with a good deal of emphasis on DNA repair in human cells and particularly with respect to repair in cells from patients with hypersensitive diseases. The phenomenon of inducible repair is discussed with respect to possible protective effects which in eukaryotes may alleviate both mutagenesis and carcinogenesis. The importance of chromatin structure in modifying or affecting the accessibility of sites to DNA repair processes is analysed with reference to recent controversies and the possible relationships between DNA repair defects and chromosome breakage syndromes are considered.

Chapters on in vivo and in vitro carcinogenesis deal with classical multi-stage carcinogenesis in mouse skin in which the sub-division of promotion into at least 2 stages is described and in vitro systems are used to examine details of initiation and promotion and the ways in which these processes may be inhibited. Other groups of papers deal with the genetics of malignancy and with the importance of growth factors for normal and malignant cells.

The impact of new molecular biological techniques are evident in this symposium. Their use in the detailed analysis of DNA repair mechanisms is identical and studies in the control of the regulation and expression of virus genomes transfected into mouse teratocarcinoma cells are described. In one paper evidence is given for massive gene amplification induced by a variety of chemical carcinogens, thereby emphasising the importance of chromosomal rearrangements in mechanisms of chemically-induced cancer.

The symposium contains several overview and summary papers, e.g. by Weinstein, Hanawalt et al., Pitot et al., Montesano, Heidelberger and Cairns which are valuable to the student both for the comprehensive nature of the review material which some of these articles contain and for their informed comment.

In summary, although much of the work is already published elsewhere the book is valuable because it is only here that the threads of the meeting are drawn together in a comprehensive way.

P.J. O'Connor
Division of Carcinogenesis,
Paterson Laboratories,
Christie Hospital and Holt Radium Institute,
Manchester M20 9BX.

This book reports the proceedings of the course of the International School of Pure and Applied Biostructure–a NATO Advanced Study Institute, held in Italy in October 1981. The book is divided into four sections which contain papers on (a) chemicals as carcinogens (b) DNA adducts (c) chemicals as promoters (d) carcinogenesis as a multistep process. Clearly no single volume could cover in depth all these areas of study. In fact many of the 3-5 chapters within each section present specialised research reports rather than general reviews, making the book unsuitable for the general reader seeking an introduction to the subject of chemical carcinogenesis. Furthermore several of the chapters deal with techniques such as alkaline elution, fragmentation of DNA and measurement of viscous and elastic components of DNA. No doubt such techniques have a place in carcinogenesis research but are hardly central to the understanding of cancer causation. These and several other topics discussed would seem to represent the particular interests of the Italian sponsoring organisation.

Specialists in chemical carcinogenesis seeking the latest ideas in their subject must realise that the papers were presented 18 months ago, but they will no doubt find some chapters of relevance to their own research interests.

The book is reproduced directly from the submitted typescript but this has been very well done and makes for clear reading and the illustrations and figures cannot be faulted. Each chapter has an adequate number of references but their style of presentation is not consistent, and there is no author index.

In summary I think the book would disappoint the general reader attracted by the title, while the specialist might liken it to the Curate’s egg!

P. Brookes
Division of Chemical Carcinogenesis,
Institute for Cancer Research,
Pollards Wood Research Station
Bucks.

Chemical Carcinogenesis–NATO Advanced Study Institutes Series, Edited by C. NICOLINI, New York, Plenum Press, 492 pp, 1982, £59.50. ISBN 92 832 11391.

Cancer Therapy, Edited by D.S. FISCHER & J.C. MARSH, Boston, USA, G.K. Hall Medical Publishers, 749 pp, 1982, £55.00. ISBN 0 8161 2219 9.

This book developed from a series of lectures given in Connecticut hospitals in the United States of America. It was the original intention to publish just the 36 lectures, but large areas of importance had been omitted. To rectify the omission, 33