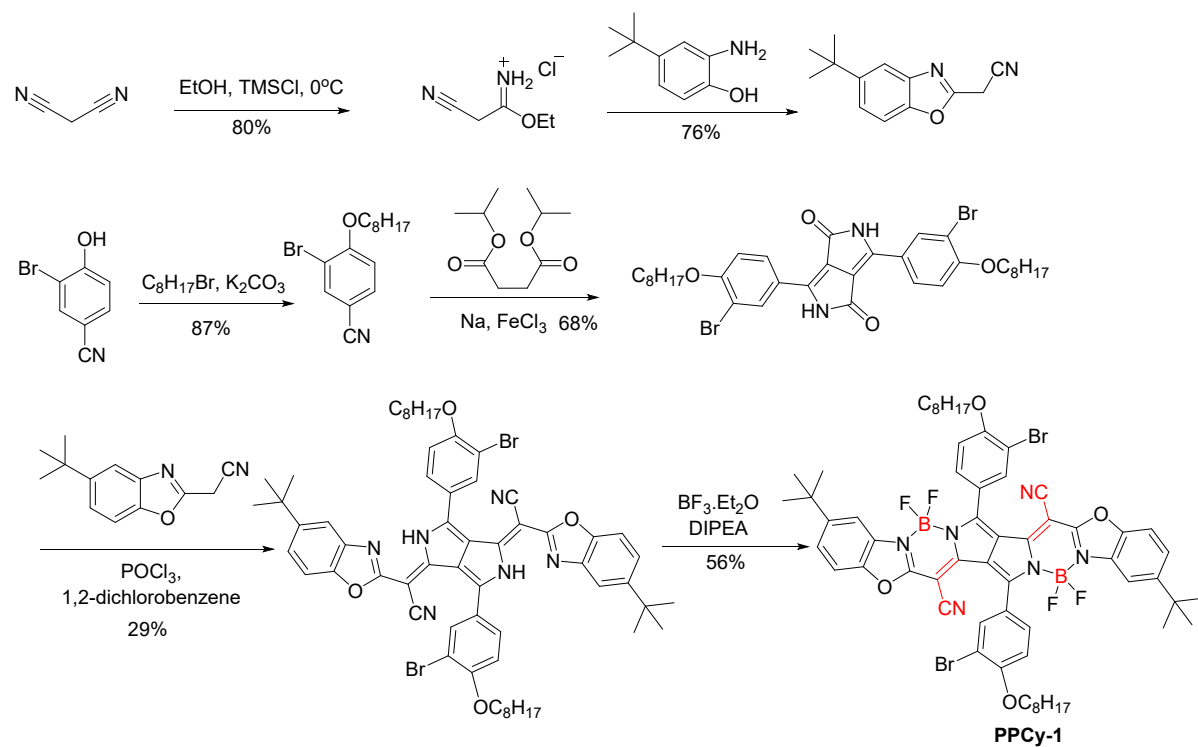


Portable smartphone platform utilizing dual-sensing signals for visual determination of semicarbazide in food samples

Lingyun Wang ^{a,*}, Bihong Lai ^a, Xueguang Ran ^b, Hao Tang ^a and Derong Cao ^a

^a Key Laboratory of Functional Molecular Engineering of Guangdong Province, School of Chemistry and Chemical Engineering, South China University of Technology, 381 Wushan Road, Guangzhou, China, 510641. E-mail: lingyun@scut.edu.cn

^b Institute of Animal Science, Guangdong Academy of Agricultural Sciences, State Key Laboratory of Swine and Poultry Breeding Industry, China, 51064.



Scheme S1 The synthetic route of **PPCy-1**.

