

of the British Clay Minerals Group. There is no index, but a useful glossary of terms. The book is well produced except for some slight difficulty with the spelling of author's names. R. W. NURSE

GILMAN (J. J.), editor. *The Art and Science of Growing Crystals*. London (Wiley), 1963. ix+493 pp. Price: 150s.

This book has contributions from thirty authors, in the United States and Britain, describing the growth of crystals from both the theoretical and practical points of view. Four sections embrace growth from the vapour and liquid states, by solidification and by recrystallization. After a theoretical review, each section describes in some detail the methods used in the growth of a large number of substances. It is clear from some of the theoretical articles that there are still large and important fields of crystal growth in which no detailed scientific explanations can yet be given. The descriptions of the methods of growing crystals are often a blend of science and art, beginning with a phase diagram to indicate the conditions under which the substance should form and ending with the various arts of persuasion that are still needed to make good crystals grow. There are interesting accounts of the preparation of materials of very high purity, some of which have less than 1 ppm of impurities. Many of the crystals described are grown for the electronics and related industries, and do not occur naturally. However, the processes and apparatus used are often applicable to minerals, as in the case of hydrothermal methods and growth from melts. There are interesting accounts of recent work on the formation and growth of diamond and ice. It would have been helpful if the indexes for substances and subjects had been a little more extensive. A. F. SEAGER