

Societas Scientiarum Fennica

Commentationes Humanarum Litterarum, XXXIV, 1: Muslim Death and Burial: Arab Customs and Traditions, Studies in a Village in Jordan. By Dr. Hilma Granqvist. Pp. 287. (Helsinki: Societas Scientiarum Fennica, 1965.) 14.30 F. Marks.

ARAB customs in connexion with death and burial is the third work of a trilogy by Dr. Hilma Granqvist. The other volumes have dealt with *Marriage Conditions in a Palestinian Village* and *Childhood Among the Arabs*. It is important that the folklore connected with these matters should be collected now before it is too late. The unchanging East is changing rapidly and the old customs and rituals are being forgotten.

Muslim Death and Burial is divided into three sections: (1) mortality, death, burial, after the burial, and unnatural deaths; (2) burial and mourning; (3) songs at death and burial. Dr. Granqvist lived for various periods in Palestine, especially at Artas, a village to the south of Bethlehem, and there made friends with the people and gradually collected the ancient folklore from them. While the book is full of stories and customs, it lacks any connective thread. However, to collect and preserve the folklore has been Dr. Granqvist's purpose, and in this she has succeeded.

Perhaps one or two examples will illustrate the matter. From the Earth is obtained the dust of which man is created. But it is only a loan from the Earth and repayment must be made at the place whence came the dust. Difficulties thus arise when a man dies far away from where he was born. As a man is one of a family, his relations must see that his dust is duly collected and returned. Again, a woman who has lived for a long time in a far-away village, having come there perhaps as a stranger to many, may die in a far country. This is explained by the saying, "Her dust drew her"—implying that somehow or other the dust from which she was originally made must have come from this place. Again, a doctor cannot treat a woman until a formula has been pronounced which makes her into his sister. For if the man sees merely up to her knees sin has been committed. If she is his sister this does not matter.

The account of a burial is particularly interesting. No unclean woman must take part; indeed, everyone at the burial must be ritually clean. Those who have to touch the body must have made their ablutions before the prayer over the deceased is given. When a dervish goes into seclusion he takes with him seven barley loaves containing bran, water in a dark blue Gaza jar, and a rattle of dates. This is because the demon fears a jar of this sort and demons never eat bran. They also fear a white cock with ten toes.

The foregoing short extracts will give an idea as to what the work is about. One can only be thankful that someone has collected these customs and written them up before it is too late.

M. C. BURKITT

Physikalische Begriffe in der Klinischen Biochemie

Von Dr. Hans Koblet. Pp. xii + 274. (Stuttgart: Georg Thieme Verlag, 1964.) 30 D.M.

MEDICAL students are on the whole notable for their aversion to anything faintly mathematical. Yet all lines of research require mathematics as a scientific tool and medical science is no exception, and *Physikalische Begriffe in der Klinischen Biochemie* would scarcely have been written had Dr. Koblet not felt that the medical research worker needed some special help to overcome his difficulties.

The first part of the book deals with basic principles, the definition of a molecule, of specific weight and density, principles of solutions, titrations, law of mass action and chemical equilibrium. Other parts deal with acids and bases and the laws of thermodynamics. Particular attention is directed to enzyme kinetics and the calculation

of the Michaelis constant of enzymes. Attention is also given to pools and turnover rates, to diffusion and the connexion between clearance and elimination constants in the blood stream. There is a mathematical appendix in which briefly but very clearly differential calculus and integrals are explained. No one can protect the medical research worker from the hard work which is required if he is to make up for omissions of his student days, but this book will help him to fill some of the gaps because everything is derived from first principles and no previous knowledge is expected.

H. LEHMANN

Annual Review of Nuclear Sciences

Vol. 14. Edited by Emilio Segre. Pp. vii + 510. (Palo Alto, California: Annual Reviews, Inc., 1964.) 8.50 dollars.

THE volume under review consists, as is usual in this series, of a large number of articles on a wide variety of topics. Ten articles are devoted to nuclear and particle physics, and to their associated experimental techniques. Two articles discuss "Breeder Reactors" and "Modern Techniques in Reactor Design", one the "Chemistry of the Actinide Elements" and one the "Quantitation of Cellular Radiobiological Responses". This volume therefore follows its predecessors in its rather curious mixture of contents.

The nuclear physics articles are concerned with "Alpha Decay", "Electromagnetic Moments of Excited Nuclear States", "Recent Progress in the Theory of Nuclear Matter" and "Nucleon-Two Nucleon Reactions above 100 MeV". The first of these concentrates on nuclei near lead and those heavier than thorium, with particular reference to calculations based on nuclear shell models. The article on "Electromagnetic Moments" is the longest in the volume and aims to be a complete review. That on "Nucleon-Two Nucleon Processes" summarizes in rather gloomy fashion the present state of our phenomenology and understanding and makes a number of useful suggestions for further work.

Short articles on "Spark Chambers", "Dynamic Orientation of Nuclei" and "Data Systems for Multiparameter Analysis" are well written as introductions to their respective subjects. That on "Data Analysis in Particle Physics", however, is aimed at the experimentalist who, though already adept at the manipulation of his data, has little or no formal training in probability.

The article on the "Structure of the Proton" is written from the experimentalist's point of view. Though directed at the expert, much of it can be read with profit by the tyro. That on "Symmetries among the strongly interacting Particles" appears to me to be strictly for the highbrows.

The fraction of nuclear and particle physics articles in this volume is close to the five-year average for this *Review*. One must therefore wonder what is the virtue in the editorial board's eyes of a policy of including regular articles on such topics as chemistry, reactors, biology, etc. They cannot serve as a means of broadening the nuclear physicists' interests, for they are written on too high a plane and surely are quite likely to be missed by the people most likely to benefit from them.

B. ROSE

Yearbook of Astronomy, 1965

Edited by Patrick Moore. Pp. vi + 203. (London: Eyre and Spottiswoode (Publishers), Ltd., 1964.) 25s. net.

THE *Yearbook of Astronomy* continues its well-established system of providing month-by-month information about the night sky. Some of the articles are rather interesting and one of the most pleasant is that of James Muir, "A Cycle of Clusters and Nebulae", which could be sub-titled "star gazing for pleasure". However, there seems to be a decline in the quality of the articles generally which it is hoped will be corrected when the next *Yearbook* is produced.

D. McNALLY