are recommended. Among the possible components of home-made models are such friendly objects as curtain rods, 'poppet' beads, babies' rattles, and pipe cleaners!

A very useful appendix lists over seventy suppliers of models and model-building materials, although as it happens, one that advertises regularly in a well-known mineralogical journal is not among them. The author has been wise in giving the reader an idea of prices not in absolute inflation-prone terms but on a coarse scale of cheap–moderately cheap–moderately expensive–expensive. References and bibliography are extensive (but without titles) and range from short notes on particular model-making techniques, through papers on specific applications in teaching or research, to philosophical discussions on the concept of what is a model.

Many model users may think they already know enough about them for their needs, but I am sure that most will find additional useful information in this book. The price, £9 for 200 pages, on the Walton scale, must be at least 'moderately expensive', but this book should find a place on the laboratory shelf as well as in the libraries.

J. ZUSSMAN

Kimberley (M. M.), editor. *Uranium Deposits: Their Mineralogy and Origin.* Toronto (Mineralogical Association of Canada), 1978. 520 pp., 125 figs. Price $12.00.

This volume is the handbook produced to accompany the most recent of the Mineralogical Association of Canada's short courses. Held in Toronto in October 1978, this course obviously reflects the resurgence of interest and activity in the field of uranium exploration and geology in the present decade. With this in mind, the need for an up-to-date text on uranium geology is becoming increasingly apparent and this handbook will be welcomed as a contribution towards filling that gap.

In following the normal format for these course-books, the volume presents a compilation of twenty-one articles by eighteen contributing authors [MA 79-1060], mainly from Canada. The subject-matter is grouped in four main sections: Uranium Geochemistry, Uranium Mineralogy, Classification and Description of Selected Deposits, Roll-type and Stratiform Deposits and Deposits in northern Saskatchewan. As is to be expected from a multi-authored work, the content and style of contributions varies considerably and there are some areas of overlap and duplication. In general, broad-based review articles on all the main aspects are complemented with papers on specific topics or areas. An eighteen-page glossary concludes the book.

To some extent, some of the broader review articles suffer somewhat in comparison with the many excellent publications arising from symposia sponsored by the International Atomic Energy Agency and more experienced uranium geologists may find some treatments rather superficial. For example, it is felt that in view of the dominant contribution to global low-grade reserves, sandstone-type deposits might have been accorded more attention. However, as is indicated in the editorial, comprehensive coverage of world-wide uranium deposits is not pretended and perhaps one of the strengths of the book is that at least some information is given on all the important world occurrences and the geochemical and mineralogical factors relevant to their formation.

Particularly heartening to the mineralogist is the acknowledgement of the important role of mineralogy and the more specialized approach and techniques required in studies of uranium paragenesis. The complexity of the diverse modes of formation, the exceedingly high number of secondary uranium minerals, and the identification procedures necessary are covered in review articles by Steacy and Kaiman and by Morton. Also the value of a multi-technique mineralogical study for the characterization of uranium deposits is demonstrated well in reference to occurrences in Saskatchewan by Rimsaite.

It is to be regretted that this otherwise well-produced book is marred by numerous errors in the text, not all of which can be attributed to printing, and some of which may be confusing to the undergraduate/post-graduate readers for whom the volume in primarily intended. Nevertheless, the rapid publication after completion of the articles has resulted in a very up-to-date work, making it of considerable value to any worker in the field of uranium geology and at the exceptionally reasonable price of $12.00 it can be strongly recommended.

I. R. BASHAM