GREEN SYNTHESIS OF SILVER SULFIDE QUANTUM DOTS

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Silver Sulfide (Ag2S) quantum dots exhibit important optoelectronic properties and non- toxicity. Currently there is a great interest in the research of polymer- based composite materials with Ag2S quantum dots for applications in catalysis and energy conversion among others. In this work, the synthesis of quantum dots of Ag2S is presented by means of a green method. Quantum dots in the ranges of 1 to 5 nm were observed. The nanostructures fluorescence was determined by fluorescence microscopy and fluorometry. MTT tests were used to determine their cytotoxicity, a cellular viability above 80% was found. Promissory results were obtained: simple and green methodology, quantum dots size control, non- toxicity and optical properties.

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