tions, but the Atomic Energy Commission has declassified a wealth of useful information; perhaps a more comprehensive bibliography would have been helpful.

The book is timely and should be of interest to newcomers to reactor design and to others who want a broad and general survey of the subject.

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Practical Medical Mycology. Edmund L. Keeney. Thomas, Springfield, Ill., 1955. 145 pp. Illus. $4.50.

The publishers do themselves little credit by decorating the jacket of this small volume with claims for an extensive coverage of the field of medical mycology. Keeney's book is essentially a handbook of the pathology and therapy of mycotic infections. As such, it should be useful to the clinician concerned with the treatment of diseases of fungal origin. For the mycologist or microbiologist interested in fungi of medical importance, it contains very little information.

Fourteen of the 16 chapters comprising *Practical Medical Mycology* contain charts describing the life-history, course of infection, related clinical findings, and something of the morphology and cultural characteristics of the fungus that causes the mycosis under discussion. The supporting texts give brief statements about the taxonomy of each fungus, a terse history of the recognition of its role in the etiology of the disease, and somewhat detailed considerations of the pathology and the treatment of the infection. Those portions devoted to treatment are compact, and their documentation accounts for the majority of recent references to be found in the bibliography of the book.

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Geography of the Northlands. George H. T. Kimble and Dorothy Good, Eds. Wiley, New York; Chapman & Hall, London, 1955. x + 534 pp. Illus. $10.50.

More than 25 years ago, The American Geographical Society of New York made a notable contribution to knowledge of the Arctic and Antarctic by publishing *The Geography of the Polar Regions* as No. 8 in its series of Special Publications. The volume reviewed here is No. 32 in that series and so, in a sense, provides an up-to-date compendium of the kinds of information that made the earlier volume so generally useful.

During the past quarter-century interest in the northern lands has increased enormously, and there is now a demand for accurate geographic information about them far beyond the comparatively limited circle familiar with the 1928 publication. For example, there are many colleges and universities offering courses in arctic subjects, and the military services include them in training programs. For these reasons *Geography of the Northlands* is apparently designed as a textbook for the college course, while also serving as a reference volume.

The list of contributors is impressive, most of them being associated in one way or another with McGill University, Montreal, or the Arctic Institute.

Following an editorial introduction, the 27 chapters fall into two groups—"Systematic studies" and "Regional studies." The former covers the arctic and subarctic region topic by topic, from physiography to politics and strategy. The chapters on the natural sciences are, in my opinion, more authoritative than those on the social sciences. The chapters on population and resources are particularly weak and betray the lack of geographical training of the authors.

Among the regional studies, several are outstanding, particularly those by J. Brian Bird on "Eastern Canada" and "Iceland" and that by Svenn Orvig on "Svalbard." The chapter on "Greenland" is woefully inadequate, and much of it is, in fact, invalidated by part of an earlier chapter on "The wealth of the northlands." Six chapters on as many regions of the Soviet Union by Bogdan Zaborski are an admirable contribution to our all too sparse knowledge of this extensive part of the northland.

From internal evidence, it appears that some parts of the volume were prepared several years before publication, and a number of maps have been made obsolete by the passage of time. A noteworthy example is a map of weather stations in the northlands, used to illustrate the concluding chapter. Although it is undated, it appears to have been prepared 7 or 8 years ago, before some of the far northern stations in Canada existed.

Despite the apparent long delays in publication, there are, nevertheless, a number of cases of editorial oversight, the most striking of them being the use of a photograph of a corner of a defunct marble quarry in northwest Greenland over a caption referring to the well-known cryolite mine at Ivigtut.

Geography of the Northlands is the only book available that covers comprehensively an area of rapidly increasing significance. If only for this reason, it deserves wide distribution, despite its rather high price. The editors should, however, take the earliest opportunity to reinforce the weaker chapters and to bring the whole of the text up to date.

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The Colloid Chemistry of Silica and Silicates. Ralph K. Iler. Cornell Univ. Press, Ithaca, N. Y., 1955. xii + 324 pp. Illus. $5.50.

The title of this book might seem restrictive at first glance, but one must recall that, although colloid chemistry is merely one branch of physical chemistry, it is a complex one. Furthermore, as the nine chapter headings suggest, the subjects discussed overlap or extend into other fundamental areas, such as biochemistry and plant physiology, with respect to the last chapter, and structural crystallography and the mineralogy of clays with respect to Chapter VII. Other chapters discuss the silica-water system, soluble silicates, silicic acids, their esters, colloidal silica, amorphous silica gels, and surface chemistry. Both author and subject indexes are included.

"Colloidal Silicates," Chapter VII, is a major one. Here an attempt is made to summarize much of what is known about silicate minerals, chiefly the clay minerals, without reference to many original works. In discussing the crystal chemistry and structure of montmorillonite, for example, the hypotheses of Hofmann, Endell, and Wilm, of Edelman and Favejee, and of McConnell are not mentioned directly. Several structural diagrams are taken from F. H. Norton's *Elements of Ceramics,* a book that suffers from similar deficiencies in the evaluation of recent mineralogic and crystallographic concepts. A minor blemish is the misspelling of Norrish's name.

This series of the Baker lectures, under the auspices of Cornell University, surely must have been a real stimulus to those who heard the lectures, if one can judge by the provocative information contained in the printed record. Brief, but frequent, mention of the practical application adds interest and gives the book a readability that is not often obtained in works of this type.

Iler has gone far beyond the conventional approaches of colloid chemistry and has discussed in nine chapters what might readily occupy as many large volumes. Graduate students should find inspiration here, but they should recognize that no scientific book can be considered as a final authority—particularly, not one on such rapidly advancing topics.

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