

Book Review

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**Nanobiotechnology II: more concepts
and applications**

Wiley-VCH, 2007,
459 pp; price £100.00/€150.00
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Nanobiotechnology is a huge subject area spanning many different scientific disciplines. The excitement of nanobiotechnology lies with the ability of biological systems to self-assemble and the promise that biology may provide the best examples of how to address any specific problem. Any overview of the subject will always suffer the problem associated with all cross-disciplinary sciences—that of clear communication of the science to a wide audience.

This book consists of a series of mini-reviews written by renowned experts in their own fields of research. As such this book is not for the faint-hearted and contains both complex chemistry and physics, with enough mathematical equations to worry any lay reader.

However, the subjects chosen for the chapters are both widespread across this field of research and of interest to a wide audience.

The book is divided into four sections covering Self Assembly, Nanostructures for Analytics and also for Medicine and Nanomotors, and within each of the first three sections there is a wide range of detailed information. Each chapter is divided into Introduction, some form of methodology and/or results and then an Outlook section. In many of the chapters it is the Outlook section that is most readable and perhaps of most immediate interest. The Introduction sections are all well written and provide a substantial list of references in bibliographies. The range of subjects covered by the book is extensive and varied and there is no doubt the book provides sufficient detailed background information of nanobiotechnology. With sufficient detail presented to interest the researcher and yet sufficient illustrations and background material for the more casual reader, the book is undoubtedly a useful reference source. However, I was

disappointed by the final section of this book, which is called Nanomotors, yet has only two chapters, one on Biological Nanomotors and one describing Biologically Inspired Nanodevices. In particular, the review of biological nanomotors is quite restricted in its content and concentrates on linear tracking motors such as kinesin and myosin rather than providing a broad overview of the many and varied types of molecular motors available.

In summary, this book is an excellent source of background information across a very wide range of subjects relevant to nanobiotechnology. It is a mixture of highly detailed science and clear outlooks on the subjects covered, but would have benefited from a more detailed section on molecular motors.

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