

stimulating suggestions are made concerning solutions of problems in inorganic chemistry.

The author's style is concise and to the point; consequently, some points lack the clarity that is often so desirable for readers who are not advanced students of the subject. However, the references not only to original articles and review articles, but also to texts at various levels outline the task for the reader who wishes to pursue the subject.

Increasing emphasis on inorganic chemistry assures this timely volume of a welcome in the libraries of inorganic chemists, spectroscopists, and solid state scientists, but to realize maximum benefit from the book, readers should have some familiarity with group theory, molecular orbital theory, and ligand field theory.

WALTER S. KOSKI

Department of Chemistry,
Johns Hopkins University

Chemical Laboratories

Laboratory Planning. Harry F. Lewis, Ed. Reinhold, New York; Chapman and Hall, London, 1962. xiii + 522 pp. Illus. \$20.

Laboratory Organization and Administration. K. Guy. Macmillan, London; St. Martin's, New York, 1962. xiv + 386 pp. Illus. \$12.

The book edited by Harry Lewis deals almost entirely with laboratory planning, construction, and design; Lewis included the expertise of nearly 30 specialists on such subjects as the selection of sites, the materials of construction, utilities, and furniture (for both office and laboratory). Of particular value is a consensus on the most desirable layouts for laboratory and office, which is based on a survey of more than 100 modern industrial and academic laboratories.

A special section is devoted to safety, and even such specialized facilities as high pressure and radioisotope laboratories are described. Laboratories for various academic functions, including teaching and research, are separately discussed. A recently completed chemical engineering building, for which the plans were based on an exhaustive analysis of many industrial and academic research facilities, is described in detail. Among the many minutiae are tabulations of the amount of office space (the number of square feet), al-

lotted to the average chemist and chemical engineer in industrial and academic institutions.

This book should prove to be indispensable to both administrative and technical personnel who are responsible for planning new construction or for planning the modification of existing facilities; it should also be most useful to the scientist and engineer in their communication with the architect and constructor.

One problem in current design that remains unresolved in this book is the necessity for anticipating changes that will occur with time in the function of laboratories. For example, in instructional chemical engineering laboratories, the vogue for large-scale industrial equipment (for both research and teaching) is waning and may disappear in the next decade; thus, the whole complexion of the designing of facilities may change markedly. The entire topic of flexibility is barely touched upon, but it must play an extremely important role in effective planning.

Guy's *Laboratory Organization and Administration*, something of a compendium for the laboratory technician or for the person who directs the chemistry or chemical engineering laboratory, runs the gamut from laboratory lighting (where the theory of illumination is dispensed with in one page) to running a stockroom and a movie projector. Many handy bits of information obtained from firsthand experience are included. Because the coverage is wide, the treatment necessarily tends to be superficial. However, a guide for further study of each subject is provided in the ample bibliography provided with each chapter.

DAVID M. MASON

Chemical Engineering Department,
Stanford University

Avifauna of Asia

A Synopsis of the Birds of India and Pakistan, Together with Those of Nepal, Sikkim, Bhutan, and Ceylon. Sidney Dillon Ripley II. Bombay Natural History Society, Madras, India, 1961. xxxvi + 702 pp. Rs. 25.

The Indian subcontinent's very rich avifauna is comprised of more than 2000 species and subspecies. Potential investigators need an accurate, up-to-date tabulation of such a large segment of the world's ornithology, and in this case,

the need for review and tabulation was particularly urgent, since more than three decades have elapsed since publication of the last comprehensive list (E. C. Stuart Baker's list). Not only has our knowledge increased greatly with respect to the distribution, occurrence, and relationships of Indian birds, but numerous changes have been made in taxonomic approaches and in the importance attached to much related data. Thus, there was a real need for reappraisal and a new listing of the birds of this vast portion of Asia.

Ripley's book is based on long and extensive study and experience, both in the field and in museums, and it gives every promise of meeting the need most adequately. It seems safe to predict that all who study the birds of southern Asia will use his book as their base of departure, and it also seems safe to predict that they will find that the book is a sound, reliable summation of the subject.

No book dealing with so vast a number of birds can possibly agree in all details with other recent technical treatises. Thus, to single out but one example, Ripley considers *Estrilda* and *Lonchura* as members of the Ploceidae, although other recent works have erected the family Estrildidae for them and their close relatives. In this matter, I agree with Ripley.

In addition to its digest of our current knowledge of this great fauna, this book will also be useful in clarifying the maze of name changes that were made when the Indian States reorganized in 1956. The maps afford a clear presentation of these complicated geographic alterations.

HERBERT FRIEDMANN

Los Angeles County Museum,
Los Angeles, California

Notes

Dermatology

Ecce Sweat Glands and Eccrine Sweating (Pergamon, London, 1962. 266 pp. \$10), edited by William Montagna, Richard A. Ellis, and Alene F. Silver, is the third volume in the series *Advances in Biology of Skin*, a series that provides up-to-date information on the form and function of the human skin and its appendages. It is also the proceedings of a symposium on the biology of the skin, which was held at Brown University. The work at the