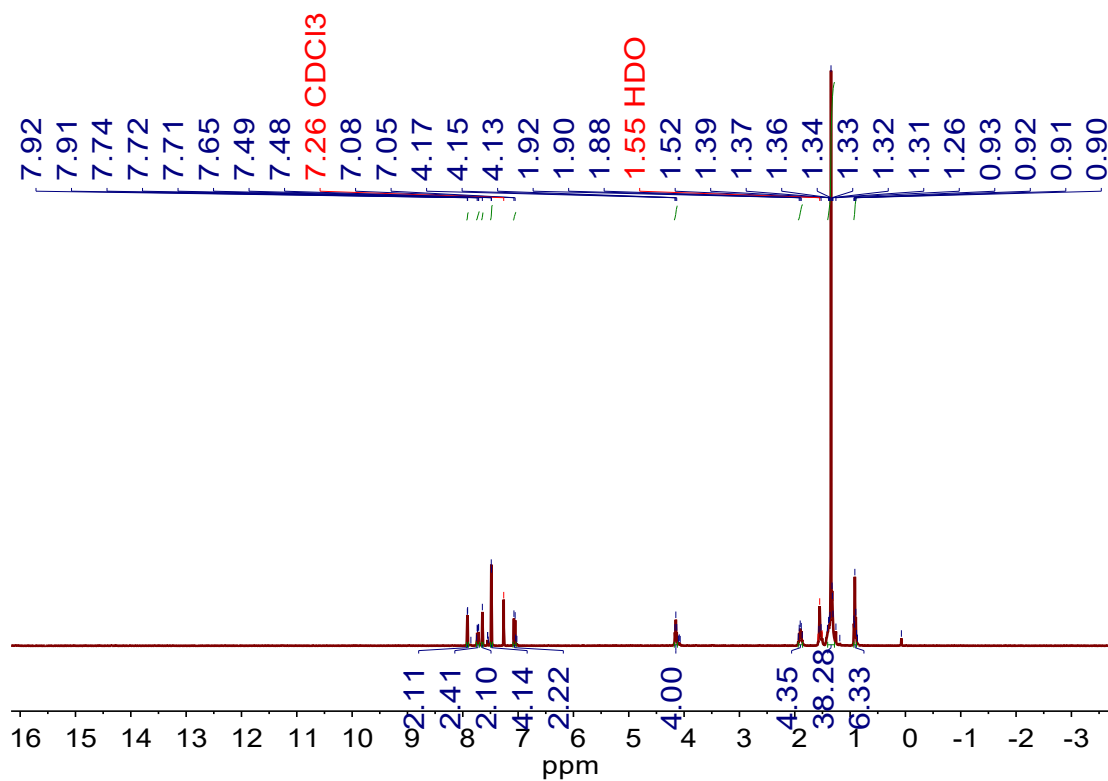


Figure S1 ¹H NMR spectrum of **PPCy-1** in CDCl₃.

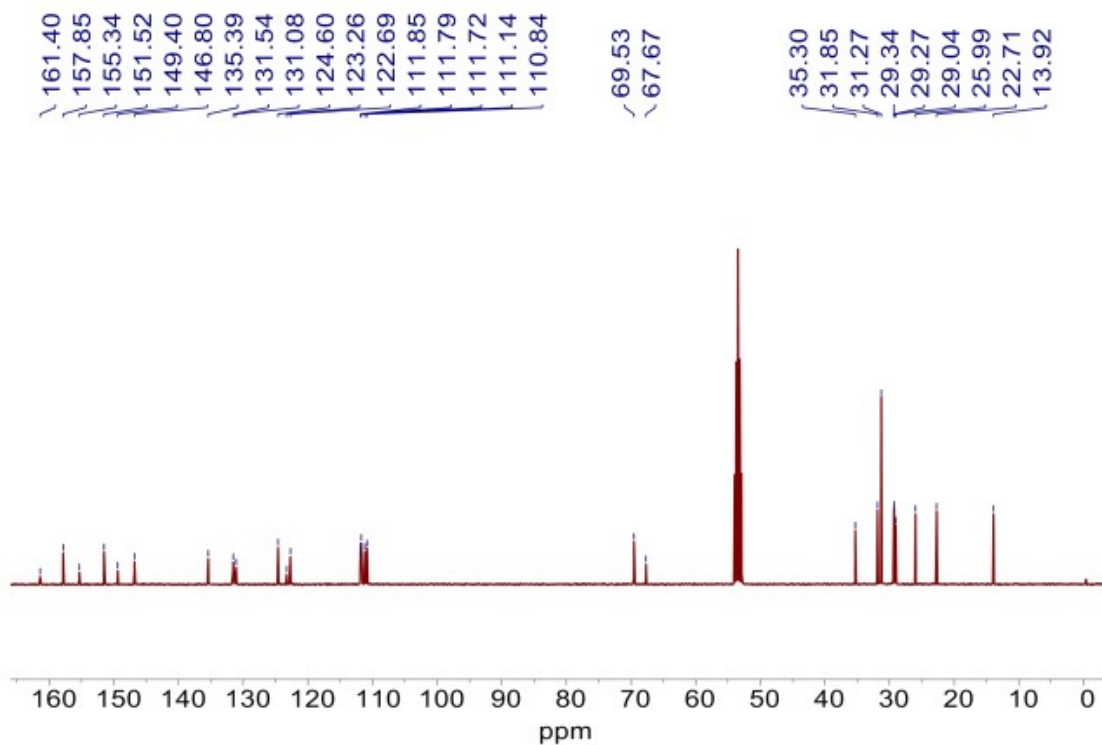


Figure S2 ^{13}C NMR spectrum of PPCy-1 in CDCl_3 .

