







Special Issue Reprint

Pharmaceutical Particulates and Membranes for Delivery of Drugs and Bioactive Molecules

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This book is a collection of papers published in the Special Issue of Pharmaceutics, entitled "Pharmaceutical Particulates and Membranes for Delivery of Drugs and Bioactive Molecules". A drug release profile is a consequential factor for nanoparticle application, directly related to drug stability and therapeutic results, as well as formulation development. Pharmaceutical particulates of different sizes and shapes (e.g., liposomes, oil-in-water emulsions, polymeric nano- and microspheres, metallic nanoparticles (NPs) such as gold, silver and iron oxide crystals, and core-shell hybrid NPs) offer many diagnostic and therapeutic applications. Membranes are also extensively utilized in many applications. They are especially beneficial to the distribution of macromolecular drugs and biopharmaceutical drugs (peptides, proteins, antibodies, oligonucleotides, plasmids, and viruses) with physicochemical and pharmacokinetic vulnerability. The delivery of drugs and bioactive molecules using particulates and membranes has gained a great deal of attention for various applications, such as the treatment of secondary infections, cancer treatment, skin regeneration, orthopaedic applications, and antimicrobial drug delivery. In addition, several production techniques have been utilized for the fabrication of particulates and membranes in the last decade, which include lyophilisation, micro-emulsion, nano-spray dryer, nanoelectrospinning, slip casting and 3D printers. Therefore, pharmaceutical particulates and membranes possess excellent prospects to deliver drugs and bioactive molecules with the prove new delivery strategies like sustained and controlled refease int Copy

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