



Stimuli Responsive Compounds for Biological and Materials Sciences: Design, Characterization and Applications

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Message from the Guest Editor

Dear Colleagues,

Stimuli-responsive materials have the ability to translate a stimulus into a change of physical/chemical properties. This activation leads to a modification at the nano/macromolecular scale such as a bond cleavage, color change or actuation. A wide range of stimuli from the internal/external environment can trigger a molecular response, namely, a variation of temperature, magnetic/electrical field, or combinations thereof. These functional materials can be endowed with multiresponsiveness and find some applications in drug delivery, gels, optical devices, shape-memory polymers, or nanocomposites.

In this Special Issue, we will focus on the design and application of stimuli-responsive small molecules and polymeric materials. Particular attention will be paid to the development of new responsive functional groups, and the improvement of their sensitivity/selectivity toward specific stimuli. These studies will also concern the determination of new stimuli from an external/internal environment. These smart compounds will also be endowed with multiresponsiveness and find application in biological and materials sciences.

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Message from the Editor-in-Chief

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