

Book reviews

Ralph S. Greco, Fritz B. Prinz and R. Lane Smith, editors.
Nanoscale Technology in Biological Systems (2005, CRC Press, Boca Raton, USA) 512 pages, \$ 159,95, ISBN: 0-8493-1940-4

Nanotechnology is gaining more and more importance and acceptance in the Pharmaceutical Sciences and especially in Pharmaceutics. The book “Nanoscale Technology in Biological Systems”, is of interest to those working in the general field of Pharmaceutics. However, since it is edited and written by surgeons, internists, and biomedical engineers with the focus on medical and engineering students it mainly concentrates on areas such as biomaterials, devices, transplants, sensors, tissue engineering, nanoprobes, and gives a very good overview about these fields. It also provides a good overview about related biological aspects such as cell structures, measurements in living cells, and host responses to implantable devices. The book contains 21 chapters on 469 pages plus 15 pages of index and is written by 38 authors and co-authors. However, this book is of no use for those interested in nanoscale drug delivery: Nanoparticles and liposomes are mentioned only in two chapters, “Nanobiotechnology” and “Nanotechnology and Cancer”, on a total of four pages, but the cited references are chosen very erratically and, with the exception of one very specialised review, do not refer to any further review articles.

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Diane Burgess, editor. Injectable Dispersed Systems. Formulation, Processing and Performance Drugs and Pharmaceutical Science vol. 149 (2005, Taylor & Francis, London) ISBN: 0-8493-3699-6, 652 pages, 186.90€

The series ‘Drugs and the Pharmaceutical Science’ continues to be a mainstay of pharmaceutical literature in research and development. This latest offering is a fine addition to the series and should serve as a current in-depth text for all scientists involved with parenterals. The first section concerns basic principals. Diane Burgess’s chapter on the physical

stability of dispersed systems is indeed very basic, but, I suppose, fitting to the aims of this book. The following chapter on biopharmaceutical principles of injectables is very qualitative, but does include a number of useful, illustrated examples. The chapter entitled ‘Characterization and Analysis of Dispersed Systems’ is certainly a useful summary of available techniques, but again rather superficial. The next chapter discusses in vitro and in vivo release kinetics. The description of the apparatus suitable for measuring such kinetics is admirable, but the mathematical handling is rather weak. Section 2 describes the various dosage forms that can be given parentally. Here we are offered separate chapters on suspensions, emulsions, liposomes, and microspheres. These are all very good general summaries, but do not expect a lot of scientific detail. The large Section 3 of this book offers individual case studies of product development. These examples are nano crystals, perfluorocarbon emulsions, liquid emulsions, pegylated liposomal doxorubicin, and injectable microspheres. These chapters are in general excellent and a mine of information about the industrial development of injectable dispersed systems. The book ends with section 4, which considers quality assurance and regulation. These two chapters contain just the usual stuff, rather dry but of course important.

This is a book of varied quality and scientific standard. Despite the weaknesses of Section 1, I would recommend purchase of this volume simply because of the numerous case studies elucidated in Section 3. So, do not expect too much, but there is a lot of interesting information about developed injectable dispersed dosage forms.

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A. Ritter, S. Reisman and B. Michniak, Biomedical Engineering Principles (2005, Taylor & Francis, London) 665 pp €103. ISBN 0-8247-9616-0

This book is evidently intended to serve as an introduction to the field of biomedical engineering for advanced undergraduate students. It is a detailed, excellent coverage of some essential aspects of biomedical engineering. Its 12 chapters