

BOOK REVIEWS

SOSMAN (R. B.). *The phases of silica*. New Brunswick (Rutgers University Press), 1965, x+388 pp. Price: \$10.00.

Nearly forty years ago the author published the well-known monograph on 'The Properties of Silica'. In the intervening years knowledge of this important, ubiquitous substance has continued to grow; some measure of this growth is indicated by the increase in the number of recognizable, distinct phases of pure silica from seven to twenty-two. It is therefore not surprising that when Professor Sosman came to revise his original work he found that it would now be advisable to publish it in two volumes. The present book concerns itself with the description of the phases of silica and their inter-relations; the second volume will deal with the properties of silica in all its forms and their inter-relations.

'The Phases of Silica' is based on the first fourteen chapters of the original monograph, so that the form is essentially preserved; naturally the contents of the chapters have been revised in the light of modern literature, with the occasional interjection of unpublished work known to the author. A slightly disappointing fifteenth chapter on the SiO_2 - H_2O system is added, though it must be recognized that the presentation of more than an outline of this field and its ramifications would have led to a disproportionate emphasis in a book of this kind. Each of the other fourteen chapters attempts to give a coherent picture of some aspect of the silica phases, and usually starts from a brief description of the relevant fundamental principles; for example, the chapter on the symmetry modifications of silica begins with a short discussion of symmetry classes in general before turning to that of the silica phases. This approach may be justified by considering the wide range of disciplines from which potential readers may be drawn.

In general, the text is well-presented in a characteristic and expansive style; it is well supplemented by detailed references for each chapter and many text figures. Professor Sosman has performed a valuable service in collecting much data scattered through the literature into this very readable book, which will no doubt in time come to enjoy the same reputation as his original monograph.

P. GAY

WYCKOFF (R. W. G.). *Crystal Structures*. Vol. 3. (2nd edn). New York, London, Sydney (Interscience Publishers), 1965, viii+981 pp. illus. Price: £10. 10s.