This is a new addition to the growing list of U. S. publications on integrated Physics Course for undergraduate students. However, there is a distinct departure from the conventional approach in Physics textbook writing. During the past two decades or so, most authors of undergraduate Physics textbooks have tended to emphasize the basic principles, rather than on details (which, unfortunately, is not so much the practice with Indian publication). The present volumes not only conform to this practice, but go further in trying to present the various physical principles from a unified point of view.

According to the authors, the traditional division of physics into subjects like mechanics, heat, sound etc. no longer has any justification. Instead they have followed "a logical and unified presentation, emphasizing the conservation laws, the concepts of fields and the atomic view of matter".

The first volume deals with Mechanics (Part 1) which includes the usual fundamental topics up to Dynamics of Rigid Bodies. This is followed by relativistic dynamics and a chapter on oscillatory motion. In all the chapters, the discussion of the fundamental principles is accompanied by illustrations from a diverse field of Physics as possible. Thus, while dealing with the dynamics of a particle such topics as the momentum conservation in the collision between an e-particle and a proton, terminal velocity attained in falling through a viscous medium (useful in analyzing Millikan's oil drop experiment), of the scattering of a particle under the action of a central field, are discussed. Also in the chapter on the dynamics of a system of particles, the basic concepts of the kinetic theory of gases are introduced by way of illustrating a many particle system. These are few of the many attempts made by the authors throughout the book in emphasizing the applicability of the fundamental laws of nature in widely diverse fields of Physics.

In Part 2, after deducing the differential equation of wave motion, different types of wave motion such as elastic waves in solid transverse waves in strings, surface waves on liquids, pressure in gases and finally electromagnetic waves are separately discussed. Much of the material usually covered under the headings of acoustics and optics are also included.

The last chapter in Part 3, dealing with Transport Phenomena, the inclusion of which at this stage can probably be justified only by reference to the topics intended to be discussed in next volume which is not yet published.

The last chapter is on Transport Phenomena, the inclusion of which at this stage is primarily justified only by reference to the topics intended to be discussed in the next volume which is not yet in publication.

As far as the Indian students are concerned, these two volumes will be very useful additions to their reference libraries, specially for undergraduate honors students. They do however cover the entire syllabus of the undergraduate curriculum of most Indian Universities, which unfortunately is not always the case with most textbooks.
The volumes are full of many highly interesting illustrative examples. Besides, large numbers of problems are included at the end of each chapter. An useful appendix of common mathematical relations and tables is included at the end of the first volume.

The authors have succeeded to a large extent in the difficult job of presenting a comprehensive and unified view of the physical world to the undergraduate students. Not only would the serious undergraduate students in this country derive considerable benefit from these volumes, but the teachers in undergraduate institutions will have the opportunity of looking at their subject from a considerably different and novel angle.

B. N. G.
Physics is a fundamental science which has a profound influence on all the other sciences. Physics essentially deals with the fundamental laws of nature. The progress being made at present in all branches of natural science is due, as a rule, to the introduction of physical concepts and techniques in them. This is besides the fact that a knowledge of physical sciences is essential for new industrial ventures lying at the root of technical progress. Physics is fast becoming an important element in the modern civilization. The book was published by Mir in 1989 and was translated from the Russian by R. S. Wadhwa. PHYS131 (Fundamental Physics I) at East Stroudsburg University and the perfor- of instruction. 2 Test section #1 used the same textbook as the control Cohen, R. A., 2002: The Fundamentals of College Physics, Vol.