articles that comprise it, the book deserves a place in well-endowed physics libraries.

> KEVIN CAHILL University of New Mexico

Mathematics: Problem Solving Through Recreational Mathematics

Bonnie Averbach, Orin Chein. 400 pp. Freeman, San Francisco, 1980. \$16.50

This book provides an approach to the teaching of mathematics that seems novel and interesting. After recreational puzzles, problems and games are presented as challenges to problem solving, mathematical techniques for dealing with those of a particular type are developed. The authors say in their preface that students have been enthusiastic and have profited by learning to think critically and logically. There is very little of formal mathematical proofs, the emphasis being on the statement and application of mathematical propositions. The topics treated include symbolic logic; algebra; number theory, including prime numbers and factorization; congruence; diophantine equations; number bases and positional notation; networks and graph theory. There are many interesting puzzles and problems, collected from a great variety of sources. Sample problems are solved in each chapter, and hints and answers for many of the problems are given at the end of the

> Hugh C. Wolfe Tenafly, N.J.

Pioneers of Science: Nobel Prize Winners in Physics

Robert L. Weber

272 pp. Institute of Physics, London, 1980. \$23.00 (available to members of AIP Societies from Marketing Services, AIP, 335 E. 45 St. New York, N.Y. 10017 for \$18.40 prepaid to Heyden & Sons)

In his preface, Weber quotes I. I. Rabi on the physicist's life: "The stage on which he played his role was the globe....He had no counterpart to the art critic, the music critic...to plague him. No one stood between him and his public because his public were his colleagues."

Here, with abundant cross references to the physicist's "public" are 114 short biographies that present an informal survey of the development of 20th century physics. The entries, written by a physicist to be understandable by the general public, note the family background, education, apprenticeship, and work habits that distinguished these men and women. Each biography describes in some detail the work for

which the award was given and its place in modern physics. Each one is illustrated with a drawing.

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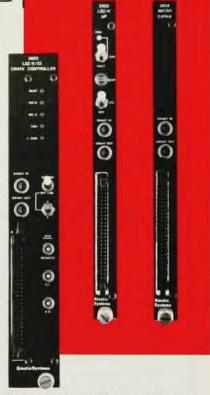
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