solved examples will stimulate the reader to work the answers by himself and will help him to formulate and solve his own specific problem. Attention has also been given to viscoelastic fluids.

This book is recommended as a must to all chemical engineering departments of the polymer industry and to all who want to acquaint themselves with the problems of designing polymerization and polycondensation units.

Norbert Platzer

Monsanto Co.
Springfield, Massachusetts 01101

Rubber: Natural and Synthetic. H. J. STERN. Maclaren and Sons Ltd., London. Palmerton Publishing Co., Inc., New York. 519 pp. $16.00.

Before writing this, I read three reviews, published elsewhere, of this book. Two of the three seemed to be pieces of hackwork put together by journalists who had not actually read the book but relied on the author's preface and the publisher's jacket to provide them with a few paragraphs, neither informative nor critical. The third and longer review was written by a man who, clearly, had read the book and was versed in its subject matter, but who seemed to be chiefly concerned with displaying his own superior knowledge. It was devoted mostly to persnickety criticisms of the book. How often one encounters reviews of these types: either superficial and perfunctory hackwork, turned out with minimal effort and unfair to both author and reader; or supercritical treatment, designed to advertise the reviewer's superior knowledge rather than to assess the book fairly for its prospective readers and to offer a judgment of the success of its author's enterprise!

I use the word "enterprise" advisedly. Except for encyclopedic publications, every scientific and technical book demands from its author enterprise in selecting, ordering, and explaining that information which will best serve his purpose. I ask then, what success has the author of the present book had in his particular enterprise? Remarkable success, I say. Dr. Stern's book is certainly open to criticism on points of detail here and there (What scientific or technical book is not?), but, considered as a whole, it is remarkably successful; indeed, it is a *tour de force.*

The 1937 book, *The Chemistry and Technology of Rubber,* edited by Davis and Blake, was, except for a short (and not very good) chapter on synthetic rubber, devoted to natural rubber. It ran to about 1000 pages. The 1954 book, *Synthetic Rubber,* ran to more than 1000 pages. Dr. Stern's book, *Rubber: Natural and Synthetic,* runs to only about 500 pages, yet within this compass it gives a good, up-to-date account of the production and use of both natural and synthetic rubber.

The book is essentially one for the technologist (who, in the case of rubber, is almost inevitably a chemist). It includes a brief treatment of the scientific aspects of rubber, thus providing some understanding of the theory of rubber directly relevant to its technology. The book is not one designed primarily for the research worker. Nevertheless the latter will find a perusal of it beneficial, for its story of rubber technology is up-to-date and may well stimulate new research approaches.

In preparing this new second edition of a book first published in 1954, the author, in view of rapid progress in the field, has drastically revised it. In no other book is there such an up-to-date and conveniently available account of the whole range of synthetic rubbers now produced. Possessors of the volume, *Introduction to Rubber Technology,*

edited by Maurice Morton, would find here material calculated to supplement the treatment of the subject in that earlier (1959) book.

The chapters on Compounding Ingredients, Manufacturing Processes, and Latex Technology are also very good. The chapter on Compounding Ingredients has an advantage over most or all previous textbook treatments of the subject: it includes descriptions of the mode of preparation of the ingredients. The otherwise good account of vulcanization accelerators might perhaps have been improved by the inclusion of a brief description of the manufacturing processes of the chief classes of accelerators. The section on emulsion polymerization might have been improved by the inclusion of a fuller treatment of the theory of the action of emulsifiers and modifiers. But by and large the book is admirable and can be warmly recommended.

G. S. Whitby

Institute of Polymer Science
The University of Akron
Akron, Ohio 44304