

## Book reviews

**Industrial Chemical Exposure: Guidelines for Biological Monitoring.** By Robert R Lauwerys. (Pp 150, £14.95.) Davis, California; Biomedical Publications, 1983.

**EUR 8513 Occupational Health Guidelines for Chemical Risk.** By R Roi, W G Town, W G Hunter, L Alessio. (Pp 164, £6.20.) Luxembourg; Office for official publications of the European Communities, 1983.

There is an interesting contrast between these two books in that both aim to provide a compact reference source for those requiring information about occupational health procedures applicable to a group of workers in an environment containing potentially hazardous chemicals. One is the work of an individual distinguished author, and offers a concise but thoroughly evaluated summary of one specific field—namely, biological monitoring. The other document does credit four human authors, but its immediate source is the computer on which the ECDIN data base is maintained by the EEC. The most immediate result of this is a certain difference in style. Whereas one does not perhaps expect the higher flights of literary achievement in a technical publication, it seems perfectly reasonable to expect the readable, accurate, and economical style achieved by Lauwerys. The other document was, however, obviously assembled directly from the data base using a report generating program that repetitively uses a series of key words and phrases coupled to data items from the file, with no apparent attempt to edit the product. This produces a decidedly stilted and impenetrable result when reading a single entry: the effect on the reviewer of trying to read the whole volume is best left undescribed.

Were the criticisms of the EEC publication confined to the style, however, this could still be a useful document. Unfortunately the "painting by numbers" approach that afflicts the style also compromises the content, and the whole selection of information seems to be based on some questionable assumptions. For instance, it is certainly true that pre-exposure screening and periodic examination of workers is appropriate in certain circumstances. Nevertheless, many would disagree with their application for every single entry in this book, irrespective of dose, duration of exposure, or concurrent hazards. The recommendations seem to be

stringent so far as frequency of examinations is concerned, but not only is there no discussion of this point at any stage but no data as to what might constitute a severe, or less severe, exposure is presented. Therefore, even a reader with the necessary knowledge to consider the question is deprived of the opportunity. In fact, the only entry containing any quantitative information at all is that on biological monitoring. This total neglect of quantitative data is extraordinary, particularly since toxicology and occupational medicine are finally showing signs of emerging from the earlier qualitative darkness into the light of quantitative science. Surely any item that is not coupled with appropriate quantitation does not count as information at all.

The account of biological monitoring information at least contains some numerical data, but the EEC publication fails to evaluate this in any way, so in some cases further investigation of an entry shows that it relates to a practicable and widely used monitoring technique, whereas in other cases a research study which would be both impractical and useless for routine monitoring is quoted. By contrast, the great value of Lauwerys's book is that the methods and data cited are properly described and evaluated: the reader is not only told what normal unexposed and acceptable exposed levels might be, but how variable these are, and whether they are likely to be useful as indicators of potential risk. If no method exists, or those methods are difficult or of questionable value, this is explained. Although the coverage of the EEC book is greater in terms of subjects and range of chemicals (and the authors have promised to extend the latter), its information content is far less: the entire book could well be reduced to a few tables by cutting out the unnecessary and irritating computerised verbiage. Also I suspect that some of Lauwerys's omissions are deliberate: he would seem to have included all the commonly occurring industrial chemicals for which there is useful biological monitoring data.

And finally: how do these books meet the needs of their intended readers, who require rapid access to data on methods, procedures, and data such as normal, acceptable, or excessive concentrations of metabolites in body fluids? In my own case Lauwerys's book has already become a valued and frequently used resident of my desk top, whereas the EEC book has never been found helpful. This is a pity because the value of the data stored in the ECDIN system as a whole is considerable, as those who have access to computerised database searching will appreciate.

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