

# BOOK REVIEWS

Selection of books for review is based on the editors' opinions regarding possible reader interest and on the availability of the book to the editors. Occasional selections may include books on topics somewhat peripheral to the subject matter ordinarily considered acceptable.



## Activation Analysis with Neutron Generators

<i>Authors</i>	S. S. Nargolwalla and E. P. Przybylowicz
<i>Publisher</i>	John Wiley & Sons, Inc.
<i>Pages</i>	658
<i>Price</i>	\$29.50
<i>Reviewer</i>	R. K. Skogerboe

This well-written and well-organized presentation provides comprehensive coverage of the topic. The apt discussion of the principles of activation analysis with neutron generators includes an accurate evaluation of the capabilities and limitations of the technique. The discussion dealing with the production of fast neutrons, the theory thereof, and the design and operational characteristics of the required equipment is distinct and complete. The chapter on radiation protection requirements should be very useful to those planning fast-neutron facilities. Sample preparation and transport approaches are considered in depth, as are sources of analytical inaccuracies. Throughout, emphasis is placed on the operational parameters and procedures which must be controlled to optimize results. The last half of the text presents a comprehensive summary of the applications of the technique.

The treatment presented in this text is excellent, and the book will serve a wide segment of the scientific community. The novice will readily benefit from reading it and the expert

will find it a good reference source. I recommend it with enthusiasm.

*R. K. Skogerboe, professor of chemistry at Colorado State University, is well-known for his work dealing with the development of trace and ultratrace analysis techniques and the application of these to the solution of diverse problems. He has utilized a wide variety of analytical techniques in his research and has published extensively. His publications include several which have critically compared the capabilities and limitations of the instrumental techniques most widely used for trace analysis.*

## Wave Mechanics and Its Applications (Volume 58 in the Pergamon Press International Series of Monographs on Natural Philosophy)

<i>Authors</i>	P. Gombas and D. Kisdi
<i>Publisher</i>	Pergamon Press, Inc. (1973)
<i>Pages</i>	238
<i>Price</i>	\$10.50
<i>Reviewer</i>	George H. Miley

As explained on its jacket flap, this elementary text is primarily intended for undergraduate students of physics to provide a basis for progressing to more advanced texts. It is split into two parts of roughly equal length: The first provides a

concise introduction to the experimental basis of quantum mechanics and key theoretical aspects, while the second presents detailed applications to atomic structure and scattering problems, including the use of perturbation and variational methods. The collection of examples in the second part is a particularly useful and noteworthy aspect of this book. The authors explain that they have done this to ensure that the student becomes adept in applying the newly learned theory. They voice the fear that the young generation hopes to contribute to general theory without going through the labor of learning through the solution of simpler problems. While this tendency is less prevalent among engineering students with whom the reviewer is acquainted, the point is certainly well taken and the examples presented provide a constructive and enticing approach that should help alleviate the situation.

The book is well written and the authors demonstrate an outstanding ability to identify and stress the key concepts involved in each section. These virtues should provide the student with an excellent supplemental text for introductory or intermediate courses in quantum mechanics.

It is the reviewer's opinion, however, that this book would not be suitable as the lead or key text in a course unless the material were carefully augmented with lectures and other reading material. While the introduction to quantum theory (Part 1 of the text) is clear and concise, it simply cannot, in the length allotted, give the neophyte sufficient interpretation of a theory that has frequently discouraged good and poor