

The Social Structure of Values

By Radhakamal Mukerjee. (Lucknow University Studies: Faculty of Arts.) Pp. xx+418. (London: Macmillan and Co., Ltd., n.d.) 18s. net.

IN this book, the author points out that sociologists have adopted two fundamentally different approaches to the problem of values. As a science, sociology "regards values on a par with language, technology and material culture"; in its philosophical phase it "presents an imaginative formulation of social relations and values, logically coherent". Prof. R. Mukerjee has devoted himself to the extension of the latter field of inquiry. For him, "a social science that as science must be relevant to action in its particular field (namely, man's behaviour and relationship to fellowmen), finds such behaviour and relationship defensible or worthy in so far as a fellow human being is treated as an end in himself in the ideal sense".

This line of argument will shock representatives of the 'objective' school of sociology, who are often so deeply immersed in 'pure' fact that they are unable to avoid what Prof. Mannheim calls a "bottomless relativism". But it is high time that the importance of values as motives is properly understood, and the present book is a most useful beginning in this regard. Prof. Mukerjee's conclusion is a disturbing one, for, as he points out, "Man's science, technology, and economics have established one world for all, and created the demand for one morality for all". It is, thus, the conflict between value-systems which is the most dangerous point of strain in contemporary social organization, and there seem to be no means of dealing with it through the social sciences if we are content to continue to study the mere relativity of values, and refrain from deeper analysis, the need for which is urged on us in the present book.

Fourth Empire Mining and Metallurgical Congress held in Great Britain, July 9th-23rd, 1949

Proceedings. Edited by F. Higham. Part 1. Pp. xx+552. Part 2. Pp. xx+553-1140. (London: Empire Mining and Metallurgical Congress, 1950.) n.p.

THESE two volumes, edited by Mr. F. Higham, contain the texts of the forty original papers read at the Fourth Empire Mining and Metallurgical Congress, together with reports of the formal proceedings, the discussions and three lectures. The titles of the seven sessions into which the conference was divided give an indication of its scope: mineral resources; modern methods of prospecting; physiological and psychological effects of heat and humidity on workers in deep mines and metallurgical works; petroleum; coal; present-day trends in mineral dressing; and metallurgy and metallurgical industries. The survey of the resources of metallic ores, non-metals and coal in the countries of the British Commonwealth is probably the best summary that has yet appeared; and though more might have been said about potential reserves, the conspectus is an impressive one. As great areas still remain to be prospected in detail for minerals, it was appropriate to follow with a discussion on prospecting techniques, including aerial photography, geological mapping and geophysical methods. The practices of beneficiation and of extraction metallurgy also received attention, the metals dealt with including gold, copper, nickel, lead, zinc, iron and magnesium. Nor was the human

side of the industries neglected. The two volumes give adequate expression to the vigour of the mining and metallurgical industries of the British Commonwealth. K. C. D.

Vacuum Manipulation of Volatile Compounds

A Laboratory Manual describing the Application of High Vacuum Technique in Experimental Chemistry. By Robert Thomas Sanderson. Pp. viii+162. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1948.) 18s. net.

THE avowed purpose of this book is to provide enough practical information to enable an investigator with an average background of experience to construct and operate a general-purpose high-vacuum apparatus for chemical research. The book has eleven chapters—with titles such as materials of construction and operation, glass-blowing, producing a high vacuum, low temperatures, etc.—and an appendix of thirty-three pages, of which twenty-six are taken up with a table of the vapour pressures of pure compounds at five fixed temperatures.

The attempt to cover many subjects has necessitated the careful selection of material; but numerous references are provided for further study. However, only one reference to low-temperature fractional distillation is provided, and the statement that "Further development in this field is much to be desired" is surprising in view of the considerable knowledge of this technique which is now available. The concluding chapter, entitled "Future Developments", is unusual, as the author has attempted here to set out the ideal properties of hypothetical substances which would render them particularly suitable for use in certain vacuum devices.

This book should be very useful to a worker who wishes to build high-vacuum apparatus and who has no contact with laboratories where such work is in progress. E. F. G. H.

Heat, Light and Sound

By Dr. F. Tyler. (General Physics, 1.) Pp. viii+399. (London: Edward Arnold and Co., 1951.) 8s. 6d.

THIS book is designed to cover examination requirements of middle forms in secondary schools, and also to include work suitable for first-year sixth-form pupils. The first of these aims has been achieved; but it is doubtful whether those in sixth forms will derive a great deal of benefit from it. The author has given the solid foundation of 'bread and butter' physics, with an occasional more appetizing titbit, and this no doubt will suit some pupils. But it is rather hard on those who require something more to stimulate interest and keep it alive, and it is disappointing that the application of physical principles to everyday life has not received greater attention. However, it is pleasing that a chapter on the technological applications of sound, including sound-recording and the acoustics of buildings, has been included.

Dr. F. Tyler is on very firm ground in his emphasis on experimental work as the basis on which the whole subject rests, and he has provided an index of practical work with a list of sixty experiments varying from very elementary to those of sixth-form standard; this is probably not intended to be a full course of experimental work. A large number of examination questions are included, some of which have been worked in the text.