

do not aspire to follow all the mathematical arguments will none the less appreciate the numerous beautiful diagrams. Those who do so aspire will be interested in the extensive bibliography with which each chapter closes.

T. G. COWLING

BIORHEOLOGY

Flow Properties of Blood and other Biological Systems

Proceedings of an Informal Discussion convened jointly by the Faraday Society (Colloids and Biophysics Committee) and the British Society of Rheology, held at the University Laboratory of Physiology, Oxford, 23 and 24 September 1959. Edited by A. L. Copley and G. Stainsby. Pp. xviii + 446. (London and New York: Pergamon Press, 1960.) 75s. net.

THERE is a present fashion among publishers to produce books on specialized subjects from the transcripts of symposia under the general editorship of one or more well-known scientists. In support of this practice it may be contended that in this manner the reader is presented with an up-to-date view of the subject, charged with the authority of experts and at the minimum of financial outlay. It is debatable, though, whether this produces a good book. In one reviewer's opinion the essence of a good scientific book is that it shall be written in a consistent style of good English prose and shall develop the subject-matter in a concise and logical manner. The proceedings of a symposium are unlikely to satisfy these criteria, and one would have thought that those papers presenting original matter should be published in an appropriate journal; if publication of the whole proceedings is desirable then it might be as a supplement to an established journal, as is the practice of some of our leading societies. The demands made on the time of the conscientious scientist who tries by reading to keep himself informed of recent developments in his own or neighbouring spheres are already so great that his time at the bench is severely restricted, and any attempt to induce him to read unnecessary verbiage must be resisted. It is customary in presenting a paper to start with a preamble in which, *inter alia*, suitable compliments may be paid to other workers, and the general background from which the special problem emerged is discussed, sometimes at some length. Though this is appropriate in the conference room, much of the preamble becomes irrelevant or redundant when presented in a book. Moreover, when several papers bear on closely related topics, there may be considerable overlapping and repetition.

Having thus challenged the principles which governed the publication of *The Flow Properties of Blood*, one must fairly commend the publishers, the societies who sponsored the symposium and all those who contributed for presenting this very interesting subject. The book is not easy to read as it requires considerable knowledge of the language of medical science and of rheology, but one reader, at least, is grateful for having been obliged to make the effort.

In the first paper the lecturer set out to explain in simple language the basic rheological phenomena. In print this is only partly successful. At times one is conscious of the conflict between rigorous theory and popular exposition, and at others one misses the

atmosphere and the appurtenances of the lecture room. After this follow several interesting articles on different aspects of the flow of blood, and about as many on other biological systems as diverse as fish and milk. One paper is stated to have been received too late for the symposium; its disjointed summary style suggests hasty preparation and gives the impression of being submitted as an afterthought. It deals only with very old work (there are no references less than sixteen years old) and the editors might have been forgiven for omitting it.

The last eighty-eight pages are devoted to a description of the demonstrations and films which were part of the programme, and finally, to complete the record, there is a directory of the participants. Most of the demonstrations were of apparatus used in work described in the earlier parts of the book and there is a considerable number of cross-references and repetition. In more than one case the diagrams are in one part of the book and their descriptions more than a hundred pages away. It is a pity that the editors did not prevail on the authors to include the descriptions of their demonstrations in the text of their scientific papers. The descriptions of the films vary from brief synopses to a complete commentary. Without the film the synopsis is probably the more useful.

The book is well produced, as one expects from this house. The diagrams and illustrations have a commendably uniform appearance when one considers their diverse origins. It was a little surprising, however, to find that the editors had not insisted on uniformity in the symbol for viscosity.

J. H. PRENTICE

ARCTIC GEOLOGY

Geology of the Arctic

Proceedings of the First International Symposium on Arctic Geology held in Calgary, Alberta, January 11-13, 1960. Edited by Gilbert O. Raasch. Vol. 1: Pp. xv + 1-732. Vol. 2: Pp. vi + 733-1196. (Toronto: University of Toronto Press; London: Oxford University Press, 1961.) 204s. net the two volumes.

THE symposium, recorded in these two volumes of very diverse scientific papers, was organized during January 11-13, 1960, by members of the Alberta Society of Petroleum Geologists, a society the strength of which lies in the unprecedented concentration of geologists and geological activity in the province during the past ten years. Very competitive exploration for oil and natural-gas had spread by 1959 from the prairies into the Mackenzie basin and for more than economic reasons into the Arctic Islands. The Geological Survey of Canada, with its large air-borne 'Operation Franklin' in 1955 and with much subsequent and other work, had brought geological knowledge of the archipelago to a new level; in addition, the skilful and rapid handling of first publication of these Survey results has provided a very high standard for all other such institutions to follow and is greatly to the credit of its directors.

The organizers of the Calgary symposium were therefore justified in inviting contributions from geologists in all other nations known to be concerned in Arctic geological exploration.

The resulting first and larger volume contains 60 geological papers on the Soviet Arctic, Spitsbergen, Greenland, Canada, Alaska and the Arctic Ocean