

or value for a person who has had an education in chemical engineering since he or she would consider the presentation of almost all the topics to be on an elementary level. On the other hand, the book was not intended for use by chemical engineers. It was written to help chemists become aware of what goes on in industry or perhaps it would be better to say it was written to teach chemists some chemical engineering. From this viewpoint, the book does an admirable job. It is clearly written, and the chemist or technologist would have no trouble in following the mathematics presented or the logic. It could serve as a text for a single course for chemists or technologists at the end of their education to familiarize them in general with chemical engineering and applications in industry. Some of the chapters have problems at the end for reader solution which are on a level of difficulty appropriate for this book.

On an overall basis, the book cannot be recommended to anyone with a chemical engineering background for anything except some general information and a chapter of details on the process for producing urea. However, it is well adapted for the use of its intended audience (chemists) and could be very helpful to them in showing what chemical engineering is and in helping them make the transition from the academic world to industry. □

FERMENTATION AND ENZYME TECHNOLOGY

*By D. I. C. Wang, C. L. Cooney, A. L. Demain, P. Dunnill, A. E. Humphrey, and M. D. Lilly
John Wiley & Sons, New York, 1979, 374 pages, \$25*

**Reviewed by Alden Emery
Purdue University**

A fermentation technology summer course of one-week duration has been offered at M.I.T. for 5 years. One of the recent teams involved collaborated in the writing of this book, presumably transcribing the material of their lectures. The stated function of the book is to aid persons taking the summer course, both at the time of the course and later. A slant toward commercial interests is implied in the preface.

The chapters can be divided into three parts: microbiology, engineering, and enzymes. The microbiology part is almost all concerned with subjects of primary concern to the industry now.

ChE conferences

CHEMISTRY AND PROPERTIES OF POLYMERIC MATERIALS

October 2-4, 1981. Montreal, Canada

Short course on the state of the art on the chemistry and properties of polymeric materials. Lecturers include M. N. Bassim, R. B. Bird, D. De Kee, J. E. Mark, J. R. A. Pearson, M. V. Sefton and J. L. White. For further information: Dr. D. De Kee, ChE Dept., Univ. of Windsor; Windsor, Ontario, Canada N9B 3P4.

POLYMER SCIENCE AND TECHNOLOGY SYMPOSIUM

September 28-29, 1981. Houghton, MI

Details may be obtained by contacting W. M. Lee, Symposium Chairman, ChE Department, Michigan Technological University, Houghton, MI 49931.

The engineering part is about half of immediate concern to industry; the other half ought to be, academics would argue, because it points the way to the future. The enzyme part is all pertinent, but of intermediate concern.

The writing in the beginning of the book is of high caliber, carefully organized, interestingly presented and with historical notes which heighten interest. The end of the book is equally good, expansive and carefully presented, if a little dry. The middle chapters unfortunately suffer from the ills of haste to such an extent that one wonders if there was any proofreading by the authors or editing by the publisher.

Anyone in industry thrust into the field could benefit by the organized explication of the major interests and approaches given in the book, if the enthusiastic review by Richard Myerly in S.I.M. News (p. 45, July 1979) is any indication. As an introduction and overview, this may be true. In terms of comprehension, however, engineers with no previous contact with biology will have trouble understanding the terms in the microbiology sections, since a background in biology is assumed; the metabolic regulation in Chapter 1, for instance, would not be intelligible without acquaintance with genetics. Persons without exposure to engineering may have problems with the philosophy, approach, and methods of the engineering sections, as a comprehension of mathematics and modelling equal to an upperclass engineer is implied in the presentations.

Academic chemical engineers will naturally

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