

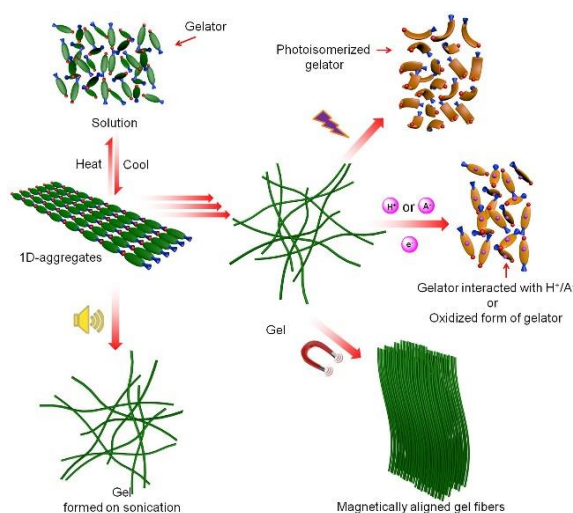
Chemistry of Stimuli Responsive Soft Materials

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Soft functional materials that respond to external stimuli such as light, heat, voltage, magnetic field, mechanical stress, ions, pH etc. are important in a wide range of applications.^{1,2} In this context, supramolecular soft materials derived from supramolecular polymerization or self-assembly of low molecular weight organic molecules have generated significant attention because of their interesting stimuli responsive, dynamic physicochemical properties. For instance, π -conjugated molecules comprised of aromatic units exhibit excellent optical and electronic properties, which can be further modulated or controlled using external stimuli. However, a breakthrough application of a stimuli responsive supramolecular material is yet to be realized. Therefore, a deeper look at the system is necessary for their potential application. Recently, we have reported several molecular assemblies and gels that respond to heat, light, mechanical force etc.³⁻⁸ In this lecture, our contributions in stimuli responsive smart materials will be discussed with the help of recent examples.



Reference

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