progressing subject area a lot has changed since October 1988.

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Sourcebook of Methods of Analysis for Biomass and Biomass Conversion Processes. Edited by T.A. Milne, A.H. Brennan and B.H. Glenn, Elsevier Applied Science Publishers Ltd, London, 1990. viii + 341 pp., price $104.00, £52.00. ISBN 1-85166-527-7.

The idea of bringing together titles and abstracts of methods directly relevant to all aspects of biomass conversion, stemmed from the oil embargo of the 1970s. This resulted in the improvement and development of old and new methods for studying the conversion of biomass — trees, plants and organic wastes — to useful fuels and chemicals. It then became apparent that there was a real need for the standardisation of methods. The 'Sourcebook of Methods of Analysis for Biomass and Biomass Conversion' lists the references (original and modified) where one can find, in detail, the analytical procedure of interest. A central core of 30 scientists and at least a further 250 scientists world-wide have combined their knowledge and resources to bring this book to fruition.

The main section of the book is entitled 'Standards and Analytical Methods' which lists, under various sub-headings, the citations of relevant and related methods of biomass conversion. These sub-headings are well defined, which enables the reader to quickly find references to the particular subject area of interest. Methods for the determination of the density of, for example, wood, petroleum and semi-solid bituminous materials are among those procedures described.

It is worth noting that although this book is a reference book, it also contains useful comments concerning the content of the citations quoted. That is, the authors have assessed the procedures in terms of convenience, reproducibility, sensitivity, and principal uses as well as providing a brief summary of other applications of the methods.

The sourcebook ends with seven appendices which could be considered as separate chapters in their own right. These appendices include, for example, a list of standard organisations, a detailed report/review of the methods available for testing combustion equipment, energy efficiency and one appendix entitled 'other sources of information'. The final appendix is a glossary which is not only useful, but interesting to read, because it cuts across the whole spectrum of biomass and biomass conversion technology.

When approaching the analysis of biomass conversion for the first time, this book provides a foundation on which to begin the search for appropriate experimental matter. By consulting it, one would also gain an appreciation of what type of analysis would be standard and most suitable for a particular requirement. For those already familiar, this is an ideal way to keep abreast of current developments and improvements of the methods in use. Therefore in conclusion, this book would be an invaluable addition to any reference library.

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