even up to 2001, and the text can also be accessed through a 15-page subject index. The *Handbook of Combinatorial Chemistry* is highly recommended to all who are interested in this subject.

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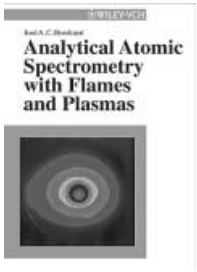
Analytical Atomic Spectrometry with Flames and Plasmas. Edited by *José A. C. Broekaert*. Wiley-VCH, Weinheim 2002. 364 pp., hardcover € 89.00.—ISBN 3-527-30146-1

Atomic spectroscopy and spectrometry are some of the oldest methods for structural and quantitative analysis, and their origins can be traced back to the fundamental work of Kirchhoff, Bunsen, and Fraunhofer. Atomic spectrometry in particular has undergone rapid developments in the last 10–15 years as a result of the introduction of new methods of excitation and detection, resulting not only in greatly improved detection sensitivity but in a widespread transition from monoelement to multielement analysis. Consequently, no analytical laboratory that is engaged in elemental analysis can nowadays afford to be without methods such as ICP-OES and ICP-MS.



J. A. C. Broekaert has performed a valuable service in writing this comprehensive monograph on the developments that have been achieved in these techniques and the prospects for the future. The structure of the book follows the classical pattern for works on analytical methods, with a clear distinction between the discussion of excitation sources (arc discharges, sparks, flames, graphite cuvettes, plasmas, glow discharges, laser microplasmas) and that of the methods for detecting the resulting excitation and/or ionization (by absorption, emission, fluorescence, or mass spectrometry). Against that systematic background the book then goes on to describe how the different combination possibilities are achieved in practice.

After considering the various methods for preparing and introducing the sample (pneumatic or ultrasonic atomization, hydride techniques, thermal or electrothermal vaporization, slurry techniques, ablation, sputtering, etc.), the author discusses the many different methods for determining elements, with their theoretical background, and describes their practical implementation, their range of applications, and the potential for further development. The overall result is a comprehensive monograph with a thoroughly systematic arrangement of the contents, supported by over 600 literature references, providing a wealth of information for practicing analysts in scientific fields.

The last two chapters are concerned with sample preparation and with comparisons between atomic spectroscopy and other methods. These are less convincing than the rest of the work. They give the impression of additions that have not been completely thought out, as they do not take into account the principles of the "analytical process", and fail to address differences in the nature of analytical problems and sample materials. These should be omitted from future editions, since a thorough discussion of how the methods described here are to be incorporated into overall analytical strategies falls outside the aims and scope of this monograph.

Sometimes points of detail are not explained as clearly as one would wish, and consequently there are many instances where the reader may need to refer to the original publications. For example, the rather brief treatment of Laser enhanced ionization (LEI) spectroscopy does not include a discussion of the differences between the use of continuous-wave and pulsed lasers. However, the book's main defect is the outdated layout. The bland and monotonous appearance of the text, without the use of emphases or visual structure, is uninteresting and detracts considerably from the experience of reading it. Also the figures deserved better preparation to improve their appearance.

However, these criticisms do not diminish the good scientific content of this excellent and comprehensive monograph, but only detract from the experience of working with it.

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Karl Marx und Friedrich Engels. Naturwissenschaftliche Excerpte und Notizen. Band 31, Mitte 1877 bis Anfang 1883. Issued by the International Marx–Engels Foundation, edited by *Anneliese Griese, Friederun Fessen, Peter Jäckel* and *Gerd Pawelzig*. Oldenbourg & Akademie Verlag, Berlin 1999. 1055 pp., hardcover € 158.00.—ISBN 3-05-003399-1

It is beyond question that Karl Marx (1818–1883) ranks as one of the greatest prolific writers (and prolific readers) of all time, as he left behind no less than 21600 pages of printed text, and notes on nearly every field of science in the margins of 35000 pages of books, not to mention the many thousands of letters that he wrote. There have been several attempts to systematically classify, evaluate, and annotate this enormous (and still not yet fully revealed) lifetime's work. There was an initial attempt in the 1920s, then in the 1970s work began in the GDR on compiling a "Marx-Engels-Gesamtausgabe" (MEGA), of which 40 volumes had already appeared by 1989, the famous "Blue Volumes", which also found their way into the bookshelves of many West German students. That project might have ended completely with the fall of European socialism as an established state entity, but in 1990 the Amsterdam Institute for Social History and the Karl-Marx-Haus of the Friedrich Ebert Foundation together set up the International Marx–Engels Foundation (IMEF), which then took on the responsibility for a third attempt at producing a MEGA version, with the detailed work being undertaken by a special working party of the Berlin–Brandenburg Academy of Sciences. Of the planned 114 volumes (expected completion date

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