Enzymes in Industry is an excellent introduction into the field of applied enzymology for the reader who is not familiar with the subject. Chapters 1 to 4 offer a broad overview of the basics of enzymes and enzyme activity, enzyme assays, production of enzymes, screening methods, and protein engineering, without going into great detail on any one of these topics. The reader looking for detailed ready-to-use protocols will be disappointed. Those willing to consult the original literature can depend, however, on a very thorough list of original citations. The reference list of the book contains more than two thousand entries!

Chapter 5 is the heart of the book and introduces the reader to a wide range of topics in the field of food and nonfood enzyme applications. Each contribution is a story in itself, easy to understand and well-illustrated with clear and easy-to-read pictures, graphs, and tables. The extensive coverage of this field of applied enzymology will be of equal interest to life scientists, engineers, and those interested in marketing aspects. Chapter 5 does not cover all possible themes. Missing are contributions on the use of enzymes in agriculture, for example, in the preparation of silage, in waste treatment, as probiotics, or as digestive aids.

The organic chemist interested in learning how enzymes can be used in organic synthesis will be pleased with the concise introduction to this topic in Chapter 6, which demonstrates the general principles by describing several concrete examples taken from industrial practice.

The second part of Chapter 6 deals with the use of enzymes for therapeutic, diagnostic, and analytical purposes. Again the contributions cover a wide range of topics but in no great depth. The remainder of Chapter 6 deals with the use of enzymes in genetic engineering. The authors offer quite detailed information on the properties and use of these enzymes. This portion of the book will probably be the least interesting to the reader. The topics covered are already well-known to those familiar with genetic engineering, and too detailed for the chemist or marketing expert looking for a general introduction.

The final chapter gives a short but informative overview of regulatory and safety aspects of enzymes, sufficient for making the reader familiar with the basic terminology and philosophy of enzyme regulation in the USA and Europe.

Enzymes in Industry offers a broad overview of the use of enzymes in industrial applications. It is up-to-date and remarkably easy to read, despite the fact that almost 50 different authors contributed. The book has been written to introduce the reader to the many applications of enzymes in industry. It was not conceived as a manual of ready-to-use recipes. But the reader will most likely find the original literature sites he or she might need for more detailed work, amongst the extensive and accurate list of references, with more than 2000 entries. The scientist involved in enzyme work should have this book in his or her library. But it will also be of great value to the marketing expert interested in the present use of enzymes and their future in food and nonfood applications.

Bryan Cooper
BASF Aktiengesellschaft
Ludwigshafen (Germany)
What is the primary focus of the book mentioned in the text? The book primarily focuses on homoatomic sulfur developments and presents work on elemental sulfur in various states, including the solid, liquid, and gas phases. It also discusses various aspects of sulfur compounds, such as reactivity, solid-state structures, and the chemistry of sulfur-rich main-group and transition-metal complexes.

What is the significance of the book being a comprehensive survey of the vast chemistry of sulfur? It serves as an essential reference source for chemists and students interested in sulfur chemistry, providing a fresh perspective on the well-established chemistry of sulfur-rich main-group elements.

Who is the target audience for this book? The target audience includes students in the first terms of their studies as well as the interested chemist who wishes to explore this field thoroughly. Even nonspecialist readers should benefit from reading this book.

What are some of the key topics covered in the book? The book covers topics such as the synthesis and reactivity of metastable polysulfanes, coordination chemistry of sulfur-rich compounds, and solid-state structures of sulfur-rich oxides. It also includes contributions from various authors, such as R. Steudel, W.E. Kleinjan, and A.J.H. Janssen.