Supporting Information

AIPE-active green phosphorescent iridium(III) complex impregnated test strips for the vapor-phase detection of 2,4,6-trinitrotoluene (TNT)

K. S. Bejoymohandas[a], T. M. George[a], S. Bhattacharya[b], S. Natarajan[b]and M. L. P. Reddy[a]*

[a] *Materials Science and Technology Division, CSIR-Network of Institutes for Solar Energy, CSIR-National Institute for Interdisciplinary Science & Technology (CSIR-NIIST), Thiruvananthapuram-695 019, India. E-mail: mlpreddy55@gmail.com*

[b]*Solid State and Structural chemistry unit, Indian Institute of Science, Bangalore 560 012, India*

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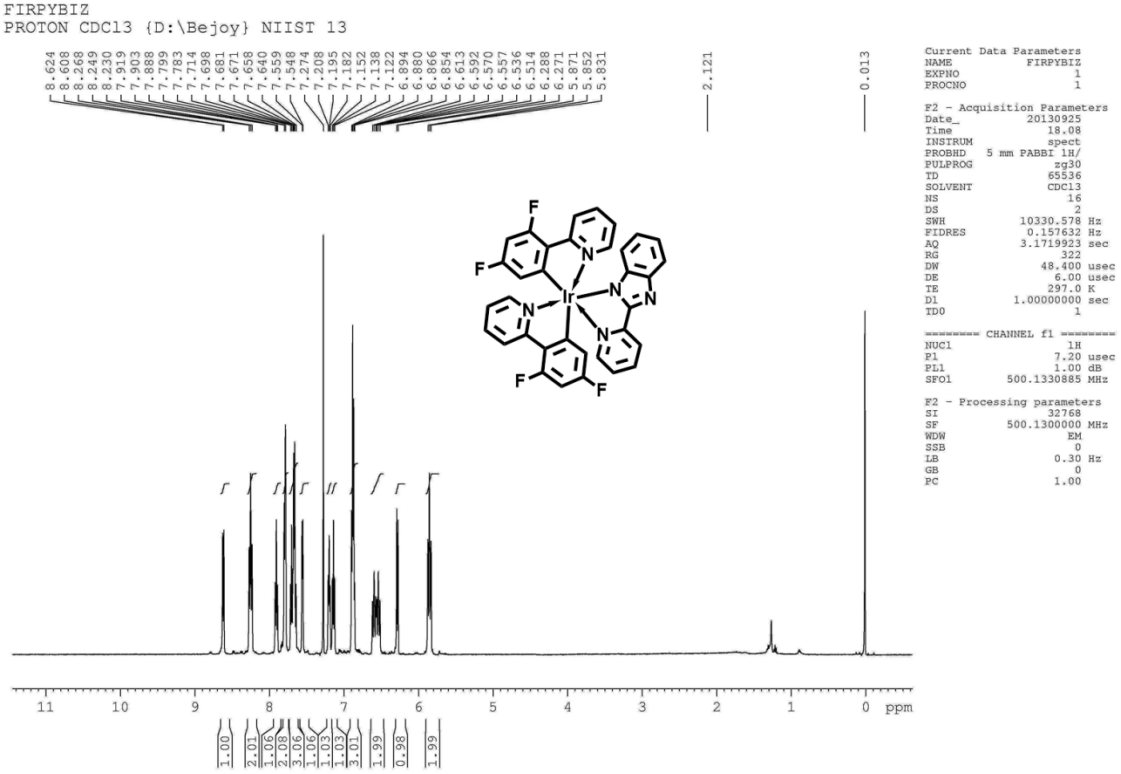

Fig. S1. ^{1}H-NMR spectrum of FIrPyBiz.

