**A Hg (II) fluorescent sensor based-on Bodipy synthesized by using knorr pyrrole**

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The increasing interest in Bodipy in recent years can be attributed to higher quantum yield and fluorescence when compared to the dipyromethane-metal complexes. However, the high stability of Bodipy increased the interest in such reactions and different derivatives were started to be synthesized. These stability sieves are delocalized, sometimes boron is sometimes provided with nitrogen, sometimes with fluorine atoms. These properties have given potential to Bodipy compounds in many applications such as luminescence agent fluorescent end chemosensor and laser dyes [1].

The Bodipy sensors generally have a high fluorescence and upon binding with cation ions exhibit various fluorescence properties. The Bodipy chemosensors exhibit a shift in absorption or emission spectra by the binding of anions and cations [2,3].

In this study, first Bodipy derivatives containing atom and organic groups will be prepared. Changes in the absorption, emission and excitation properties of these compounds will then be investigated in the presence of some metal ions. Thus, in these measurements, it is determined that the final Bodipy derivatives planned for which metal ion are selective.

The resulting bodipy compound was tested with different metal ions. But it only showed a selectivity for mercury metal. The compound can be used a fluorescent sensor for Hg (II) ion.



[1] Arbeloa, [Garcia-Moreno, I](http://apps.webofknowledge.com/DaisyOneClickSearch.do?product=WOS&search_mode=DaisyOneClickSearch&colName=WOS&SID=E1ELzu1ZIWhUVFPcKv7&author_name=Garcia-Moreno,%20I&dais_id=98726&excludeEventConfig=ExcludeIfFromFullRecPage) (Garcia-Moreno, I); [Costela, A](http://apps.webofknowledge.com/DaisyOneClickSearch.do?product=WOS&search_mode=DaisyOneClickSearch&colName=WOS&SID=E1ELzu1ZIWhUVFPcKv7&author_name=Costela,%20A&dais_id=119126&excludeEventConfig=ExcludeIfFromFullRecPage" \o "Find more records by this author) (Costela, A); [Sastre, R](http://apps.webofknowledge.com/DaisyOneClickSearch.do?product=WOS&search_mode=DaisyOneClickSearch&colName=WOS&SID=E1ELzu1ZIWhUVFPcKv7&author_name=Sastre,%20R&dais_id=133079&excludeEventConfig=ExcludeIfFromFullRecPage" \o "Find more records by this author)(Sastre, R); [Amat-Guerri, F](http://apps.webofknowledge.com/DaisyOneClickSearch.do?product=WOS&search_mode=DaisyOneClickSearch&colName=WOS&SID=E1ELzu1ZIWhUVFPcKv7&author_name=Amat-Guerri,%20F&dais_id=423215&excludeEventConfig=ExcludeIfFromFullRecPage" \o "Find more records by this author) (Amat-Guerri, F),1999, Correlations Between Photophysics And Lasing Properties Of Dipyrromethene-BF2 Dyes İn Solution, CHEMICAL PHYSICS LETTERS,  299, 315-321.

[2]J. Huang, X. Ma, B. Liu, L. Cai, Q. Li, Y. Zhang, K. Jiang, S. Yin, J. Lumin. 141 (2013)130.

[3] M. Formica, V. Fusi, L. Giorgi, M. Micheloni, Coord. Chem. Rev. 256 (2012) 170.