

CdS Quantum Dots as Fluorescent Probes for Detection of Naphthalene

Authors : Zhengyu Yan, Yan Yu, Jianqiu Chen

Abstract : A novel sensing system has been designed for naphthalene detection based on the quenched fluorescence signal of CdS quantum dots. The fluorescence intensity of the system reduced significantly after adding CdS quantum dots to the water pollution model because of the fluorescent static quenching mechanism. Herein, we have demonstrated the facile methodology can offer a convenient and low analysis cost with the recovery rate as 97.43%-103.2%, which has potential application prospect.

Keywords : CdS quantum dots, modification, detection, naphthalene

Conference Title : ICEERE 2014 : International Conference on Environmental and Earth Resources Engineering

Conference Location : Istanbul, Türkiye

Conference Dates : July 30-31, 2014