BOOK REVIEWS

In general, the quality of the papers is excellent, and the authors have given a critical analysis of their work. The results presented at this Symposium support and extend most of the observations concerning enflurane reported previously in this country. The book, therefore, represents a comprehensive review of the data presently available on enflurane and will be helpful for practicing anesthesiologists and physicians in training.

The book is well illustrated and would have been more enjoyable if the discussions and, particularly, the introductions had been shortened by editing to eliminate repetitive material. In my opinion, when suitably tailored, the published proceedings from symposia such as this are excellent for the continuing education of practitioners. Hopefully, similar books on other new anesthetic agents, such as isoflurane, will be forthcoming.

KAI REHDER, M.D.
Mayo Clinic
Rochester, Minnesota 55901


Many of the responses to anesthesia, disease and physiologic stress can be transformed into numbers, graphs, wiggles on a screen, or even sounds. Generalizations and decisions based on these measurements play important roles in clinical practice. In part, at least, the science and use of such measurement can be learned from books or even (rarely), taught by professors.

I would like to have a book on Measurement that answers three questions: what could I measure now and in the future; what are the principles and pitfalls of the devices used for measuring; what do the results mean—especially in the context of clinical problems? Measurement in Anaesthesia addresses itself to these questions, but falls short in its answers. The book is composed of 20 lectures delivered in 1973 at the Boerhaave Course on Measurement in Leiden. Areas covered include electrical safety, radioactive isotopes, pain, psychological variables, pH, Pco2, PaO2, blood flow, and computers. In part, the book fails because the authors have their own ideas on what questions are important and because each chapter was written by a different author. The editors contributed little to the lectures that would create a cohesive body of information. Often, there is little or no description of the theories on which the devices are based. For example, the workings of the pH electrodes are dismissed with a sentence and a reference ("Most pH electrodes now utilize the capillary type of electrode with a calomel reference electrode—end of theory"). On the other hand, the next chapter (The Measurement of Oxygen in the Gas Phase) contains several succinct and simple but complete and clear descriptions. There is greater consistency in the emphasis in all chapters on the problems encountered in the use of instruments and how to deal with such problems. Discussion of the implications of measurements to clinical problems is uneven—nonesistent in some chapters and nicely detailed in others.

The book has other strengths and weaknesses. Despite the multiplicity of authors, there is little overlap of chapter material. The style and clarity of writing is remarkably good for a multi-authored book. Most descriptions avoid the use of equations and rely on words and pictures to make their points. However, basic calculus is required to follow some of the cardiovascular measurement sections. The book is richly illustrated with 163 figures and tables.

Finally, there is too much emphasis on research tools and measurements of the future. Too much because it appears that these descriptions are at the expense of a more complete coverage of measurements available today. Although we are given a four-page description of computer manipulations of the ECG, I did not find a description of how to measure arterial or venous blood pressure, or pulse rate. I would have thought that these simple everyday variables would have been of prime interest. There is no discussion of how to estimate body temperature, although there is early mention of its importance. One chapter is devoted to the problems of interference and electrical safety associated with recording of biological signals, but none to the placement, use and safety of intravascular catheters.

E. I. Eger, II, M.D.
Department of Anesthesia Research
University of California
School of Medicine
San Francisco, California 94243


Selected Abstracts on Animal Models for Biomedical Research is an annual publication of the Animal Models for Genetic Stocks Program at the Institute of Laboratory Animal Resources, National Academy of Sciences—National Research Council. It is distributed free of charge to libraries and to scientists interested in animal models of human diseases, and is designed to lead readers to cited papers that will be of value to them. This edition contains 108 abstracts, classified according to disease of anatomic system, pleasantly printed and sufficiently informative for readers to assess the need for consulting the parent articles.

B. Raymond Fink, M.D.
University of Washington
Seattle, Washington 98195