Public Abstract

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Title:Characterizing and Understanding Self-Assembling Nanocapsules Host-Guest Systems

Self-assembled nanocapsules are large entities that are capable of containing a smaller entity. For the purpose of my research, the smaller entities are fluorescent or capable of emitting light. Previous research has shown that a specific nanocapsule, C-hexylpyrogallol[4]arene or PgC6, is capable of containing up to two fluorescent entities. The focus of this research is fine-tuning the parameters the smaller fluorescent entity must have in order to be contained within one of these nanocapsules. A second nanocapsule that contains copper metal ions was investigated as well.