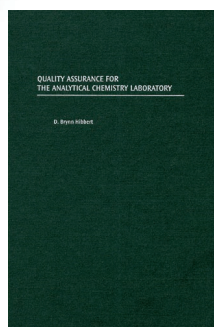




### Quality Assurance for the Analytical Chemistry Laboratory



By D. Brynn Hibbert. Oxford University Press, New York 2007. 320 pp., hardcover  
£ 58.00.—ISBN 978-0-19-516212-7

Quality assurance (QA), as a special aspect of research and teaching, has not always had an easy time of it in the past in the scientific world—even in analytical chemistry—and has often either been acknowledged only as a fringe subject or, in the worst cases, completely ignored. However, in analytical chemistry, there has been a noticeable change in the last few years. Through the influence of national and international metrological institutions and norm-setting committees, the stricter requirements for the quality and safety of industrial products, and conditions imposed by regulatory bodies, especially in the pharmaceutical industry, the subject of quality assurance has also become incorporated into university courses. Evidence of this growth in importance can be seen in the many new books on QA that have appeared in the last few years.

In this book, David Brynn Hibbert, who is Professor of Analytical Chemistry at the University of New South Wales, Sydney, and is also well known as a co-author of *Data Analysis for Chemistry* (Oxford University Press, 2005), gives, in ten chapters, an intro-

duction to the different aspects of quality assurance, and describes its basic tools.

An abstract term such as “quality” must first be precisely defined, especially for scientists. Therefore, the author begins in Chapter 1 by considering what is meant by quality, and he attempts to collect and summarize the many definitions of this difficult term for the reader. Closely related concepts, such as quality management systems, quality control, the recently coined term “qualimetrics”, and lastly quality assurance, are discussed.

Chapter 2 deals with the basic principles of statistical data evaluation, without claiming to give an in-depth treatment of the subject. Readers who seek a more advanced and deeper mathematical introduction to statistical methods are referred to appropriate textbooks; here, of course, the author does not forget to mention his own book on this subject.

The third chapter is devoted to the systematic optimization of analytical methods (as opposed to “trial and error” methods, which are usually very time-wasting), with an emphasis on the quality of the data that are produced. Here, although Hibbert occasionally cites the classical situation of optimizing the choice of mobile phase in HPLC as an example, most of the discussion is very abstract from the reader’s viewpoint, and it would have been desirable to relate it to other types of situations and to examples from laboratory practice.

The following chapters are dedicated particularly to the tools used in quality control. The book emphasizes the use of graphical presentations (such as various flow diagrams) and discusses different techniques for analyzing and presenting data (for example, different types of data plots). The author also devotes separate chapters to interlaboratory comparisons, measurement uncertainty, traceability, and method validation. These can be read and understood independently without having previously studied the rest of the book. Although the chapters offer the reader a sound and precise knowledge of their topics, one often wishes while reading the book that many more examples from practical situations had been included.

The book ends with a chapter on accreditation, which gives the reader a short but information-packed introduction to this subject, about which one could easily fill another book.

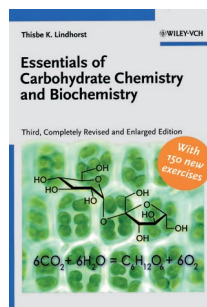
The book can be recommended to everyone who wants a first overview of the subject of quality assurance in analytical chemistry, and especially to readers who are beginning a career in analytical sciences. Although the author has written the book in a style that is relaxed and attractive to the reader, it is more suitable for those readers who will appreciate a rather abstract approach to a new subject. Students should therefore carefully compare the many books on QA that are available, and consider whether there is one or another that might be more appealing in its presentation.

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### Essentials of Carbohydrate Chemistry and Biochemistry



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The chemistry of carbohydrates and its modern interdisciplinary branch of glycobiology enjoy the reputation of demanding a great deal of intellectual activation energy from their novices. Accordingly, one must place a high value on any author’s attempt to offer a scientifically sound, didactically clear, but also stimulating approach to this highly topical field of research in the form of a textbook. *Essentials of Carbohydrate Chemistry and Biochemistry*, by