

Continent? The point is not that the author is necessarily wrong, but that his failure to make explicit his logical strategy invites criticism—and deprives him of the discipline inherent in the writing of an exposition of his method.

In view, finally, of the comparatively undeveloped state of the literature on the professions, it is rather strange that the author and the publisher, Harvard University Press, have not provided the book's readers with a bibliography, not even with the usual polite bibliographic footnote in which one inters one's predecessors. Thus, it is possible for the common reader to finish this study without learning that Richard Shryock, among others, has written specifically on the medical profession in this period, that Sidney Mead ever wrote on the ministry, or that in the not distant past sociologists have been responsible for a substantial literature on the professions, both theoretical and descriptive. Talcott Parsons, Robert Merton, Everett Hughes, to cite only a few obvious examples, are not even mentioned; neither are studies of the professions in other countries during the first half of the 19th century.

Perhaps, however, my remarks concerning a lack of discipline should be charged not against our author, but against his own profession. It is almost incomprehensible that, in 1965, an able and ambitious young historian could have written a book on the professions without feeling it necessary to provide any explicit theoretical structure, without referring to the possible need to consider such concepts, without even a nod at the possibilities inherent in comparative studies. Perhaps Calhoun's confusion of focus and arbitrary organization are an index not to his own conceptual vagueness but to the values and training of his profession (and mine). For historians are in a period of real intellectual change; the more gifted and imaginative are dissatisfied with traditional academic models, but still unsure of new forms and values.

CHARLES ROSENBERG

*Department of History,
University of Pennsylvania*

Inorganic Chemistry

Inorganic Chemistry, vol. 1, *Principles and Non-Metals* (Oxford University Press, New York, 1965. 699 pp., \$8) by C. S. G. Phillips and R. J. P. Williams, differs markedly from previ-

ous textbooks on this subject. In the words of the authors, "inorganic chemistry is commonly presented as little more than a catalogue of facts. The purpose of this book is to suggest that it can also be a stimulating intellectual and experimental inquiry." I do not entirely agree with their first statement, but I am in complete agreement with their second. Both the factual and theoretical aspects of inorganic chemistry are extremely important and can be intellectually stimulating.

The authors are to be congratulated for having written a scholarly treatment of inorganic chemistry. The many figures that show a variety of different correlations of properties of elements and of compounds constitute the most novel and useful aspect of the book, in my opinion. For example, Fig. 3.7 is a plot of the bond dissociation energies of homonuclear diatomic molecules versus the number of valency electrons per atom. This plot, which I had not seen elsewhere, nicely shows bond energy maxima at one and at five valency electrons. Such a clear-cut illustration is most useful to students, particularly when it can be readily explained on the basis of current bonding theories.

Since the book does depart from tradition, I feel it may be helpful to list the chapter headings: "Wave mechanics"; "Atomic structures and the periodic table"; "Assemblies of like atoms"; "The bond model"; "The ionic model"; "The band model"; "Chemical equilibria"; "Solid structures: Non-stoichiometry and phase equilibria"; "Electrode potentials"; "Kinetics and mechanism"; "Hydrogen"; "The halogens"; "Oxygen and oxides"; "Oxyacids and hydroxides"; "Non-aqueous solutions"; "Sulfur and group VIB"; "Nitrogen to boron: The remaining non-metals"; and "Postscript to non-metals." Volume 2, on metals, will be published later.

The chapter on the band theory of bonding for continuous solids such as metals or salts is excellent; a consideration of this topic is not often included in textbooks of inorganic chemistry. Also very good are the discussions on wave mechanics, chemical equilibria, phase diagrams, and kinetics and mechanisms. The current trend seems to be to include more and more material of this type in textbooks of inorganic chemistry. What then is left for the full-year course in physical chemistry? In my opinion there is some

duplication here, and it should be avoided, particularly in view of the fact that most schools require only a one-quarter or one-semester course in inorganic chemistry.

In addition to having written an outstanding book, the authors have also included a very good set of questions at the end of each chapter. These questions vary from extremely difficult to fairly straightforward. I cannot answer several of them, and this may also be true of other instructors. It would be helpful to have answers for the more difficult questions.

The chapters that deal with the chemistry of the nonmetals also differ markedly from the usual treatment. For example, the chapter on the halogens contains 23 figures, most of which are not in other textbooks, showing various types of correlations. In this way the student gets a graphic illustration of the different trends in properties and behaviors of the halogens and their compounds.

The book is well written and well illustrated, and the printing and the paper are good; I strongly recommend it to both students and faculty. In our American universities, the book should serve as a textbook of inorganic chemistry for students who have had physical chemistry.

FRED BASOLO

*Department of Chemistry,
Northwestern University,
Evanston, Illinois*

How Big Is Big?

Hospitals, Doctors, and the Public Interest (Harvard University Press, Cambridge, Mass., 1965. 351 pp., \$8.50), edited by John H. Knowles, contains the 1963 Lowell Lectures, "The Hospital's Responsibility to the Community," which followed a similar series presented by Nathaniel W. Faxon (1948), then director of the Massachusetts General Hospital. The editor, who is the general director of the hospital, states that the volume is "intended for laymen, medical students, the medical profession, the political profession, and the experts of other disciplines in the hope that it will increase understanding and lead to considered and constructive action of all sides.

Better understanding of the hospital, its historical evolution, its present problems, and its obligatory role as a