spectrometric detection systems currently employed in ion chromatography. Hyphenated techniques such as IC-ICP/OES, IC-ICP/MS, and IC-ESI/MS are also discussed in detail. Finally, multi-mode stationary phases will be discussed, which are bridging ion-exchange and reversed-phase chromatography. These stationary phases are ideally suited for the separation of organic compounds which have a certain tendency to dissociate into an anion or a cation and thus, exhibit a significantly higher selectivity than traditional ion-exchange or reversed-phase columns.



TERMINY WARSZTATÓW			
Data	Dzień tygodnia	Godzina	Sala
2014-11-03	poniedziałek	9.15 – 12.00	Luwr (Chemia A)
2014-11-04	wtorek	9.15 – 12.00	Luwr (Chemia A)
2014-11-05	środa	9.15 – 12.00	Luwr (Chemia A)
2014-11-06	czwartek	9.15 – 12.00	Luwr (Chemia A)
2014-11-07	piątek	9.15 – 12.00	Luwr (Chemia A)