



Smart Polymers for Biomedical Applications

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Message from the Guest Editor

Dear Colleagues,

There has been a renewal of interest in controlling the “nano” structures/functions of biomolecules, and a considerable number of studies have been conducted on designing novel materials to meet these applications. Some special types of polymers have emerged as a very useful class of polymers and have their own special chemical properties and applications. These polymers are called “smart” polymers and have been studied for many years. The characteristic feature that makes them smart is their ability to respond to very slight changes in the surrounding environment, such as temperature, pH, light, or certain chemicals. The uniqueness of these materials lies, not only in the fast macroscopic changes occurring in their structure, but also in these transitions being reversible. The responses are manifested as changes in one or more of the following: Shape, surface characteristics, solubility, formation of an intricate molecular assembly, sol-to-gel transition, and others. This Special Issue focuses on how to design smart polymers and how to apply them to biomedical fields.

Dr. Mitsuhiro Ebara
Guest Editor





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Message from the Editor-in-Chief

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