

Book Reviews

A Semiempirical Life. By Michael J. S. Dewar. American Chemical Society, Washington, DC. 1992. xxiii + 215 pp. 15 × 23 cm. ISBN 0-8412-1775-0. \$24.95.

This is the 11th volume of the 22-volume *Profiles, Pathways, and Dreams* series of autobiographies of eminent chemists to be published by the American Chemical Society under the editorship of Jeffrey I. Seeman. This volume is by Michael Dewar, a complex and brilliant chemist. Clearly, he possesses an extraordinary memory and integrates his acquired and intuitive knowledge with remarkable results. For more than 50 years he has made enormous contributions to a wide range of areas of chemistry. In the past few years alone he has published research in such diverse areas as boron chemistry, biosynthesis of fatty acids, superconductivity of oxide ceramics, phenyl radicals, and most notably in new theoretical procedures, i.e. AM1. Dewar is deeply committed to establishing the validity and value of his concepts. He loves science and states, "Organic chemistry is the best preparation for anything." Without question, he does not shy from debate. He has been described as "at once abrasively brash and charmingly boyish."

The clear thinking and individuality of a brilliant scientist such as Dewar are evident from this candid description of his rich personal and professional life. All scientists can gain a great deal from this entertaining and inspiring autobiography of a truly remarkable scientist.

Staff

Polyamines in the Gastrointestinal Tract; Falk Symposium 62. Edited by R. H. Dowling. U. R. Folsch and C. Loser. Kluwer Academic Publishers, Dordrecht. 1992. xviii + 538 pp. 16 × 24 cm. ISBN 0-7923-8926-X. \$165.00.

This book contains the proceedings of the 62nd Falk Symposium held in Titisee, Germany, on October 6–8, 1991, the first meeting ever held dealing exclusively with the role of polyamines in the gastrointestinal tract. The proceedings are broken into eight sections with a total of 49 papers (plus 27 posters) by 52 principal authors of international diversity. The first section is devoted to the physiology and function of polyamines with emphasis on enzymology, regulation, and expression of polyamines on a subcellular level. The second section, comprised of four papers on the biochemistry of polyamines, leads into the third section which deals with aspects of molecular biology. Of particular interest is a paper on the human ornithine decarboxylase (ODC) gene and its insertion into transgenic mice. The six papers that cover clinical studies are placed in section four, where the fascinating and sometimes controversial concept of using polyamines as a disease-state diagnostic tool for ulcerative colitis patients in which colorectal cancer is a sequela is examined. Section five examines the role of polyamines in normal and adaptive growth. Furthering this line of reasoning, the potential associative role of polyamines with gastrointestinal tract

tumors is covered in the seven papers of section six. Polyamine transport, metabolism, and absorption from gut are addressed in section seven. Most of the papers in the first seven sections contain detailed methodologies and up-to-date references. Finally, 27 abstracts from the poster sessions are presented in section eight, and while they are of course limited in methodology, they do give a flavor of the most recent advances in the field. The organizers have indeed achieved their aim of providing a well-written book of equal interest to both basic and clinical scientists.

This volume is well-produced with a uniform type face that is exceedingly easy on the eye. The index is adequate for this format. The volume is pertinent and timely, given that it appeared less than a year after the symposium was held. Though not gentle on the pocketbook, this volume is essential reading for those with interest in the field and required reading for those actively involved.

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Following the Trail of Light. A Scientific Odyssey. By Melvin Calvin. American Chemical Society, Washington, DC. 1992. xxiii + 175 pp. 15 × 23 cm. ISBN 0-8412-1828-5. \$24.95.

This is an autobiography of Nobel laureate Melvin Calvin. It is the 12th volume in the 22-volume *Profiles, Pathways, and Dreams* series edited by Jeffrey I. Seeman and published by the American Chemical Society. The major part of Professor Calvin's scientific career has been spent at the University of California, Berkeley. One of his numerous maxims, "Have confidence not to fear the other scientific disciplines and their mysteries." is reflected in his broad range of interests and achievements. Early in his career Calvin focused on the theory of organic chemistry. This was followed by multi-disciplinary research in bio-organic chemistry and is detailed in short chapters "The Path of Carbon in Photosynthesis", "Photochemistry", "Electronic Properties of Organic Crystals", "Chemical Evolution and Organic Geochemistry", "Free Radicals", "Effect of Deuterium on Biological Reactions", "Chemical and Viral Carcinogenesis", "Hydrocarbons from Plants", and "Artificial Photosynthesis", which resulted in his 1961 award of the Nobel Prize in Chemistry for his research on carbon dioxide assimilation in plants.

Consistent with other volumes in this series, *Following the Trail of Light. A Scientific Odyssey* presents a highly personalized account of an extraordinary scientist. It clearly achieves the objective of the editor to present a description of an eminent chemist that should inspire and encourage, in science and in life, readers from all scientific disciplines.

Staff

Books of Interest

Multiple Chemical Reactions. By Edward J. Calabrese. CRC Press, Inc., Lewis Publishers, Boca Raton, FL. 1991. xxvii + 704 pp. 16 × 24 cm. ISBN 0-87371-146-7. \$99.50.

Intracellular Protein Degradation. By F. J. Doherty and R. J. Mayer. Oxford University Press, New York. 1992. xii + 61 pp. 15.5 × 23.5 cm. ISBN 0-19-963293-6. \$14.95 (Pbk).

Amino Acid and Peptide Synthesis. By John Jones. Oxford University Press, New York. 1992. 86 pp. 18.5 × 24 cm. ISBN 0-19-855669-1. \$29.95 (Cloth). \$9.95 (Pbk).

Alcohol Abuse Treatment. Volume 3. Drug and Alcohol Abuse Reviews. Edited by Ronald R. Watson.

The Humana Press, Inc., Totowa, NJ. 1992. xi + 327 pp. 15.5 × 23 cm. ISBN 0-89603-242-6. \$59.50.

Drug Abuse Treatment. Volume 4. Drug Alcohol Abuse Reviews. Edited by Ronald R. Watson. The Humana Press, Inc., Totowa, NJ. 1992. x + 206 pp. 15.5 × 23 cm. ISBN 0-89603-233-7. \$59.50.

Guidance For Laboratory Design: Health and Safety Considerations. Second Edition. By L. Diberardinis, J. Baum, M. First, G. Gatwood, E. Groden, and A. Seth. John Wiley & Sons, Inc., New York. 1993. xiv + 514 pp. 16 × 24 cm. ISBN 0-471-55463-4. \$55.95.

Gene Structure and Transcription. Second Edition. By Trevor Beebee and Julian Burke. Oxford University Press, New York. 1992. xii + 89 pp. 15.5 × 22.5 cm. ISBN 0-19-963317-7. \$14.95 (Cloth).