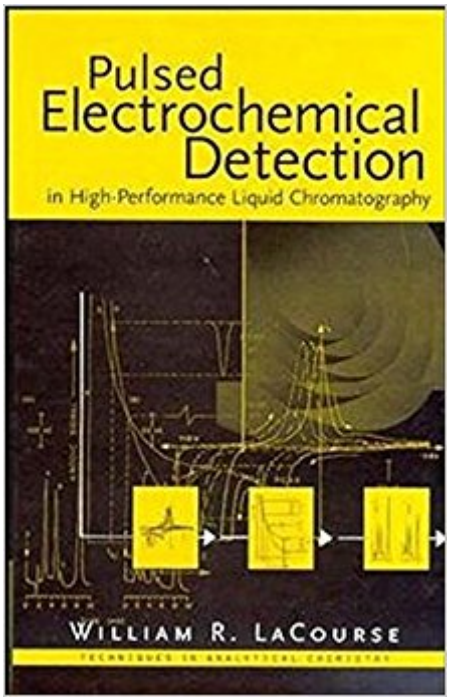
Pulsed Electrochemical Detection In High-Performance Liquid Chromatography (Techniques In Analytical Chemistry)



Synopsis

A reliable, comprehensive, relevant view of HPLC and its applications The development of HPLC-PED represents the successful marriage of two powerful analytical technologies and has resulted in the best technique for sensitive and direct detection of biological compounds with poor optical detection properties. PED has been used extensively for the determination of carbohydrates and other polar aliphatic compounds, and as a result, numerous methods have been developed to enable the analysis of a wide variety of samples. Over the years, many articles, anecdotal information, and misinformation have permeated the scientific community, with the possible consequence of confusion or uncertainty with regard to PED on the part of the analyst. Pulsed Electrochemical Detection in High-Performance Liquid Chromatography presents a reliable, comprehensive, and relevant review of HPLC-PED and its applications. The book is divided into three major parts: background material necessary for a more thorough understanding of the principles and relevance of PED; an in-depth discussion of PED using voltammetry and other electroanalytical techniques and presenting the advantages, applicability, and optimization of all existing PED waveforms; and practical aspects of HPLC-PED, including a summary of the major applications and a look at future developments in the technique. Appendices include a pulsed voltammetry (PV) program specifically written to optimize pulsed amperometric detection (PAD) waveforms and all the known applications, categorized and listed in tabular form. For analytical chemists; biochemists; carbohydrate chemists; biotechnologists; undergraduate, graduate, and postdoctoral students; and lab technicians working in a range of areas including the pharmaceutical, medical, and food and beverage industries, this eminently readable guide is the first reliable book-length treatment of how to use PED coupled with HPLC.

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Customer Reviews

This original text gives a detailed treatment of Pulsed Electrochemical Detectors (PED), which, when coupled with a HPLC system for separation, allows for the detection of bioactive compounds such as carbohydrates, amines, peptides in complex mixtures. The author discusses the advantages and applicability of PED waveforms and their optimization. Insight is provided to assist with instrument setup and troubleshooting.

A reliable, comprehensive, relevant view of HPLC and its applications The development of HPLC-PED represents the successful marriage of two powerful analytical technologies and has resulted in the best technique for sensitive and direct detection of biological compounds with poor optical detection properties. PED has been used extensively for the determination of carbohydrates and other polar aliphatic compounds, and as a result, numerous methods have been developed to enable the analysis of a wide variety of samples. Over the years, many articles, anecdotal information, and misinformation have permeated the scientific community, with the possible consequence of confusion or uncertainty with regard to PED on the part of the analyst. Pulsed Electrochemical Detection in High-Performance Liquid Chromatography presents a reliable, comprehensive, and relevant review of HPLC-PED and its applications. The book is divided into three major parts: background material necessary for a more thorough understanding of the principles and relevance of PED; an in-depth discussion of PED using voltammetry and other electroanalytical techniques and presenting the advantages, applicability, and optimization of all existing PED waveforms; and practical aspects of HPLC-PED, including a summary of the major applications and a look at future developments in the technique. Appendices include a pulsed voltammetry (PV) program specifically written to optimize pulsed amperometric detection (PAD) waveforms and all the known applications, categorized and listed in tabular form. For analytical chemists; biochemists; carbohydrate chemists; biotechnologists; undergraduate, graduate, and postdoctoral students; and lab technicians working in a range of areas including the pharmaceutical, medical, and food and beverage industries, this eminently readable guide is the first reliable book-length treatment of how to use PED coupled with HPLC.

A groundbreaking book for those interested in Using Pulse Electrochemical Detection (PED) with HPLC (High Performance Liquid Chromatography). There is so much useful information. I love the altered famous quotes at the beginning of each chapter.

Pulsed Electrochemical Detection in High-Performance Liquid Chromatography (Techniques in Analytical Chemistry) Forensic Applications of High Performance Liquid Chromatography (Analytical Concepts in Forensic Chemistry) CHROMATOGRAPHY OF ALKALOIDS, PART A, Volume 23A: THIN-LAYER CHROMATOGRAPHY (Journal of Chromatography Library) E-Juice Recipes: Shake and Vape E-Liquid Recipes For Your Electronic Cigarette, E-Hookah G-Pen: Quick and tasty E-liquid recipes that you can enjoy today. ... E-liquid recipes for DIY E-juicers. Book 3) Practical High-Performance Liquid Chromatography High Performance Liquid Chromatography: Fundamental Principles and Practice High Performance Liquid Chromatography in Phytochemical Analysis (Chromatographic Science Series) Chromatographic Fingerprint Analysis of Herbal Medicines: Thin-layer and High Performance Liquid Chromatography of Chinese Drugs High-Speed Countercurrent Chromatography (Chemical Analysis: A Series of Monographs on Analytical Chemistry and Its Applications) Basic Gas Chromatography (Techniques in Analytical Chemistry) The Analytical Chemistry of Cannabis: Quality Assessment, Assurance, and Regulation of Medicinal Marijuana and Cannabinoid Preparations (Emerging Issues in Analytical Chemistry) Beginners Guide to UPLC: Ultra-Performance Liquid Chromatography (Waters Series) Ion Chromatography (Modern Analytical Chemistry) Forensic Applications of Gas Chromatography (Analytical Concepts in Forensic Chemistry) Gas Chromatography: Analytical Chemistry by Open Learning Liquid Soapmaking: Tips, Techniques and Recipes for Creating All Manner of Liquid and Soft Soap Naturally! High Fiber Recipes: 101 Quick and Easy High Fiber Recipes for Breakfast, Snacks, Side Dishes, Dinner and Dessert (high fiber cookbook, high fiber diet, high fiber recipes, high fiber cooking) Gas Chromatography and 2D-Gas Chromatography for Petroleum Industry: The Race for Selectivity Beginners Guide to Liquid Chromatography (Waters Series) Mathematical Modeling and Scale-Up of Liquid Chromatography: With Application Examples