

## Book review

### **Percutaneous Absorption**

Edited by Robert L. Bronaugh, Howard I. Maibach, Kent, ISBN 0-8247-19960-2.

This is the third edition of a very useful book that reviews developments in the dermal absorption of xenobiotics. There are a significant number of similarities between this and the previous editions but there are novel elements in this edition, which warrant purchase for those researchers interested in skin absorption. The editors are well established in the field, which is perhaps why they have contributed to 60% of the chapters. The excellent, but highly mathematical, first chapter on modelling should not put off the casual reader.

The book is divided broadly into three areas, mechanisms; methodology; drugs and cosmetic absorption. The first of these considers a number of issues including metabolism and toxicological implications of dermal absorption. It is surprising that there has not been a recent update on the routes of permeation, as suggested by the picture on the front cover of the book. Within the methodology section the chapters cover various aspects of in vitro and in vivo approaches with more emphasis being placed on in vivo techniques. Release from topical formulations is considered but developments in the measurement of

in vitro absorption are not given prominence. Issues surrounding targeting to various regions of the skin, for example, the hair follicle are described. The final area contains interesting chapters on a variety of subjects. Physical means of delivering agents transdermally are described. Problems associated with delivery through the nail plate are reviewed. Specific chemical types are also considered, e.g. fragrances, hair dyes, alpha hydroxy acids, nitrosamines, and sunscreens. Safety issues are also addressed with particular emphasis on cosmetics.

There is a vast amount of information in this book and overall it does serve as a good reference text for the skin absorption of xenobiotics. It does not, however, cover all aspects of the subject and more emphasis could have been given to subjects such as the route of penetration, non invasive monitoring of skin absorption, automated in vitro skin permeation determination.

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