



Physical origin of third order non-linear optical response of porphyrin nanorods

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Résumé en anglais	The non-linear optical properties of porphyrin nanorods were studied using Z-scan, Second and Third harmonic generation techniques. We investigated in details the heteroaggregate behaviour formation of [H4TPPS4](2-) and [SnTPyP](2+) mixture by means of the UV-VIS spectroscopy and aggregates structure and morphology by transmission electron microscopy. The porphyrin nanorods under investigation were synthesized by self assembly and molecular recognition method. They have been optimized in view of future application in the construction of the light harvesting system. The focus of this study was geared towards understanding the influence of the type of solvent used on these porphyrins nanorods using spectroscopic and microscopic techniques.
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