SYNTHESIS AND FLUORESCENCE STUDIES OF A THIOPHENE-BASED AZAMACROCYCLE

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Abstract: Anions are ubiquitous in nature and play significant roles in both chemistry and biology. Therefore, anion sensing has become an important area of research in recent years. Although several classes of anion sensors are known in the literature, polyamines are still considered are effective systems to bind anions strongly. During this research work, a thiophene-based azamacrocyle has been synthesized from high dilution condensation reaction, followed by reduction of imine to amine. The compound has thoroughly been characterized by NMR and mass spectroscopies. The synthesized compound has been converted into its dinuclear complex from the reaction with copper bromide, and investigated for different anions by fluorescence titrations. In this poster, the synthesis and anion binding studies of the receptor will be presented.

Acknowledgement: The National Science Foundation is gratefully acknowledged for a CAREER award (CHE-1056927) to M.A.H. Nabhan Karim and Jonathan Coleman are high school students, who were supported by the NSF-CAREER for summer research (2011).