

**Priests and People**

A Study in the Sociology of Religion. By Conor K. Ward. (Social Research Series.) Pp. xi+182. (Liverpool: Liverpool University Press, 1961.) 25s. net.

**T**HIS book is the fruit of fifteen months field work by a team of sociologists in a Roman Catholic parish in Liverpool. It provides, therefore, a very thorough examination of the life and activities of the parish and makes available much material which can be used in assessing the effectiveness of a parish in an urban setting. This is perhaps where the chief interest of the book lies for the general reader. For more than a thousand years the territorial parish with its church and resident clergy has been the normal centre of Christian life and in the past it developed into very much more than a centre for worship only. Around the parish church was collected the educational, social and sometimes political life of the area. But with the coming of the Industrial Revolution all this was changed and the parish ceased to be the centre it had been.

The question has been raised whether the system of territorial parishes is the most effective expression of Christian community in an industrial society. Ought the Church not to be training its man-power for specialist ministries, industrial chaplaincies, etc., rather than for parochial work? Such questions are constantly being argued and strong opinions are expressed. Dr. Ward's book makes it abundantly clear that more sociological research is a first essential for finding effective answers for these and other problems. It would be dangerous to make generalizations from this study of one parish. Few parishes will be as socially monochrome as this one was. Studies of other parishes would be useful to test how far the situation here described is typical. One suspects that the social cohesion of Liverpool with its history of religious intolerance might not be so true of parishes in other parts of Britain. Yet Dr. Ward has made one thing clear. Though changes must be made to adapt the parish more effectively to its urban environment, it will not be superseded in the foreseeable future. J. ROBINSON

**Handbuch der Astronautik, Lieferung 1-6**

Herausgegeben von Prof. Karl Schütte und Hans K. Kaiser. Band 1, Heft 1: Pp. 1-32. Band 1, Heft 2: Pp. 33-64. Band 1, Heft 3: Pp. 65-96. Band 1, Heft 4: Pp. 97-128. Band 1, Heft 5: Pp. 129-160. Band 1, Heft 6: Pp. 161-192. (Konstanz: Akademische Verlagsgesellschaft Athenaion, Dr. Albert Hachfeld, 1958 und 1960.) 1.50 dollars each part.

**T**HIS *Handbook of Astronautics* will consist of 4 volumes, each made up of about 12 sections, the individual sections being issued separately and each containing 32 pages. Of the proposed 48 sections it is the first 6 which are the subjects of this review. There is no editorial introduction to explain the aims or scope of the *Handbook*, but the intention appears to be to cover the whole subject of astronautics, from the details of rocket engines to the niceties of space law, in a series of articles of about 20 pages each, which begin from first principles and presumably in later issues will go into the subjects more fully. The issues under review contain  $8\frac{1}{2}$  articles. Willy Ley writes on the history of the idea of space flight; W. Schaub on "Gravity and Its Conquest", dealing

with the fundamental dynamics; J. C. Cooper on "Flight-space Law"; and A. J. Zaehring on solid-propellant rockets. H. Stümke describes how to calculate the flight performance of unmanned rockets in considerable detail, S. J. Smith and G. P. Sutton review heat-transfer problems in liquid-propellant rocket motors, R. P. Haviland outlines the applications of satellite vehicles, and J. Eugster investigates the dangers to space travellers from cosmic rays and other radiations. Finally W. Alvermann and W. Lohse begin to discuss the theory of rocket engines, but suffer a premature cut-off in mid-sentence. These articles form sound and useful introductions to their subjects, and the *Handbook* as a whole promises to be valuable as a work of reference and for teaching purposes, though it remains to be seen whether the choice of subjects will be well balanced. The book follows the unsatisfactory dual-language convention, with about half the articles in English and half in German. Since most readers are not equally fluent in both languages, the value of the book is, for them, halved. The separate sections have attractive paper covers, but are presumably intended to be bound together, since they are apt to finish in mid-sentence; so the total cost of the 1,500-page *Handbook* will be 72 dollars plus binding costs. D. G. KING-HELE

**A Statistical Model for Chemists**

By Edward L. Bauer. Pp. x+156. (New York: Academic Press, Inc.; London: Academic Press, Inc. (London), Ltd., 1960.) 4.75 dollars.

**T**HE author in his preface describes this book as "a manual for the working chemist" and no more exact definition of this excellent little handbook could possibly be given. Shorn of all complicated mathematical functions and lucid in its approach, this volume supplies the chemist with typical examples taken from ordinary laboratory data, and indicates those benefits relating to economy, accuracy and interpretation which can accrue from applications of the statistical method.

The relation of the Gaussian normal distribution curve to the 'Student's *t*' concept of Gosset is clearly described, the latter function being of most general use to the chemist, who is usually concerned with the averages of small sample results.

Conventional statistical terms such as precision, accuracy, average deviation, variance, standard deviation, etc., are all concisely defined. Fixed, random and mixed models of the analysis of variance technique are illustrated by reference to three chemists carrying out certain analytical observations. Most of the tests of significance used in the book are based on the analysis of variance method, but attention is directed to the simplifications resulting from the use of range rather than variance in the calculations. Chapter 6 contains an interesting exposition of regression analysis involving correlated variables, and is illustrated by the effects of unknown 'blank' titres, etc., in quantitative analyses. Theories of sampling, control of routine analyses and factorial experimentation are all given fairly full treatment.

The volume ends with a collection of useful statistical tables, for example, for use with *F* and *t* functions, computation of confidence limits, etc.

This book should prove a most useful elementary introduction to the amateur statistician, particularly in the chemical field. D. T. LEWIS