Molecular recognition driven co-assembly in chiral anthraquinone derivatives

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A key element to enhance the complexity of synthetic supramolecular systems, ultimately towards the level of biomolecular systems, is the ability to establish and control molecular networks consisting of two or more different molecules. Co-assembly of binary systems driven by specific non-covalent interactions can greatly expand the structural and functional space of supramolecular nanostructures.

Herein, we will describe our investigation of a series of single-component and mixed supramolecular gel assemblies made of chiral anthraquinone derivatives of different length and flexibility. The combination of electron microscopy, rheology and CD spectroscopy analyses suggests a way to control the type of fibrous networks that can be formed based on the selection of the components.

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