

CHEMICAL MUTAGENS. PRINCIPLES AND METHODS FOR THEIR DETECTION. Volume 5. A. Hollaender and J. F. de Serres (Eds.). Plenum Press, New York and London, 1978. Pp. xv+348. Price \$35.40.

This is the fifth volume in 7 years of this standard catalogue of mutagen-screening methods. Hollaender, the sole editor of the first four volumes, is joined by F. J. de Serres for this one. The high standard of the earlier volumes is maintained, and this one will join the earlier ones as a standard reference on the shelves of all those involved in mutagen-screening.

The chapters in the current volume cover analysis of body fluids for alkylated macromolecules, detection of forward mutation in *Schizosaccharomyces pombe*, a heritable translocation test in mice, deleterious mutation and chromosomal rearrangement detection in the fern *Osmunda regalis*, analysis of rearrangements in mammalian germ cells, and somatic mutation detection as coat colour spots in mice heterozygous for coat colour genes. Further chapters describe detection systems for sister chromatid exchanges and rearrangements, effects of mutagens on sperm shape in mice and man, and further aspects of the mouse specific locus method. One particularly interesting chapter, by Robert W. Miller, summarises the history of the discovery of teratogenic and carcinogenic activity of such agents as X-rays, viruses, and a number of chemicals. The author draws some interesting conclusions from his analysis and presents some very thought-provoking recommendations. The book ends with an appendix containing the U.S. Toxic Substances Control Act (Public Law 94-469).

A. RADFORD

Department of Genetics, University of Leeds

MUTAGENESIS. Volume 5 in the series "ADVANCES IN MODERN TOXICOLOGY". W. G. Flamm and M. A. Mehlman (Eds.). John Wiley & Sons Limited, Chichester, 1978. Pp. xii+401. Price £17.50.

This book is a welcome addition to the literature on environmental mutagenesis. It sets out with a selective approach, and within a concise 400 pages covers the major aspects of the subject at a level deep enough for all but the very narrowest specialist. In an introductory section, Flamm discusses the major classes of human genetic disease and mutagenicity test systems which would be appropriate to detect such chromosomal or gene mutations. Drake then delves into the history of mutagen screening and the legal, political and scientific aspects of developing screening strategies, identifying environmental mutagens and determining permissible levels of exposure.

The second section summarises the state of knowledge of cellular repair processes in mammals in relation to mutagen- and carcinogen-induced DNA damage, continuing into a study of the interrelationships of nutrition, carcinogenesis and mutagenesis, concentrating on geographic and economic class distribution of various types of cancer with diet on carcinogen-induced tumours in laboratory animals. In the third part, McCann and Ames review the "Ames" test, the high level of correlation of its results with actual carcinogenicity, and strategies which may reduce further the already low (*c.* 10 per cent) levels of false positive and negative predictions. The following chapters describe mammalian test systems for the detection of chromosomal rearrangements and point mutations. The remaining sections

contain two chapters by Fischbein on environmental sources of both natural and synthetic chemical mutagens, and a final chapter on information retrieval systems for genetic toxicology. This is an important book for anyone in the fields of mutagenesis, health and safety at work and elsewhere, and concerned with improving the quality of the environment.

A. RADFORD

Department of Genetics, University of Leeds

Oxford University Press

Blood Groups and Diseases

A. E. Mourant, Ada C. Kopeć,
and K. Domaniewska-Sobczak

'This beautifully produced monograph concerns the association of blood groups, HLA types and other inherited biochemical characteristics that can be detected by blood tests with disease . . . this book is now the main source of reference and should appear in any medical library and particularly in medical genetics and anthropology departmental libraries.' *British Book News*.
Illustrated £25 *Oxford Monographs on Medical Genetics*

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A. E. Mourant, Ada C. Kopeć,
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The Lancet £12.50. *Research Monographs on Human Population Biology*
