Special Issue

Mathematical Modeling in Drug Delivery

Message from the Guest Editor

Medical devices that release drugs in a controlled manner provide targeted drug delivery and can reduce adverse side effects. Mathematical modeling plays an important role in the design process as it can be used to study various design parameters and, hence. significantly reduce the expensive experimentation required for the optimization of such devices. Mathematical modeling relies on the careful representation of the physical situation and requires a thorough understanding of drug release kinetics, as well as mathematical expressions and modeling tools. Numerious mathematical models have been described in the literature in the past and solved either analytically or numerically; however, there are still many challenges that need to be overcome in order for a mathematical model to be an accurate and easy-to-use tool in the design of medical devices. This Special Issue serves as a forum to bring together scientists in the field of the mathematical modeling of drug delivery. Both review and original articles are invited.

Guest Editor

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