

Book Review

Developments in the Chemistry and Technology of Organic Dyes. Edited by J. Griffiths. Blackwell Scientific Publications, Oxford. 1985. ix + 132 pp. ISBN 0-632-01304-4. Price: £25.00.

This is Volume 7 in the series of Critical Reports on Applied Chemistry, sponsored by the Society of Chemical Industry. The object of the text is to review recent developments in chemical and technological aspects of synthetic dyes, and its current awareness is exemplified by the inclusion of references up to the 1982–1984 period in its various sections.

The review is in four parts. Developments in the Light Absorption Properties of Dyes; Colour and Photochemical Degradation Reactions is reviewed by the editor of the volume, J. Griffiths. Relationships between colour and constitution are discussed in terms of empirical, qualitative theoretical (resonance theory, PMO theory and triad theory), and quantitative theoretical (PPP-MO) aspects, with an additional section outlining notable recent developments in the area of various azo and quinone systems. The author then reviews photochemical degradation reactions of dyes, with particular respect to azo, anthraquinone, di- and triarylmethane and related cationic dyes. Developments in Dyes for Textile Applications (reviewed by G. Hallas) outlines recent developments in the areas of disperse dyes, reactive dyes and basic dyes and a parallel review (P. F. Gordon and P. Gregory) of non-textile uses of dyes deals with colour photography, electronic and electrical uses of dyes, biological uses of dyes and dyes for plastics and foams. The final section,

by I. Holme, reviews ecological aspects pertinent to colouring matters, viz., their toxicological characteristics and their various modes of degradation.

Each section is presented with commendable lucidity and presents a concise but comprehensive update of current awareness in the field of colourants. It is recommended without reservation to all chemists involved, by choice or necessity, in the field of organic dyes.

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