

NANOCARRIER TECHNOLOGIES

FRONTIERS OF NANOTHERAPY

Edited by
M. Reza Mozafari

Nanobiotechnology is one of the key technologies of the 21st century. It is a combination of nanoscience and biotechnology and covers areas ranging from gene transfer and nanoencapsulation to food technology. Nanocarriers are a leading nanobiotechnology tool with the ability to provide protection, site-specific delivery, enhanced bioavailability and controlled release of pharmaceuticals, genetic material, imaging agents, nutraceuticals and cosmetics to name a few. For this reason, the study of nanocarriers, their properties and applications has attracted a great deal of interest over recent years. Designed as an advanced survey of the field, this book describes the key research parameters of nanocarrier technologies including their preparation methods, evaluation of their safety and efficiency, their interaction with biologicals and their application in biotechnology, drug delivery, gene therapy and food technology areas.

