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Removal of Brilliant Green in Environmental Samples by Poly Ethylene Terephthalate Granule

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Abstract : In this research, poly-ethylene terephthalate granule was prepared from Tak Corporation. The granule was characterized by fourier transform infra-red spectroscopy. Then the effects of various parameters on brilliant green sorption such as pH, contact time were studied. The optimum pH value for sorption of brilliant green was 6. The sorption capacity of the granule for brilliant green was 4.6 mg g−1. The profile of brilliant green uptake on this sorbent reflects a good accessibility of the chelating sites in the poly-ethylene terephthalate granule. The developed method was utilized for the determination of brilliant green in environmental water samples by UV/Vis spectrophotometry with satisfactory results.

Keywords : poly-ethylene terephthalate granule, brilliant green, environmental sample, removal
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