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3.8. CLEAN ROOM ENVIRONMENT 3.9.QUALITY MONITORING; 3.10. OBSERVATIONS ON HANDLING OF FUSED-SILICA CAPILLARY TUBING; 3.11.COLUMN TECHNOLOGY - COATING THE STATIONARY PHASE; 3.12. STATIONARY PHASES; 3.13.COATING TECHNIQUES; 3.14.COLUMN TECHNOLOGY - QUALITY EVALUATION; 3.15.COLUMN TECHNOLOGY - SUMMARY; References; Chapter 4- Packed Columns for Gas-Liquid and Gas-Solid Chromatography; 4.1.INTRODUCTION; 4.2.GAS-LIQUID CHROMATOGRAPHY; 4.3.GAS-SOLID CHROMATOGRAPHY; References; Chapter 5 - Gas-Solid Chromatography (PLOT Columns); 5.1.ALUMINA ADSORBENTS; 5.2.MOLECULAR SIEVES; 5.3.POROUS POLYMERS 5.4.CARBON ADSORBENTS 5.5.OTHER ADSORBENTS; References; Chapter 6- Classification and Selection of Open-Tubular Columns for Analytical Separations; 6.1.INTRODUCTION; 6.2.STATIONARY-PHASE CLASSIFICATION; 6.3.POROUS-LAYER OPEN-TUBULAR COLUMNS; 6.4. TEMPERATURE-PROGRAMMED SEPARATIONS; 6.5.STATIONARY-PHASE SELECTIVITY TUNING; References; Chapter 7 - Multidimensional and Comprehensive Gas Chromatography; 7.1.INTRODUCTION; 7.2.A GRAPHICAL REPRESENTATION OF 2D GC SEPARATIONS; 7.3 .BACK FLUSHING 2D GC; 7.4.HEART CUTTING 2D GC; 7.5.COMPREHENSIVE 2D GC; 7.6.CONCLUSIONS; References Chapter 8 - Sample Introduction Methods 8.1.INTRODUCTION; 8.2. CHOOSING A SAMPLE INTRODUCTION SYSTEM; 8.3.SUPPORTING DEVICES; 8.4.THE COLD ON-COLUMN INJECTOR; 8.5.THE FLASH VAPORIZATION INJECTOR; 8.6.THE SPLIT/SPLITLESS INJECTOR; 8.7.THE PROGRAMMABLE TEMPERATURE VAPORIZING (PTV) INJECTOR; 8.8.THE GAS SAMPLING VALVE; 8.9.THE LIQUID SAMPLING VALVE; References; Chapter 9 - Head space-Gas Chromatography; 9.1.INTRODUCTION AND HISTORY; 9.2.FUNDAMENTALS OF HEAD SPACE EXTRACTION; 9.3. INSTRUMENTATION AND PRACTICE; 9.4.METHOD DEVELOPMENT CONSIDERATIONS; 9.5.CONCLUSIONS; References Chapter 10- Thermal Desorption for Gas Chromatography

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#### Sommario/riassunto

This title provides comprehensive coverage of modern gas chromatography including theory, instrumentation, columns, and applications addressing the needs of advanced students and professional scientists in industry and government laboratories. Chapters are written by recognized experts on each topic. Each chapter offers a complete picture with respect to its topic so researchers can move straight to the information they need without reading through a lot of background information. Individual chapters written by recognized experts The big picture of gas chromatography

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