

Physics and Radiobiology of Nuclear Medicine.

Gopal B. Saha, PhD. New York: Springer-Verlag; 1993, 208 pp, \$49.50.

Dr. Saha has prepared this book as a comprehensive text for physicians in preparing for their Nuclear Medicine Board examinations. The fourteen chapters cover all aspects of nuclear medicine physics and radiobiology.

The first six chapters are very concise and cover basic physics principles, structure of matter, radioactive decay, kinetics of radioactive decay, statics and radiation counting, production of radionuclides and interaction of radiation with matter. Discussions are to the point and cover all pertinent material that both the nuclear medicine physician and technologist would need. Each chapter has a

set of questions and suggested readings at its conclusion. Illustrations are not plentiful but are simple and direct, providing the reader with good visual examples.

Five chapters cover instrumentation: gas-filled detectors, scintillation and semiconductor counters, imaging devices, performance parameters of imaging devices and tomographic systems. These compendary chapters provide an amazing variety of accurate details about the various instruments. However, discussion about scintillation camera correction techniques for linearity, energy and uniformity are nearly absent. Quality control of scintillation cameras and SPECT and PET devices are covered from a methods standpoint of performing the tests.

Chapters 12 and 13 cover radiation biology and internal radiation dosim-

etry, respectively. Both of these chapters are direct and comprehensive.

The final chapter on radiation protection and regulations, provides a valuable short overview and introduction to various organizations, principles of radiation protection and monitoring. This chapter covers nearly every aspect of a practical radiation protection and regulatory program that a physician or technologist would need.

While Dr. Saha has achieved his goal of providing a complete discussion of topics for the nuclear medicine physician in training, he has also provided a valuable resource for technologists and technologist students.

Paul E. Christian, BS, CNMT
*The University of Utah Health
Sciences Center
Salt Lake City, Utah*