Supramolecular chemistry aims at constructing highly complex chemical systems and advanced materials by designing arrays of components held together by intermolecular forces. The implementation of molecular recognition and information offers means for controlling the evolution and the architecture of supramolecular entities and of organized phases as they spontaneously build up from their components through self-organization. Numerous supramolecular entities of organic and inorganic nature have been generated. The investigation of their properties has made use of various physico-chemical methods. In particular, X-ray crystallography has played a major role in acquiring firm data about the structure of these species, information of crucial importance for understanding both their mode of formation and their properties. Several such self-organization processes and the entities they generate will be described.

General References

Keywords: SUPRAMOLECULAR SELF ORGANIZATION