

Book Review

MELANINS AND MELANOGENESIS, by Giuseppe Prota. Academic Press, San Diego, CA, 1992, 290 pages.

This book summarizes the current state of the art in melanin research. It contains 224 pages of text and over 50 pages of references (covering over 1,000 citations up to early 1992). This field was last reviewed thoroughly in the late 1960s by Nicolaus. Much has changed in the intervening years, and this book therefore represents a valuable new reference source in this complex field.

Dr. Prota is recognized as a work leader in melanin research, and in this book he presents a comprehensive evaluation of the chemical, biological and, to some extent, medical aspects of melanins. While he puts major emphasis on the chemistry and biosynthesis of these pigments, he does effectively relate these aspects to their broader biological significance.

The introductory chapter gives an overview of the basic concepts and major issues

in melanin pigmentation. Other chapters discuss melanin-producing cells and tyrosinase and the various types of melanins: natural/synthetic, eumelanins, neuromelanins, and pheomelanins and trichochromers.

The last three chapters are devoted to the biology of melanins, covering pigment cell metabolism, genetic and hormonal regulation of melanogenesis, and photobiology and photochemistry of melanogenesis. Despite this diversity of subjects and the volume of information provided, it is to Dr. Prota's credit that the presentation is concise and very readable. While clearly meant to appeal to the specialist, most technical readers will learn much from this book.

Overall, Dr. Prota presents an objective, in-depth study of the status of research into the important field of melanin pigmentation. This book is essential reading for all scientists in this area.—KEITH C. BROWN—Director, Organic Research, Clairol, Inc.