

four on aggregate matter, and seven on the physics and engineering of nuclear devices. Robert R. Wilson's recent appointment to the directorship of the National Accelerator Laboratory makes his "Anecdotal Account of Accelerators at Cornell" particularly timely.

A lecture by Robert Oppenheimer, given not long before his death and bearing the same title as the book, makes especially good reading. Oppenheimer speaks in his very personal, somewhat guarded style, with great

wisdom and unusual simplicity, about ideas and ideals that concern us all.

Robert F. Bacher and Victor F. Weisskopf have provided an introductory chapter on the career of Hans Bethe. They have been generous enough to put in print, as footnotes, some anecdotes that in the past have been current only in oral tradition, and they have written as authoritative an evaluation of Bethe's work as one could hope to produce when the subject of the account is still very much on the scene. For, Hans Bethe

is not only busy lecturing his students at Cornell and the rest of us at APS meetings, but he is deeply involved in a massive program of calculations on nuclear matter. His bibliography will surely continue to grow, and we can expect his high standards of workmanship to serve all of us as a guide for years to come.

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Eugen Merzbacher, who writes on quantum mechanics, is spending the current academic year as a visiting professor at the University of Washington.

Is science a society?

THE SOCIAL SYSTEM OF SCIENCE. By N. W. Storer. 180 pp. Holt, Rinehart and Winston, New York, 1966. Paper \$3.95

by R. Bruce Lindsay

The impact of science on society has been studied in depth for some time, and most scientists believe that they understand its role in this respect. The author, a member of the sociology department at Harvard University, has, since 1961, contributed several articles to the literature on the social aspects of science. In this book he has set for himself a somewhat different field of investigation. He tackles this question: Do scientists as a group form a society with a social system analogous to the great systems recognized by sociologists, namely, those associated with man as an economic, political, religion- and family-forming animal? Storer believes that the answer is yes and has framed an ingenious theory or model to justify his answer.

Having defined a social system as a "stable set of patterns of interaction, organized about the exchange of a qualitatively unique commodity and guided by a shared set of norms that facilitate the continuing circulation of this commodity," the author proceeds to argue that the community of scientists satisfies this definition. The commodity in this case is competent response to created scientific knowledge and the norms are those previously laid down by Robert K. Merton, namely, universalism, organized skepticism, communability and disinterestedness. The emphasis throughout is on basic science as distinguished



A SOCIOLOGICAL LOOK at scientists finds science is indeed a society.

from applied science. The reviewer feels that this limitation is an unhappy one. There are relatively few individuals who can satisfy the strict creativity criterion laid down by the author, and yet there are thousands of scientists who do make valid contributions to science short of making basic discoveries.

That the majority of scientists would agree that they form a social community is doubtful, but it is at any rate of interest to have the well considered views of a sociologist looking from the outside at their multifarious activities. Among the interesting problems to which Storer directs his attention are professional recognition, the distinction between the genius and

the crackpot, secrecy in scientific research, the financial support of science, the growth in number of scientists and the "publication explosion" and its implications for the future of science. Scientists of all kinds will find the book challenging reading.

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The reviewer is Hazard Professor of Physics at Brown University. He is interested in and has on occasion written about the sociology of science.

For student involvement

PRINCIPLES OF PHYSICS, A PROGRAMMED APPROACH: Vol. 1, FOUNDATIONS OF MECHANICS; Vol. 2, MECHANICS AND THERMODYNAMICS. By Neil Ashby, Stanley C. Miller. 240 pp. and 261 pp. Allyn and Bacon, Boston, 1966. Paper \$5.95 each

by Oakes Ames

These two volumes are a contribution to the literature of introductory physics texts that is unique not so much for the choice or ordering of material as for being a programmed presentation. For the benefit of those who may not have encountered this method, the purpose of a programmed text is to involve the student as much as possible in working out the material for himself as he reads. To work through a programmed text requires a measure of self-discipline and sometimes may seem slow going. There is little doubt, however, that if the author carefully develops the steps the reader must take, the end result is an efficient and rewarding method of study. Specifically, the page is divided into two columns, the right-hand one being the text. The text is divid-