

Food Chemistry

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Book review

## *Food Chemistry. A Laboratory Manual*; Dennis D. Miller; Wiley, 1998, ix + 193 pages, ISBN 0-471-17543-9, £25.95

This highly valuable little book is designed for students, in the laboratory, who already have a background in general chemistry. Dennis Miller (who is a member of our Editorial Board) asserts that many students have successfully performed the experiments described and it seems to me that they are fortunate to have such a wellprepared set of exercises. Every detail is spelled out. For example, "Turn on your spectrophotometer and allow it to warm up. Turn the wavelength selector to 430 nm. Use water to set 0 absorbance." It saves valuable time when such minutiae are arranged for how often have we been asked, "What do we do for the blank?"

There is an emphasis on exercises of basic food importance, e.g. acids, bases, buffers, lipid peroxidation, Maillard reactions etc. and the appendices contain more about acid-base equilibria, spectrophotometry, chromatography and electrophoresis. But it is the carefully selected practical exercises of the main part of the book that makes it so important for the development of basic food chemical practice. Each exercise in fact ends with study questions, references, and suggested further reading, which is an admirable way to encourage students to pause and reflect about what they have learned from the exercise.

The book also contains many of the basic chemical structures encountered by food scientists and these appear to be free of errors. The final appendix is a glossary of major terms.

As an academic who has spent most of his scientific career teaching at a university east of the Atlantic, it is reassuring to discover that our western cousins highlight the very same major areas of study as ourselves. However, the  $R_F$  values for colour separations are listed against FD and C numbers, so E-numbers are not mentioned. Such minor omissions should not deter European students from getting hold of this excellent book.

I once again congratulate Dennis Miller for producing this laboratory manual which skilfully combines practical essentials with supportive chemical explanation. It should form an important part of any university course in "Food Chemistry".

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