

**MAGNESIUM CATION CHEMOSENSOR BASED ON
1-(ANTHRYL)-2-(BENZO-15-CROWN-5)ETHENE
FLUOROIONOPHORE**

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Development of fluoroionophore combining the fluorophore and ionophore is one of the attractive subjects in the studies of chemosensor with selective binding of species and fluorescence as an optimal monitor. According to the nature of the ionophore-fluorophore interaction, the fluorescence signal is modified in intensity or/and in energy. A fluoroionophore, 1-(anthryl)-2-(benzo-15-crown-5)ethene, was synthesized. The influences of alkaline and alkaline earth metal ions such as lithium, sodium, potassium, cesium, magnesium and calcium perchlorate on absorption and fluorescence properties were investigated. The compound showed remarkably high cation-induced fluorescence enhancement for Mg^{2+} ion.