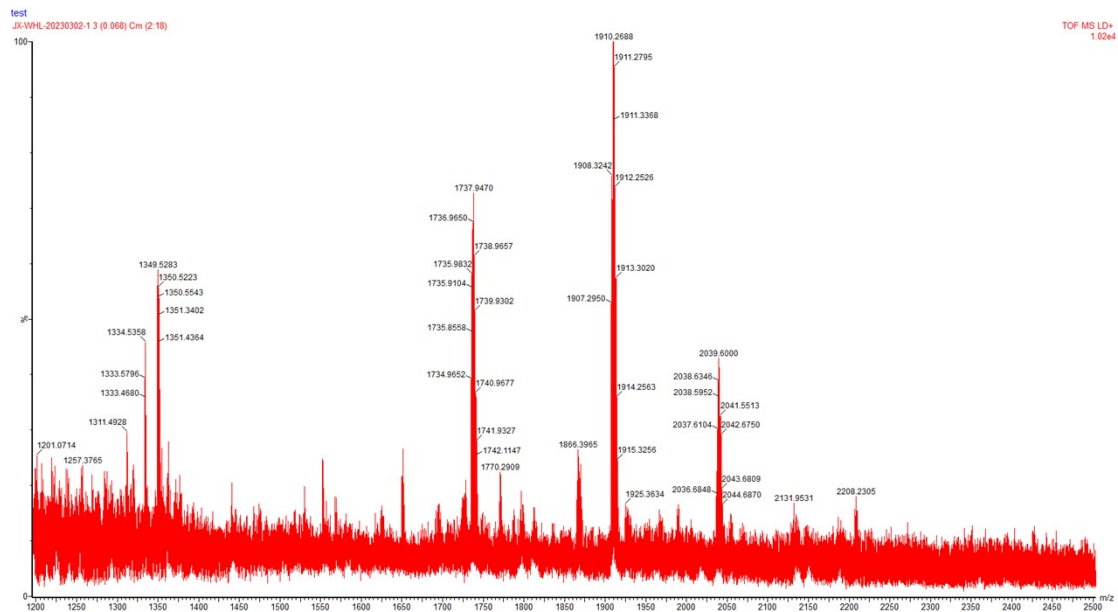


Figure S3 ESI-MS spectrum of PPCy-1.

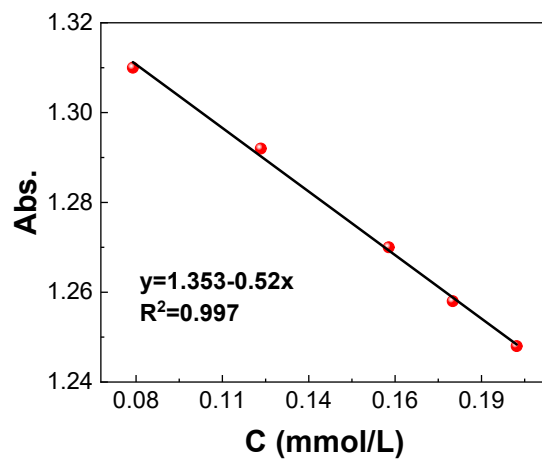


Figure S4 The linear plot of absorption band at 690 nm vs. SEM concentration.

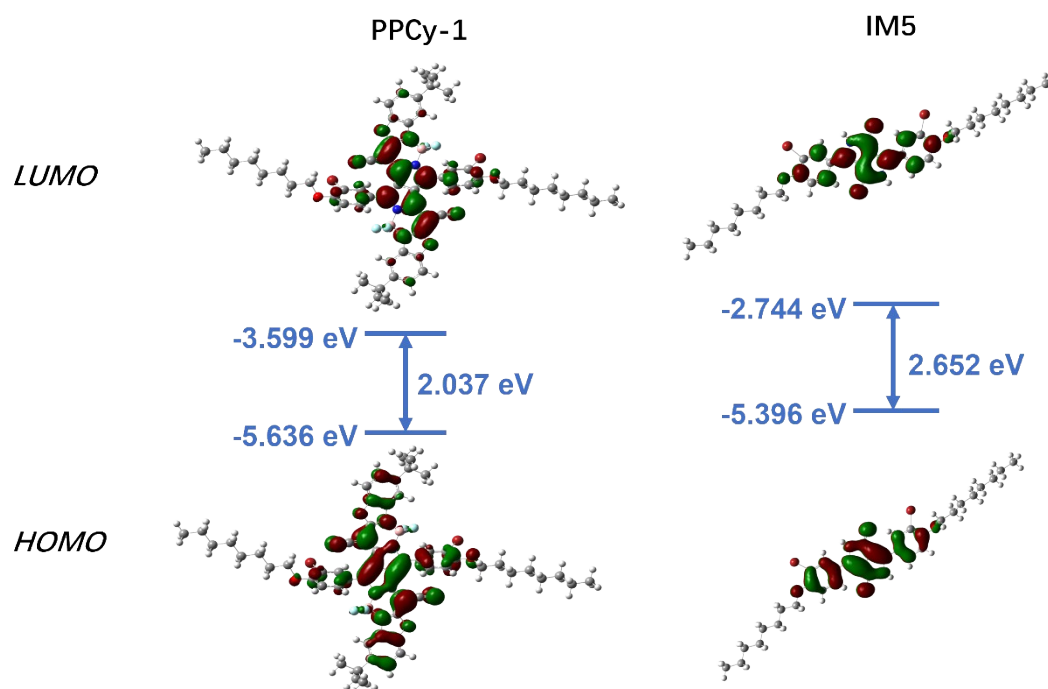


Figure S5 The DFT results of PPCy-1 and IM5.