1. Record Nr. UNINA9910830283703321

Autore	Kromidas Stavros
Titolo	More practical problem solving in HPLC [[electronic resource] /] / Stavros Kromidas ; with contributions by Friedrich Mandel, Jurgen Maier-Rosenkranz and Hans-Joachim Kuss
Pubbl/distr/stampa	Weinheim ; ; [Great Britain], : Wiley-VCH, c2005
ISBN	1-281-23926-7 9786611239268 3-527-61230-0 3-527-61231-9
Descrizione fisica	1 online resource (312 p.)
Disciplina	543.84
Soggetti	High performance liquid chromatography Phase partition
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	More Practical Problem Solving in HPLC; Foreword; Contents; Preface; The Structure of the Book; Part 1 (general section); Part 2 (specific questions); In Lieu of an Introduction; Chromatography - and more - Crossword; Across; Down; An HPLC-Quiz; An HPLC Tale; The Tale of Peaky and Chromy; 1 HPLC Tips; 1.1 Stationary Phases and Columns; Tip No. 01 "It improves with age" is a rule that applies to port and sometimes to red wine, but how about your C(18) column?; Tip No. 02 Optimization via column parameters - what works best? Tip No. 03 Can selectivity always be put down to chemical interactions with the stationary phase?Tip No. 04 A matter of perspective . . . Or: Selectivity and peak symmetry of basic compounds using reversed-phase packing materials; Tip No. 05 Separation of isomers; Tip No. 06 When should I use a "polar" C(18) phase?; Tip No. 07 Are polar RP-C (18) phases more suitable for the separation of polar analytes than non-polar phases?; Tip No. 08 What about non-endcapped phases - are they a thing of the past?; Tip No. 09 How can I separate acids using RP C(18)? Tip No. 10 The nitrile phase - some like it polarTip No. 11 The

selectivity of RP columns; 1.2 Buffers, pH Value; Tip No. 12 Does it always have to be potassium phosphate?; Tip No. 13 UV cut-off of buffer solutions; Tip No. 14 Sources of errors when using buffers; Tip No. 15 The drawbacks of using buffers; Tip No. 16 Why is the pH value so important, and what does it do?; Tip No. 17 Why does the pH value shift even though I am using the correct buffer and the buffer capacity is sufficient?; Tip No. 18 Changes to the pH value in the eluent: the extent of the shift and the reasons behind it
Tip No. 19 An unintentional pH shift and its consequencesTip No. 20 RP separations in the alkaline medium; Tip No. 21 Separation of basic and acidic compounds contained in the same sample; 1.3 Optimization, Peak Homogeneity; Tip No. 22 The peaks appear too soon - what can be done?; Tip No. 23 What can I do if the peaks elute late?; Tip No. 24 Quick optimization of an existing gradient method; Tip No. 25 Increasing efficiency - often the fast track to success; Tip No. 26 Additives to the eluent; Tip No. 27 Separating the unknown - where shall I begin?
Tip No. 28 Separation of an unknown sample using a reversed-phase C (18) column - how do I go about it?Tip No. 29 Developing an RP separation - the two-day-method; Part 1: Choice of column and eluent; Tip No. 30 Developing an RP separation - the two-day method; Part 2: Fine-tuning of the separation; Tip No. 31 Quick check on peak homogeneity; Tip No. 32 Quick check on peak homogeneity; Tip No. 33 Tied to a standard operating procedure - how can a bad separation be improved further?; Tip No. 34 More elaborate measures to check peak homogeneity; Tip No. 35 First easily digestible tip
Tip No. 36 Second easily digestible tip

Sommario/riassunto

A unique approach to solving HPLC problems.Everyone who bought ""Problem Solving in HPLC"" by Stavros Kromidas will equally benefit from nearly 100 new practical examples for optimization, trouble-shooting, and instrument performance given in this sequel.The author provides- guidance for selecting and evaluating methods, intstruments and columns,- practical help with everyday trouble-shooting,- advice for optimizing separations, always explaining the reason why.In each case the problem, the solution and the conclusions are presented over a maximum of 4 pages, and in add