

has not gone too far. Perhaps it was assumed that ingestion of nuclear information by the student would have occurred earlier; in which case a more sophisticated treatment, on the same level as the solid-state chapters, seems in order rather than the brief and descriptive discussion given. One feels a certain ingratitude in mentioning this point, since Sproull is a clear and thorough expositor whose book evidently represents a great deal of thought and teaching experience. It is not hard to foresee a future edition as the standard text in modern physics courses for engineering students.

Resonance in Organic Chemistry. By George Willard Wheland. 846 pp. John Wiley & Sons, Inc., New York, 1955. \$15.00. *Reviewed by A. S. Friedman, National Bureau of Standards.*

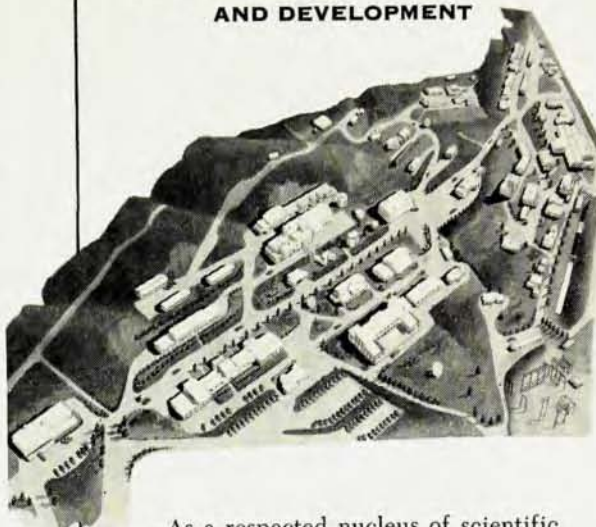
Resonance in Organic Chemistry is a greatly expanded edition of the author's earlier book, *The Theory of Resonance and its Application to Organic Chemistry*. The author considers the molecular orbital treatment and the resonance treatment as parallel rather than mutually exclusive approaches to the study of the structure of chemical bonds. From the point of view of the organic chemist, however, the resonance theory may be clearer. The major portion of the book is therefore devoted to a discussion of the resonance concept of molecular structure and its application to organic chemistry. There is, however, a long (150 pp.) concluding chapter which reviews the mathematical bases of both the valence bond and the molecular orbital methods. The appendix contains a tabulation of interatomic distances and bond angles for almost 1000 molecules.

Vibrations Mécaniques. Acoustique. By P. Fleury and J.-P. Mathieu. 322 pp. Editions Eyrolles, Paris, France, 1955. 3000 fr. *Reviewed by R. B. Lindsay, Brown University.*

This is the third volume of a contemplated series of eight by the present authors on general and experimental physics. The multi-volume type of general textbook by a single author or pair of authors is a more common phenomenon in continental Europe than in Britain or America. It has certain obvious advantages which are worthy of attention, two among them being a helpful uniformity of presentation and level of difficulty over a wide range of subject matter, and a comfortable expansiveness of treatment not possible in the highly condensed one-volume text. On the other hand, diversity in presentation often possesses great pedagogical value. Without entering into a detailed argument on this subject, it is at any rate a pleasure to report that the book under review is a substantial introduction to mechanical vibratory phenomena and acoustics. The level of difficulty is approximately that corresponding to junior courses in American colleges and universities.

In the preface the authors assert that their aim has been to present as concretely as possible the principal

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