Record Nr. UNINA9910144143303321 Autore Rood Dean Titolo The troubleshooting and maintenance guide for gas chromatographers [[electronic resource] /] / Dean Rood Weinheim,: Wiley-VCH Pubbl/distr/stampa [Chichester, : John Wiley, distributor], c2007 **ISBN** 1-281-08790-4 9786611087906 3-527-61130-4 3-527-61131-2 [4th ed.] Edizione Descrizione fisica 1 online resource (347 p.) Altri autori (Persone) RoodDean 543.0896 Disciplina 543.85 Soggetti Gas chromatography Gas chromatography - Instruments - Maintenance and repair Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Previous ed. published: Weinheim; New York: Wiley-VCH, c1999, under title: A practical guide to the care, maintenance, and troubleshooting of capillary gas chromatographic systems. Nota di bibliografia Includes bibliographical references (p. 317) and index. Nota di contenuto The Troubleshootingand Maintenance Guide for Gas Chromatographers; Preface; Contents; Intentions and Introduction; 1 Introduction to Capillary Gas Chromatography; 1.1 What Is Gas Chromatography?; 1.2 What Types of Compounds Are Suitable for GC Analysis?; 1.3 The Basic Parts of a Gas Chromatograph; 1.3.1 Gas Supply and Flow Controllers; 1.3.2 Injector; 1.3.3 Capillary Column and Oven; 1.3.4 Detector; 1.3.5 Data System; 1.4 The Chromatogram; 1.5 The Mechanism of Compound Separation; 1.5.1 A Simple Description of the Chromatographic Process 1.5.2 A Detailed Description of the Chromatographic Process1.6 Factors Affecting Separation; 1.6.1 Stationary Phase; 1.6.2 Compound Structure; 1.6.3 Column Temperature; 2 Basic Definitions and Equations; 2.1 Why Bother?; 2.2 Peak Shapes; 2.2.1 Peak Width (W);

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Sommario/riassunto

This fourth edition of the classic guide for every user of gas chromatographic instrumentation is now updated to include such new topics as fast GC using narrow, short columns, electronic pressure control, and basic aspects of quantitative gas chromatography. The author shares his many years of experience in technical support for gas chromatography users, addressing the most common problems, questions and misconceptions in capillary gas chromatography. He structures and presents the material in a concise and practical manner, suitable even for the most inexperienced user without any detail