Book review

Ascorbic Acid: Chemistry, Metabolism, and Uses: (Advances in Chemistry Series 200), edited by PAUL A. SEIB AND BERT M. TOLBERT, American Chemical Society, Washington, D.C., 1982, xi + 585 pages + Subject Index, \$79.95 (U.S. and Canada), \$95.95 (elsewhere).

This book contains 24 contributions to a symposium held on the occasion of the 180th National Meeting in Las Vegas, Nevada, 1980.

The individual chapters deal with the most important aspects of this essential water-soluble vitamin, giving a well balanced overview of some 60 years of research in this field. Each chapter includes a list of references as a guide to the special fields, which is important for non-specialist readers. It is a pity that this volume was published such a long time after the symposium.

All of the chapters seem to be interesting, but the reviewer found the following contributions particularly informative: Synthesis of L-Ascorbic Acid (T. C. Crawford), Chemistry of Ascorbic Acid Radicals (B. H. J. Bielsky), Dehydroascorbic Acid (B. M. Tolbert and J. B. Ward), Chelates of Ascorbic Acid: Formation and Catalytic Properties (A. E. Martell), Ascorbate Oxidase: Molecular Properties and Catalytic Activity (P. M. H. Kroneck *et al.*); furthermore, as regards the physiological aspects: The Kinetics of Ascorbic Acid in Humans (A. Kallner, D. Hartmann, and D. Hornig), and, finally: Effects of Ascorbic Acids on the Nitrosation of Dialkylamines (Y. K. Kim, R. S. Tannenbaum, and J. S. Wishnok).

The formula for the p-bromophenylhydrazone of dehydroascorbic acid, given in Chapter 2 (Crystallography of the Ascorbates), does not correspond to the convention for depicting stereoformulas for L-ascorbic acid and its derivatives that is used in other chapters. Apart from this small imperfection, this is a valuable book. It is written for specialists, but is nevertheless easy to read, and the problems discussed proved to be easy to understand. It is therefore recommended, not only for chemists and biochemists, but also for their colleagues in other natural sciences, including medicine.

Pharmaceutical Research Department, F. Hoffmann-La Roche & Co., Ltd., Basle, Switzerland JOSEPH KISS