

A Color Atlas of Rocks and Minerals in Thin Section

edited by W. S. MacKenzie and A. E. Adams, published in 1994 by Wiley Halsted Press, ISBN 0-470-23338-9, 192 pages

Review by Christopher G. Kendall

This elegant book fits nicely in one's hand and is beautifully reproduced. It is full of clear and high quality color photographs: each photograph telling an important story. The book is intended for as an introductory text for students of earth science, geology, mineralogy and physical geography who need a text for the identification of a mineralogy of rocks and mineralogy under microscope. I imagine anybody who has to use microscope to look at minerals will find this useful reference text. I have found it always to be good to have extra photographic references to minerals that are sometimes are difficult to identify. Do not underestimate this book if you have an interest in mineral identification from thin section. It is a very nice text. While it is aimed at the introductory level students and as such is very carefully laid out, it may be helpful to all optical petrographers.

The book is broken down into five parts and includes sections on optical mineralogy, minerals, igneous rocks, and sedimentary rocks, metamorphic rocks. The initial part of the text concentrates on optical mineralogy describing such things as birefringence and cleavage, relief, colour and pleochroism, shape and habit of crystals, extinction angles, twinning and zoning. Next is a description of common minerals including olivine, orthopyroxene, and clinopyroxene, etc. Then is a section on igneous rocks which deals with such things as peridotite, olivine-rich basalt, basalt, alkali dolerites, and gabbro, etc. The section on sedimentary rocks deals with terrigenous clastic rocks, carbonate rocks, quartz arenite, various types of carbonate rocks, dolomites, volcanoclastic rocks, etc. The metamorphic rocks section deals with metamorphic facies, crenulation cleavage, corona texture, polymorphic reaction, mylonite, biotite hornfels, etc. The text has no referenced material. There is an index to most common minerals and/or rocks with a short description associated with each in the text. Often each rock or mineral description is accompanied by at least two or three photographs, usually one taken under plain polarized light and the other under crossed nicols. This is a great little book and MacKenzie and Adams should be congratulated on the quality of their product.