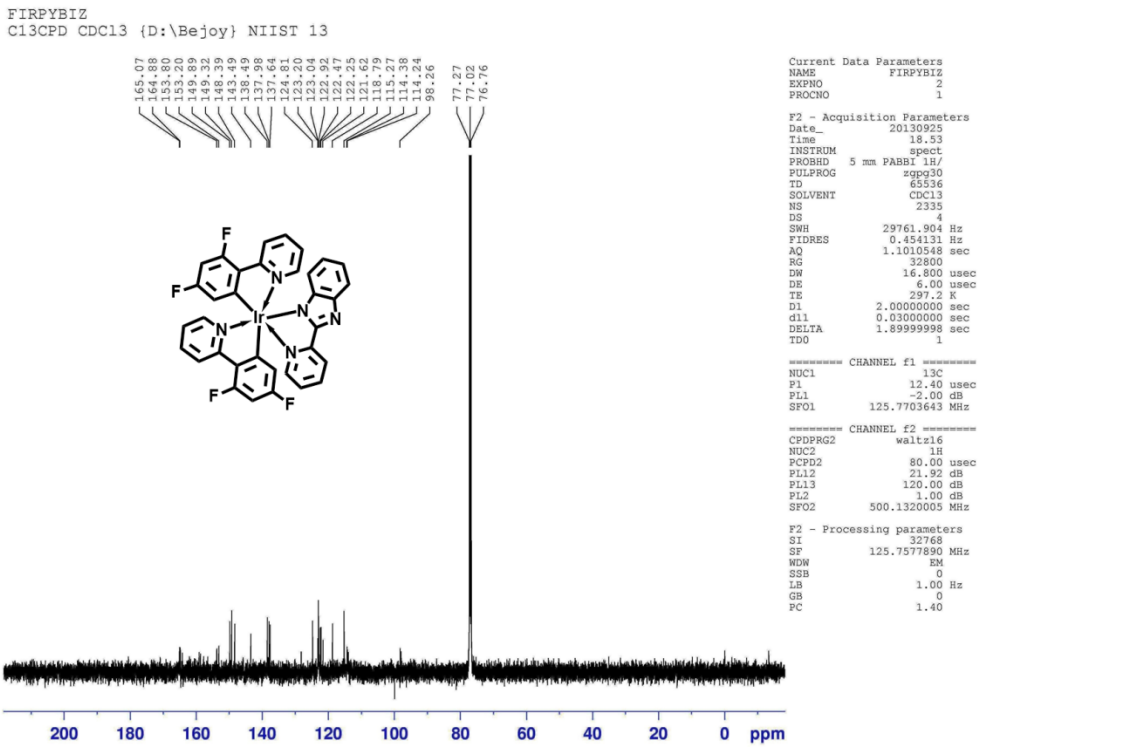

Fig. S2. ^{13}C-NMR spectrum of FIrPyBiz.

