
Radioactivity Measuring Instruments. *M. C. Nokes.* Philosophical Library, Inc., New York. 1958. viii+75 pp. \$4.75.

Although the title of this book indicates a rather widespread coverage of the field of radiation measurement, the author has limited himself to a discussion of Geiger-Muller tubes and the electronics associated with that type of radiation detector. About one third of the book is devoted to a description of physical and chemical phenomena within a G-M tube, counting statistics, definitions, and construction techniques. The remainder of the book concerns construction of economical radiation-counting equipment for introductory laboratories. Examples and explanations are given for triggering circuits, power supplies, count-rate circuits, and scalars. Difficulties are bound to arise in the use of this book since the author describes circuits that are designed for use in European laboratories (240 volts, 50 cps) and that utilize British vacuum tubes ("valves"). The British component problem can perhaps be circumvented since some local electronic component suppliers can provide information on suitable domestic replacements. The counting systems described are of both the portable and the laboratory type. Although most of the circuits use vacuum tubes, some transistor circuitry is included. The author's main purpose seems to be to provide sufficient information for the construction of simple but useful counting equipment by persons with "an elementary knowledge of electricity and an ordinary measure of manual dexterity." In this, the book achieves its purpose and instructors in high schools and colleges may find it helpful. It will not be particularly useful, however, to persons with no experience in electricity due to the differences in instrumentation technology and terminology between the United Kingdom and the United States.

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