

JNMT Bookshelf

HANDLING RADIOACTIVITY

Donald C. Stewart, John Wiley & Sons, 1981, 282 pp, \$35.00

Although this text is not specifically geared toward the medical applications of radioactive materials, several sections of it are of interest to persons responsible for radiation safety. These sections—concerning radiation protection standards, operations, laboratory design, transportation, and waste disposal—contain some very pertinent remarks regarding the specifications of hoods, air filtration devices, and monitoring tools. I particularly enjoyed the background information on the evolution of the various regulatory and advisory groups (ICRU, ICRP, NCRP, BIER, IAEA, NRC, ERDA, DOE, DOT, etc.) and their relationship to one another.

The author's treatment of the derivation of protection standards and dosimetry units is thoroughly understandable. The book is almost totally lacking in mathematical supporting data although other references are cited. Instead, data are presented in a logical, practical manner, allowing one to learn without drowning in a sea of formulae.

Approximately 60% of the book is devoted to design and operation of laboratories using much greater quantities and varieties of radioisotopes than found in nuclear medicine. The basic principles apply to us as well, of course, and a hospital or research facility planning construction would do well to consider these concepts. In addition, familiarity with the monumental problems of the nuclear industry at large will help us to knowledgeably differentiate the relatively innocuous concerns of nuclear medicine.

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LEGAL MEDICINE WITH SPECIAL REFERENCE TO DIAGNOSTIC IMAGING

A. Everette James, Urban and Schwarzenberg, 1980, 387 pp, \$32.50.

This book takes the gobbledygook out of the legal system and substitutes plain language. Our legal system has many parts and layers, and a book of this kind must deal in principles instead of specifics. As the author explains, what may be true in Illinois, may not be true in other states. Topics explained include the legal system, experiences of being a witness, responsibilities, professional corporations, malpractice insurance, and regulatory bodies (and their influence).

The target audience of this book is the practicing

physician, particularly the radiologist. Many of the chapters would not be applicable to the technologist; however, the discussions on the legal system, need for documentation, and on being a witness should be of interest to all health care professionals. The chapter on nuclear medicine clearly and concisely reminds the reader of NRC regulations and the necessity of following them.

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FUNDAMENTALS OF RADIATION DOSIMETRY

J.R. Greening, Adam Hilger Ltd, Bristol, UK, 1981, 160 pp, \$27.00.

Radiation dosimetry is presented in this text presupposing that the reader has a background in physics. Therefore the word "Fundamentals" in the title is a relative term. Many graphs, formulae, and tables punctuate the explanation and, in some cases, are the explanations themselves. Relationships between quantities and units, interactions of ionizing radiation with matter, measurement of exposure and direct dose are among the topics discussed.

The book can be effectively used as a reference for senior nuclear medicine technologists, residents, and nuclear medicine scientists. I do not recommend it as a text for a nuclear technology training program because of the comparatively sophisticated presentation of the material.

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SCINTILLATION CAMERA ACCEPTANCE TESTING AND PERFORMANCE EVALUATION

American Association of Physicists in Medicine, American Institute of Physics, 1980, \$3.00.

This 23-page booklet documents the various aspects of commissioning a new scintillation camera prior to clinical use. It is the result of the deliberations of the AAPM Nuclear Medicine Committee under the chairmanship of Audrey V. Wegst.

The topics covered range from inspection on delivery through measurement of temporal resolution, uniformity, spatial resolution, energy resolution, multiwindow spatial registration, and point source sensitivity to collimator testing and determination of shielding leakage.

As the introduction states the booklet's primary ob-

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