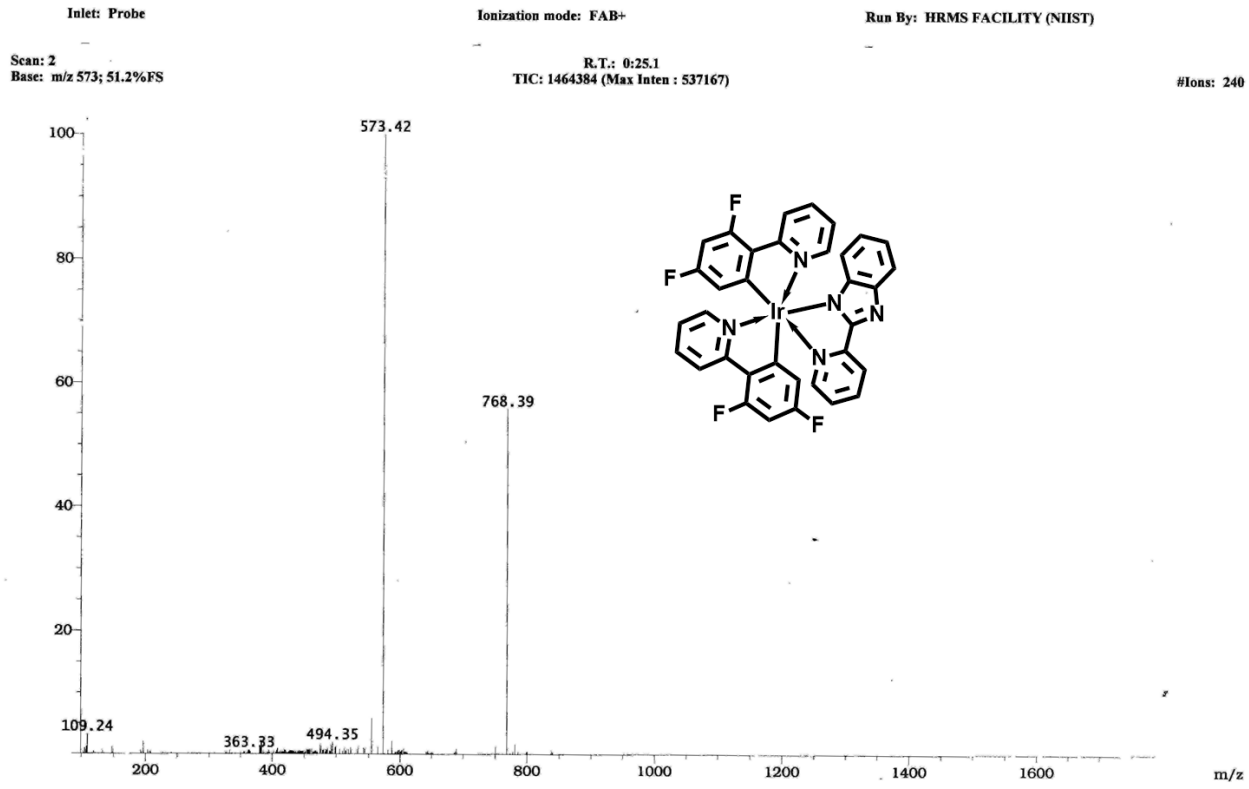

Fig. S3. FAB – MASS spectrum of FIrPyBiz, 768.39 $(M+1)^+$

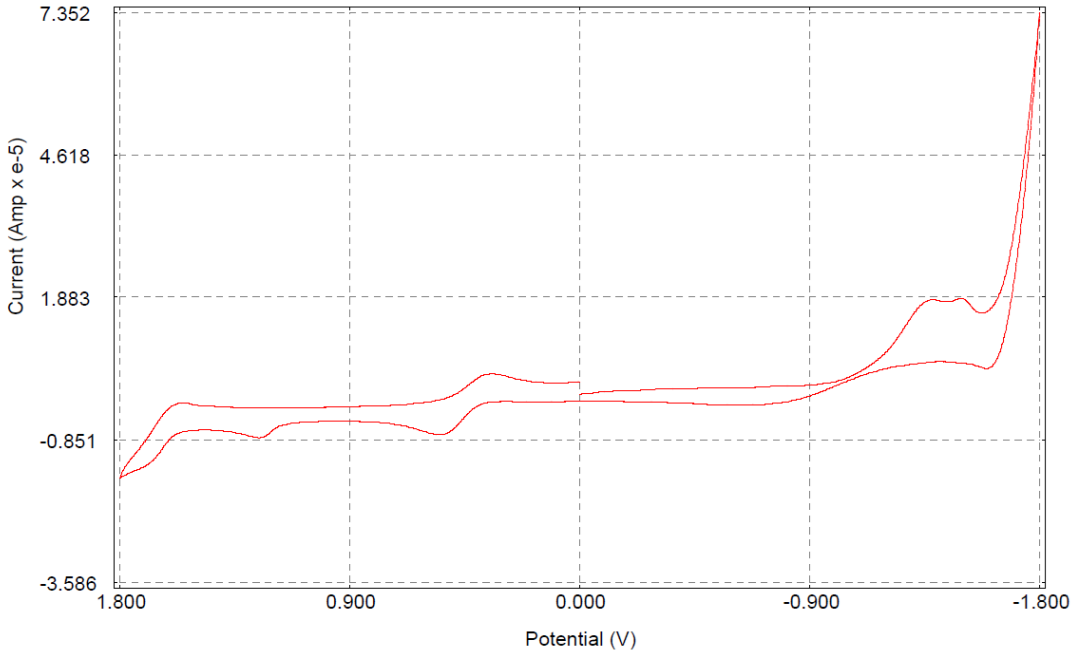

Fig.S4. Cyclic voltammograms of FIrPyBiz at a scan rate of 100 mVs^{-1}

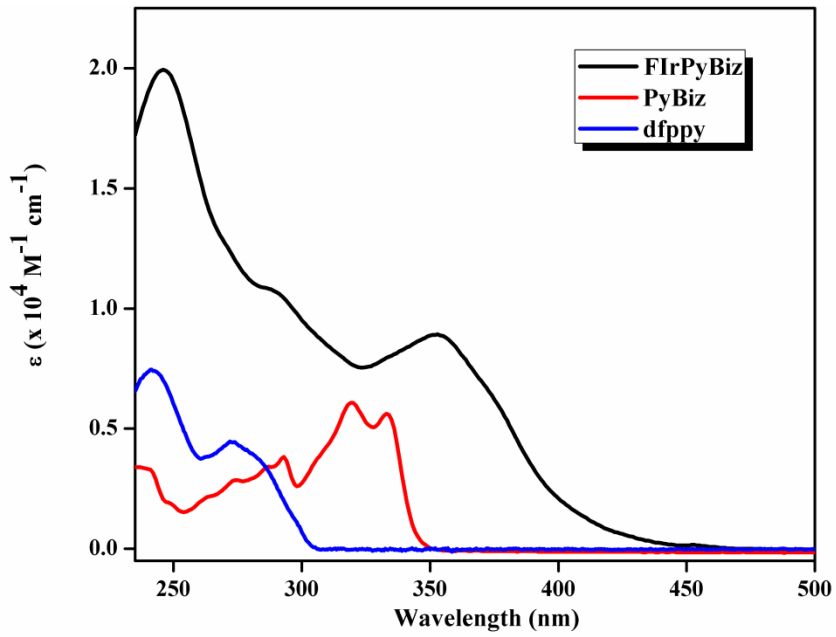

Fig. S5. Absorption spectra of dfppy, FIrPyBiz and PyBiz in dichloromethane solution (c = 1×10^{-5}M)

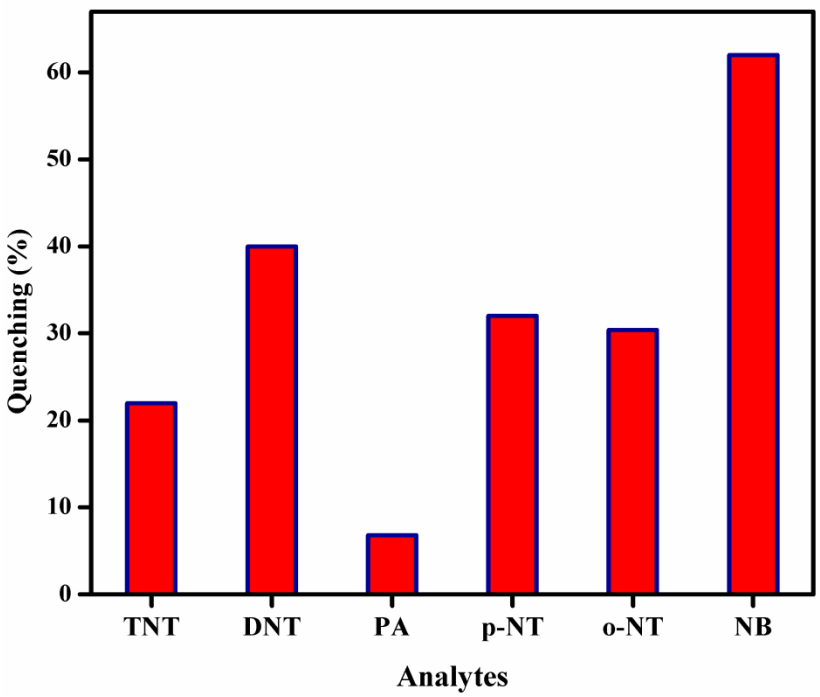

Fig. S6. Comparison of the phosphorescence quenching efficiency of FIrPyBiz impregnated test strips upon exposure to saturated vapors of different nitro aromatic analytes for 60 s (λ_{exc} = 365 nm).

Table S1. Comparison of present manuscript with previous reports with respect to type of system used, Stern-Volmer constant and phase of experimentation.

S. No.	Publication	System	K_{SV} (M^{-1})	Phase
1	Present manuscript	AIPE active phosphorescent Iridium(III) complex	7.4×10^4	Vapor, Solid and solution
2	*J. Mater. Chem.* 2011, 21, 9130	π-Electron rich fluorescent aromatic compounds	1.97×10^4	Solution
3	*J. Mater. Chem.* 2012, 22, 11574	Fluorescent self-assembled monolayer film	1.47×10^4	Solution
4	*J. Mater. Chem.* 2012, 22, 2908	Silica anchored fluorescent organosilicon polymers	10×10^3	Solid state
5	*Chem. Commun.* 2012, *48*, 4633	Conjugated polymer encapsulated in mesoporous silica nanoparticles	3.73×10^3	Solution