

difficult to answer. The author (compiler?) points out in his preface that not *all* the information is available through abstracting and indexing services. For example, his occasional two or three lines of comment will often enable a decision on whether a particular paper is relevant or not to be taken, where a title alone might not suffice. Since, however, most of the journals used are readily available, this is likely to save only minutes at most.

Many potential readers are likely to have more limited horizons than the 2000 or so enzymes index here, although it may occasionally be useful for someone about to use, say, citrate or imidazole buffer for the first time to check that it is not already

known to inhibit the enzyme of interest.

It will not take much sensitivity to realise that I am working towards no as an answer to the third question. I do not think that even libraries will be able to afford this book. Surely 16 pence per page is extravagant. Is there really no technology available for reproducing (and distributing) such printed matter more cheaply? A book like this gains almost nothing from the luxury of typesetting and photographic reproduction of the original typescript would (presumably) prevent words like 'nurospora' and 'chicken' appearing.

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Flavour '81

3rd Weurman Symposium. Proceedings of the International Conference, Munich, April 28–30, 1981

Edited by P. Schreier

Walter de Gruyter; Berlin, New York, 1981

xiv + 780 pages. DM 198.00 (approx. £50)

The consumer recognises essentially only three qualities in his food – appearance, texture and flavour. The enormous importance of the flavour of foods in our diet is self-evident – one may possibly overeat an especially attractive food, undereat when it is unattractive and flavour is often the main factor controlling which particular brand of food is purchased. Hence the great interest by food scientists and food manufacturers in flavour.

The situation can be put another way – some 2000 substances, both extracts of foodstuffs and synthetic materials are currently used to flavour foods.

This book is devoted to methodology as exemplified by the section headings – Sensory Methodology, Application of Sensory Methods, Instrumental Analysis, Formation of Flavour, and Molecular Aspects.

Since more than 50 papers were presented they cannot be reviewed individually but some aspects will supply an insight into the type of research in progress.

Apart from the more obvious investigations of the ingredients of desirable natural flavours and the more difficult problem of ascertaining the relative contributions made by the various compounds present, there is the possibility of mimicking 'nature' (if processes such as baking may be included in that description) as illustrated by the chapter entitled 'Formation of flavour components from proline and hydroxyproline with glucose and maltose'.

Another approach is exemplified by 'Possibilities of biotechnological production of aroma substances by plant tissue cultures' and 'Microbial formation of flavours'.

The other side of the picture is the development

of unwanted flavours and the paper entitled 'Sunlight flavours in Champagne wines' starts from the observation that wine undergoes flavour deterioration when exposed to fluorescent light in retail outlets.

There is indeed an enormous amount of fundamental and applied chemical research in pro-

gress in this area and lest any academic biochemist regards this as trivial in comparison with the unravelling of metabolic pathways, let him try consuming burned milk, unsalted potatoes or (for those who are well-travelled) the Durian fruit.

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