Many newly proposed drugs suffer from poor water solubility, thus presenting major hurdles in the design of suitable formulations for administration to patients. Consequently, the development of techniques and materials to overcome these hurdles is a major area of research in pharmaceutical companies.

Drug Delivery Strategies for Poorly Water-Soluble Drugs provides a comprehensive overview of currently used formulation strategies for hydrophobic drugs, including liposome formulation, cyclodextrin drug carriers, solid lipid nanoparticles, polymeric drug encapsulation delivery systems, self–microemulsifying drug delivery systems, nanocrystals, hydrosol colloidal dispersions, microemulsions, solid dispersions, cosolvent use, dendrimers, polymer- drug conjugates, polymeric micelles, and mesoporous silica nanoparticles. For each approach the book discusses the main instrumentation, operation principles and theoretical background, with a focus on critical formulation features and clinical studies. Finally, the book includes some recent and novel applications, scale-up considerations and regulatory issues.

Drug Delivery Strategies for Poorly Water-Soluble Drugs is an essential multidisciplinary guide to this important area of drug formulation for researchers in industry and academia working in drug delivery, polymers and biomaterials.
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