There is no reference to radiation of frequency above 300 GHz, although ionising radiations, for example, have a significant effect on human tissue. The author's limited perspective is illustrated by his statement 'electromagnetism is invisible', and makes the book of doubtful value to nuclear scientists!

The author's claim to present a 'dispassionate and objective view of the subject' is not endorsed by the style in which the book is written. Personal anecdotes ('I can personally attest to its (diathermy's) effectiveness') are used freely, and a rather colourful style ('would you believe . . .') gives the impression occasionally not so much of a scientific text as of a popular magazine. There are several examples of rather loose writing such as, in a reference to the Bordeaux machine, the phrase '... human treatment of cancer' which should presumably be '... treatment of human cancer'.

The chapter on 'Regulatory Definitions' contains a number of minor misprints and the misleading statement that the most hazardous band of frequencies is from 50 to 60 Hz. Elsewhere, electrical field, field strength, field intensity and electrical charge potential are used synonymously.

This book may be recommended as a readable introduction to the effects of electromagnetic fields on man, to those who want a general acquaintance with this subject. Otherwise, it leaves much to be desired.

G. HARDING

Health Hazards from New Environmental Pollutants: Report of a WHO Study Group. Technical Report Series 586. (Pp. 96; 8 Sw. fr; \$3.20) WHO: Geneva. 1976.

In this book the usefulness and limitations are considered of methods of forecasting environmental health hazards arising from developments in the chemical industry. The main substance of the report is in four sections; the first two of these deal with laboratory methods of identifying hazards and identification by observation of the health of the population, and with the type of information required. There is always a limit to the resources available to deal with the increasing number of environmental problems.

The next section draws attention to those problems considered to be of high priority such as the effects of power production, metals, photosensitisers and pesticides. In the last section fifteen recommendations are listed. These are addressed to both the

WHO and member states. Many of the recommendations could well be considered by individuals, university departments and industrial organisations with a view to organising their own contribution.

The remaining two-thirds of the book consists of seven annexes in which the high priority topics are considered in greater detail. Among this information there is an account of the relevant data banks in the USA, and the tabular presentation of health and environmental hazards associated with alternative forms of power production is especially useful.

The international study group which prepared this report collected information from many sources. The result is a readable and thought-provoking account that contains something of interest to most people concerned with the environment. More particularly those involved in the study and control of occupational medicine will wish to consider this report. Some will be informed by the report, others will find it a useful reminder and yet others may use it as a check-list for areas of concern and action.

D. H. NAPIER

Experimental Studies of Shiftwork. By P. Colquhoun, S. Folkard, P. Knauth, and J. Rutenfranz. (Pp. 279; illustrated; DM. 39.0). Friedr. Vieweg & Sohn: W. Germany. 1975.

This collection of 25 papers (all in English) summarises the proceedings of the 3rd International Symposium on Night- and Shiftwork, held in Dortmund in 1974, under the auspices of the Subcommittee on Shiftwork of the Permanent Commission and International Association on Occupational Health. The first symposium (1969) was especially concerned with shiftworking and morbidity; the second (1971) placed emphasis on its psychological and social aspects. The meeting reported here concentrates 'on laboratory and field studies of the various forms of shiftworking'. Papers mainly concern sleep deprivation and disturbance, and the adaptation of physiological and performance functions under both laboratory and field conditions.

In their introduction the authors suggest that before one can confidently advise individuals and organisations on shiftworking problems 'it is necessary to study shiftwork first in the laboratory under controlled conditions so that we can establish basic principles'. And they add that they 'would like the symposium to be seen as a step towards the formulation of

a programme of laboratory research'. Although they do also stress that such a programme should be 'relevant to real-life problems', it would be interesting to know to what extent their view was wholly accepted by participants.

An alternative view is that concurrently with experimental studies in the laboratory, equal research time and effort should be devoted to carefully-conducted studies under working conditions outside. A supplementary line of attack might be the regular collection, preferably in a form standardised internationally, of details of current practice in the arrangement of working hours. At present we have little systematic information of this kind. The justification for this dual approach is that problems differ in their amenability to laboratory or outside-laboratory investigation. This applies whether one's concern is with particular effects of particular shift patterns, or with different forms of individual adaptation.

In this connection it is also worth remembering that, in this country at least, we are dealing with two broad categories of personnel on abnormal arrangements of working hours. The first consists of those in such process industries as glass and steel manufacture, who are employed fairly consistently on shiftworking, and even on shiftwork of a particular type, for a considerable period of their working lives. But for very many more, experience of shift- and night-working is a much more inconsistent and erratic business, partial or seasonal, or involving perhaps the odd emergency night shift and the occasional marathon stint. It may be that a laboratory approach is more suited to a study of the problems of the second category than of the first.

Since discussions following papers are often the best part of meetings of this kind, a somewhat fuller account of their main directions would have been welcome here. Conclusions and suggestions for future action are rather tantalisingly compressed into a single page.

R. SERGEAN

Handbook of Industrial Toxicology. Edited by E. R. Plunkett. (Pp. 536; £17.50). Heyden & Son Limited: London. 1976.

In the preface to his book, the author states that 'this is still a handbook intended as a quick reference guide', and it is exactly what he states. The print is large and the information given is concise, clear, easily understandable and up to