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Book review

Static Headspace – Gas Chromatography: Theory and Practice, edited by B. Kolb, L.S. Ettre. Publisher: Wiley-VCH, New York, Chichester, Weinheim, 1997. ISBN 0-471-19838-0; xx+298 pp; £65.00

Undoubtedly headspace gas chromatography has been accepted as a very promising analytical tool for analysing volatile components in liquids and solids of very different origin.

One of the authors, Dr. Bruno Kolb, realized one of the very first successful instruments for this method at the Perkin-Elmer Bodenseewerk, whilst Dr. Leslie S. Ettre, former senior development scientist at Perkin-Elmer in Connecticut, and now lecturer at Yale University, is an expert on GC instrumentation and nomenclature. Together they form a very good team to evaluate both the theoretical and the practical aspects of this topic.

The book contains nine chapters (General introduction; Theoretical background of HS-GC and its applications; The technique of HS-GC; Sample handling in HS-GC; Headspace methods for quantitative analysis; Method development of HS-GC;

Nonequilibrium HS analysis; Quantitative analysis by HS-GC; Special measurements) together with lists of acronyms and symbols at the beginning of the book, and compound- and subject indexes at the end. Each chapter is followed by a list of thoroughly selected and recent references. Many real designs and chromatograms support the theoretical background as well as the instrumentation and practical applications. One small comment is that although the book discusses the static headspace technique, a subchapter should have been included dealing with dynamic versions of headspace technique also to illustrate the principal differences etc. – e.g. in the chapter on Nonequilibrium HS analysis.

In conclusion: this text is a thorough treatment of this analytical tool of great practical value. I recommend this book for students and teachers as well as for practical users of gas chromatographic techniques in the very broad spectrum of laboratories, such as those in the chemical industry, medical care, toxicology, food and environmental control.

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