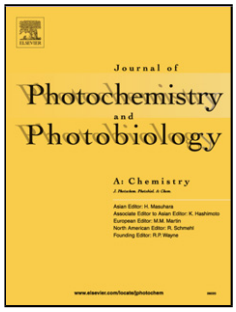
Accepted Manuscript



Title: Combined use of spectrophotometer and smartphone for the optical detection of Fe^{3+} using a vitamin B_6 cofactor conjugated pyrene derivative and its application in live cells imaging

Authors: Yachna Upadhyay, Thangaraj Anand, Lavanya Tilak Babu, Priyankar Paira, Ashok Kumar SK, Rajender Kumar, Suban K. Sahoo

PII: S1010-6030(18)30248-X
DOI: https://doi.org/10.1016/j.jphotochem.2018.05.002
Reference: JPC 11272

To appear in: *Journal of Photochemistry and Photobiology A: Chemistry*

Received date: 21-2-2018
Revised date: 1-5-2018
Accepted date: 2-5-2018

Please cite this article as: Yachna Upadhyay, Thangaraj Anand, Lavanya Tilak Babu, Priyankar Paira, Ashok Kumar SK, Rajender Kumar, Suban K.Sahoo, Combined use of spectrophotometer and smartphone for the optical detection of Fe3+ using a vitamin B6 cofactor conjugated pyrene derivative and its application in live cells imaging, Journal of Photochemistry and Photobiology A: Chemistry https://doi.org/10.1016/j.jphotochem.2018.05.002

Combined use of spectrophotometer and smartphone for the optical detection of Fe^{3+} using a vitamin B_6 cofactor conjugated pyrene derivative and its application in live cells imaging

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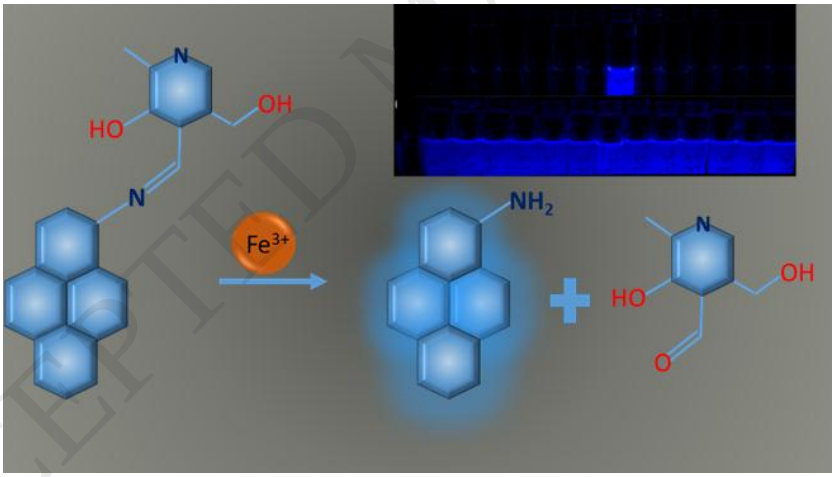
Graphical Abstract



Synthetically easy, a pyrene-vitamin B_6 cofactor pyridoxal based fluorescent 'turn-on' sensor was developed for the selective detection of Fe^{3+} *via* the chemodosimeter approach.