

Special Issue

Self-Assembly and Gelation of Short and Ultrashort Peptides

Message from the Guest Editor

The special issue on peptide gelation will provide a compendium of different experimental and computational approaches aimed at understanding the rules which govern the self-assembly and gelation of short peptides. A mixture of review, perspective and original research articles will inform the reader about the design strategies, criteria for peptide self-assembly and gelation, the relationship between peptide chemistry, fibril length and gel strength explored by microscopic and rheological techniques. Some studies will focus on how solution conditions, solvent composition and concentration affect the kinetics of gel formation, the respective fibril network, the strength of the gel phase and its stability. Some papers will demonstrate how optical and vibrational spectroscopy can be used to obtain information about the structure of the fibrils that underlie the gel phases of short peptides. While most of the papers will focus on the structural and mechanism issue, possible biomedical applications of peptide gels will be described as well.

Guest Editor

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Message from the Editor-in-Chief

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