Developments in Mechanics, Volume 1. Conf. Proc. (Michigan State Univ., Sept. 1961). J. E. Lay and L. E. Malvern, eds. 622 pp. Plenum Press, Inc., New York, 1961. $19.50. *Reviewed by R. C. Alverson, Stanford Research Institute.*

THE papers which comprise this volume are reports of both theoretical and experimental investigations in the fields of solid and fluid mechanics. In all, there are thirty-one papers dealing with various topics in solid mechanics and eighteen papers on the mechanics of fluids. Most of the work reported on is of an applied rather than fundamental nature. The range of subject matter which is discussed in each of the two fields reflects the general topics which are of much current interest to those working in the field of applied mechanics.

The section on solid mechanics involves papers on static and dynamic stress problems, vibrations of plates, plastic collapse of beams and plates, equations of shell theory, yield strength of crystalline solids, and perforation of plates by projectiles. The section on fluid mechanics deals with problems in magnetohydrodynamics, heat transfer, chemical kinetics of high-speed flow and turbulent flow. Nearly every paper is a detailed experimental or theoretical analysis of a highly specialized problem. Because of the diverse nature of the topics discussed and the degree of specialization within each topic, the volume is likely to be of interest chiefly to those whose special interests lie in some branch of applied mechanics. Within this audience nearly everyone is likely to find at least one paper of personal interest.

Annual Review of Nuclear Science, Volume 12. Emilio Segrè, Gerhart Friedlander, Walter E. Meyerhof, eds. 633 pp. Annual Reviews, Inc., Palo Alto, Calif., 1962. $8.50. *Reviewed by Evans Hayward, National Bureau of Standards.*

WE now have the twelfth volume in this impressive series of review books. As in previous years, the make-up consists of ten to fifteen authoritative review papers of which twenty to thirty percent treat nuclear physics per se. The others are devoted to the important techniques of nuclear science or to areas in which nuclear physics is used as a tool to explore other fields.

In this particular volume there are four articles devoted to topics in nuclear physics: a much-needed review of inelastic electron scattering by Barber, one on polarization measurements on beta and gamma rays by Page, a comprehensive review of compound nucleus reactions by Bodansky, and a paper by Mössbauer on the effect that bears his name. My own interests are betrayed by the statement that these excellent reviews form the heart of the book for me. The other papers will have different fans. They include articles on solid-state detectors, preparation of thin films, reactor technology, and mass spectroscopy. The papers concerned with the applications of nuclear physics are devoted to the production by radiation of atomic displacements in