The Heritage of Copernicus: Theories "Pleasing to the Mind". (The Copernican Volume of the National Academy of Sciences.) Edited by Jerzy Neyman. Pp. 542. (MIT Press: Cambridge, Massachusetts, and London, 1974.) n.p.

THIS book is not about Copernicus, nor about the postulated revolution to which he has given his name. Rather, it is a collection of 24 essays, by various hands, dealing with various other postulated 'Copernican' or 'Quasi-Copernican' 'revolutions' in astronomy, cosmology, biology, chemistry, physics, mathematics, probability theory and technology. The book is intended for the general reader, who will need to have a rather large technical vocabulary, or access to a rather large and up-to-date dictionary. None of the contributors seems to be a professional historian of science.

Many of the 'revolutions' described are merely good pieces of traditional science—such as Shapley's work on our Galaxy—and almost all the references to Copernicus' own work show a degree of incomprehension that makes the book highly ambiguous as a tribute.

The most interesting essays are those which pay least attention to Copernicus or to 'revolutions': one by Geoffrey and Margaret Burbidge on some of the problems facing modern cosmological theories, and one by Stanley L. Miller on "The First Laboratory Synthesis of Organic Compounds under Primitive Earth Conditions". **J. V. Field**

The Laue Method. By Jose Luis Amoros, Martin J. Buerger and Marisa Canut de Amoros. Pp. xi+375. (Academic: New York and London, March 1975.) $37.00; £17.75.

THE Laue technique, although the oldest used by X-ray diffractionists, was early superseded in many areas of structure analysis by methods based on monochromatic radiation and moving crystals. But it has remained a useful technique in metallurgy and crystal physics, especially, though no thorough presentation of its potentialities has appeared for about 40 years. This book aims to fill the gap.

Chapter 1 is historical, chapters 2–8 are written especially for the numerous users who have had no formal training in crystallography, and chapters 9–13 are aimed at the specialist. Structure analysts who normally only take Laue photographs by accident will find this book well worth reading, partly for the clarity of its presentation, but also because it presents some fresh and some neglected ideas. The novel suggestion for the use of the method in crystallochemical analysis seem to me to be rather too optimistic, but the discussion of the idea that cylindrical Laue photographs can be used to determine the symmetry and orientation of an arbitrarily set crystal will well repay study. So too will the sections which discuss the methods used in the study of the diffuse scattering which results from thermal motion, disorder or crystal imperfections.

The last chapter purports to present a new method of interpreting the photographs; I can remember it being used, however, for teaching the topic at a summer school in 1947 and can attest to its utility. **D. Rogers**

Books brief

Design Theory of Fluidic Components. By Joseph M. Kirshner and Silas Katz. Pp. xi+479. (Academic: New York and London, January 1975.) $45.00; £21.60.

AT present the list of books concerned with the relatively new technology of fluidics is quite short. Kirshner and Katz have made a valuable addition to the list. The initial chapters about the properties of fluid filled transmission lines and jet flows are particularly good and the bibliographies given after each chapter are extensive and well up to date. The authors have rightly restricted their attention to devices with non-moving parts and devote a complete chapter to each main type and their performance characteristics (these include the impact modulator, the vortex triode, the beam deflection amplifier, the bistable switch and the transition NOR). The appendices contain data on air filled transmission lines and also computer programs for calculating the response of such lines to various inputs. These will be very useful to system designers. Likewise, newcomers and students will find the list of problems following most chapters helpful, though for some reason the answers are not given. **Terry Hughes**

Mycotoxins. Edited by I. F. H. Purchase. Pp. xiii+443. (Elsevier Scientific: Amsterdam, Oxford and New York, 1974.) Dfl.115; $44.25.

THE discovery of aflatoxin 15 years ago attracted the interest of many scientists to the field of the mycotoxins. It was indeed fortunate as previously very little had been known of the chemistry and mode of action of the mycotoxins in spite of numerous ancient descriptions of the massive poisonings of people and domestic animals by these fungal metabolites.

This book, addressed primarily to investigators and students, contains ample information on different aspects of studies on mycotoxins. Contributors have not followed precisely unified criteria in their presentations and some chapters are treated from widely different points of view. Furthermore, there are four chapters concerned with trichothecene mycotoxins, which results in some overlapping in the information on these compounds.

The authors have been chosen well. Most of them are leading authorities in the subjects which they write about, and the coverage is very good although there are few data dating from later than the end of 1972.

The presentation and typography of the book are excellent.

This volume should be useful not only to mycologists and scientists interested in mycotoxins but also to pathologists and experts in bromathology and toxicology. The book might be very encouraging to investigators interested in the mode of action of mycotoxins, since little work has been done on this aspect of these compounds. **David Vazquez**

Handbook of Genetics. Vol. 1: *Bacteria, Bacteriophages and Fungi*. Edited by Robert G. King. Pp. xvi+676. (Plenum: New York and London, 1974.) $44.50.

THIS book, the first in a series, aims to review organisms which have been extensively used by geneticists. It is an excellent collection of review articles interspersed with techniques, gene symbols and chromosome maps for selected bacteria, bacteriophages and fungi. The introductory article on a classification and evolutionary scheme for all organisms, although interesting and relevant to the series as a whole, seems out of place as it makes no reference to techniques such as %G+C and numerical taxonomy. Most of the articles are of a high standard and contain a wealth of technical and background material. The total omission, however, of any reference to the extensive genetical work on *Coprinus lagopus* in an article entitled '*Coprinus*' is difficult to understand but this is an isolated case and the rest of the material is well balanced. The usefulness of the indices could have been improved by giving textual pages rather than bibliographical pages in the author index and by greater cross referencing in the subject index.

In spite of these relatively minor criticims and the high price, this book should become a basic reference work for research workers and teachers in microbial genetics. **B. W. Bainbridge**