

Plastics Rheology, R. S. Lenk, Interscience, New York, 1968. 214 pp.

According to the author's introduction this book has been written for undergraduates—presumably chemical engineering seniors—wanting to specialize in plastics technology. An exact equivalent of this course may be difficult to find outside the U.K., yet a book of the scope of the present one should be useful in introductory courses on that general level and in extension courses for graduate chemists and chemical engineers. Since the author has taught this course many times, its outline can be taken as a pedagogically effective sequence of topics for instruction in plastics rheology.

While reading through this book I made a long list of inaccuracies, outdated and/or unbalanced presentations, and important omissions. A simple summary of the situation is that very few individuals know enough molecular physics, especially polymer physics, fluid mechanics, and mechanical engineering, to be able to present a well-balanced and accurate picture in a short book. Clearly, the author is not one of these few and should never have undertaken such an ambitious task.

A great merit of the book's outline is that it demonstrates the wide range of phenomena which a polymer technologist must be familiar with. Owing to the great importance of polymers, there is a real need for courses and hence for textbooks for seniors in chemistry and chemical engineering that will create awareness and some basic understanding of polymer rheology. While the present book does not yet meet this need, its shortcomings should stimulate others to the team effort that would be required to do it right.

A. Bondi

Shell Development Company
Division of Shell Oil Company
1400-53 Street
Emeryville, California 94608