DEMANGE, M. A. 2012. *Mineralogy for Petrologists: Optics, Chemistry and Occurrences of Rock-Forming Minerals*. xvi + 201 pp. CRC Press. Price £49.99, US$79.95 (HB+CD). ISBN 9780415684217.
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Dr Michel Demange states that the aim of his book is 'to illustrate the most common rock forming minerals as they appear under the petrographic microscope and to facilitate their learning'. In this the author has varying degrees of success. The book might alternatively be described as 'a concise guide to optical mineralogy for . . .?'. At around 200 A5 pages it is certainly concise and condenses a lot of useful information, but I struggle to see who would really use it and what helps it stand out as a textbook in an already crowded field.

The book is divided into three parts. To begin, there is a very brief introduction to mineralogy/crystallography and mineral classification. This is followed by a section on the occurrence of minerals in which physical and chemical factors influencing mineral stability are described, largely as an introduction to metamorphic, igneous and sedimentary rocks. This is one of the more puzzling sections of the book, and one which highlights the obvious weakness of a text which has lofty aims and limited space. As expected, the second part is a short introduction to the optical properties of minerals and use of the petrographic microscope. The more logical structure adopted here pays off, although the depth to which different topics are covered varies considerably. This part of the book finishes with a short section on fluid and melt inclusions written by Jacques Touret. This is a useful addition, although brevity and style conspire to leave the reader wondering whether fluid inclusion studies are best left to 'a specialist' rather than inspiring further study.

The final two thirds of the book present a systematic mineralogy of the most important rock forming minerals. The classification adopted is different from other texts, with minerals grouped as tectosilicates, ferro-magnesian minerals, aluminous minerals, calc-magnesian minerals, accessories, sedimentary minerals and finally ore minerals. This structure works well, as the emphasis here is on mineral occurrence and stability, summarized concisely with a number of useful phase and compositional diagrams, as benefiting a text book aimed at petrologists. Structure and chemistry of major mineral groups are covered to varying degrees, although often in a truncated manner, with optical properties largely summarized in a number of useful tables. The real gem, however, is the CD ROM which accompanies the book. This contains an interactive PDF file describing distinguishing features and optical properties of all minerals covered in the book, along with a large number of high quality photomicrographs. This guide would be useful as a student aid and for teaching lab classes. Useful appendices are limited to a description of how mineralogical formulae can be calculated.

Would I recommend this book? No. If discovered it as an old text in a second hand bookshop I would buy it, take it home and treasure its slight quirkiness. However, aside from the excellent CD ROM it feels dated and lacks purpose. It covers important material in too little depth and at too fast a pace to recommend it to students. It might have been a useful guide to those who have previously learnt optical mineralogy and petrology as a guide to mineral identification, but the price is too high to recommend it over other, more in-depth texts, and I'm not sure I would ever turn to it while DHZ sits on my shelf. An appallingly high number of typos and spelling mistakes and an abundance of bad English lay to rest any doubts I might have had over writing a negative review. A reader willing to part with nearly £50 deserves a lot better from a leading publisher.

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