SUPPORTING INFORMATION

Terbium (III) Coated Carbon Quantum Dots for Detection of Clomipramine through Aggregate Induced Emission from the Analyte

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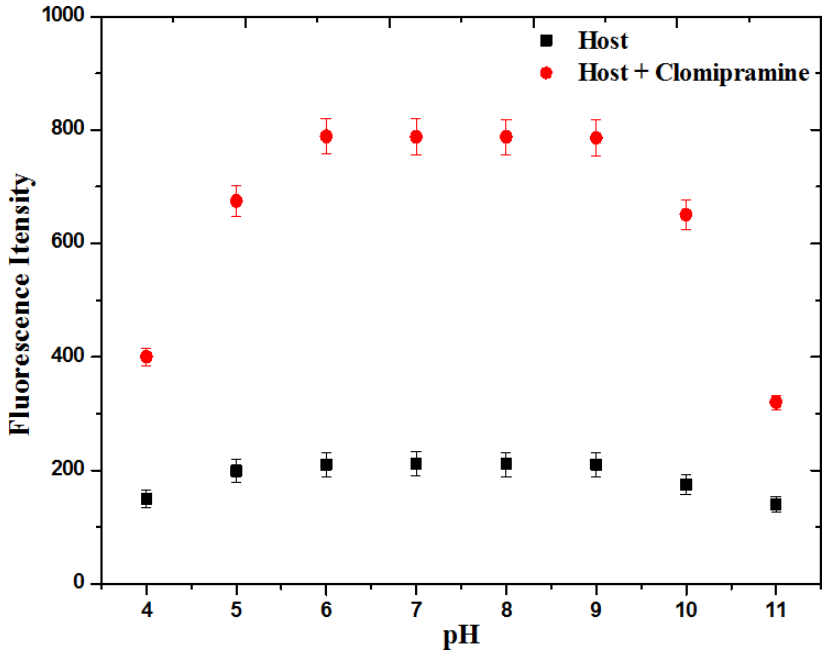


Figure S1 Fluorescence study to check the effect of pH on CQD-Tb by conducting acidic and basic titrations.

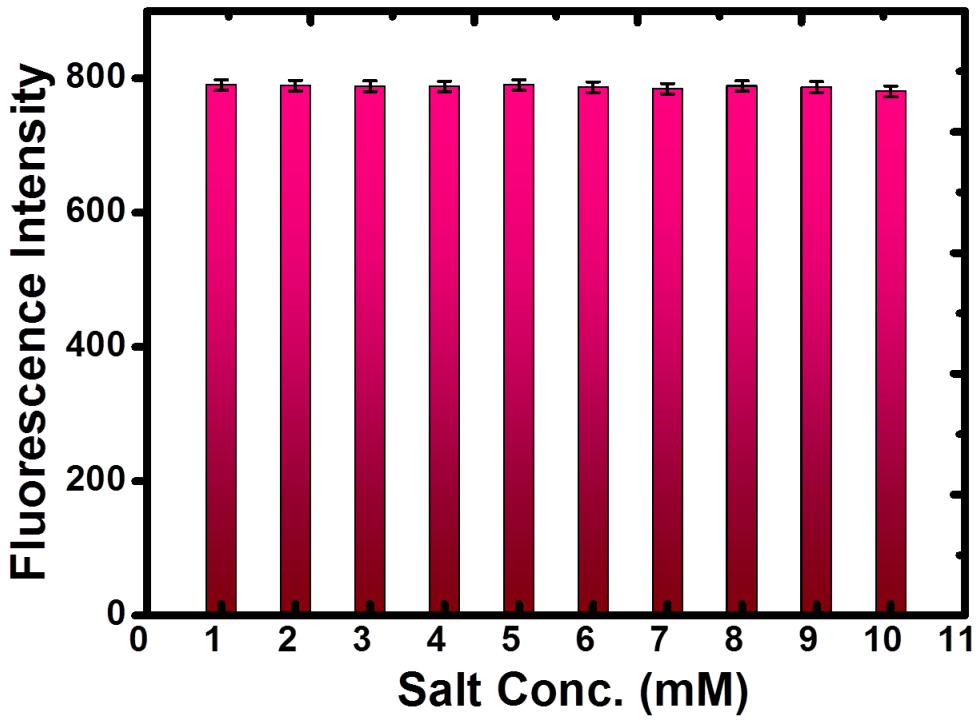


Figure S2 Fluorescence study to check the effect of salt concentration on CQD-Tb by conducting acidic and basic titrations.

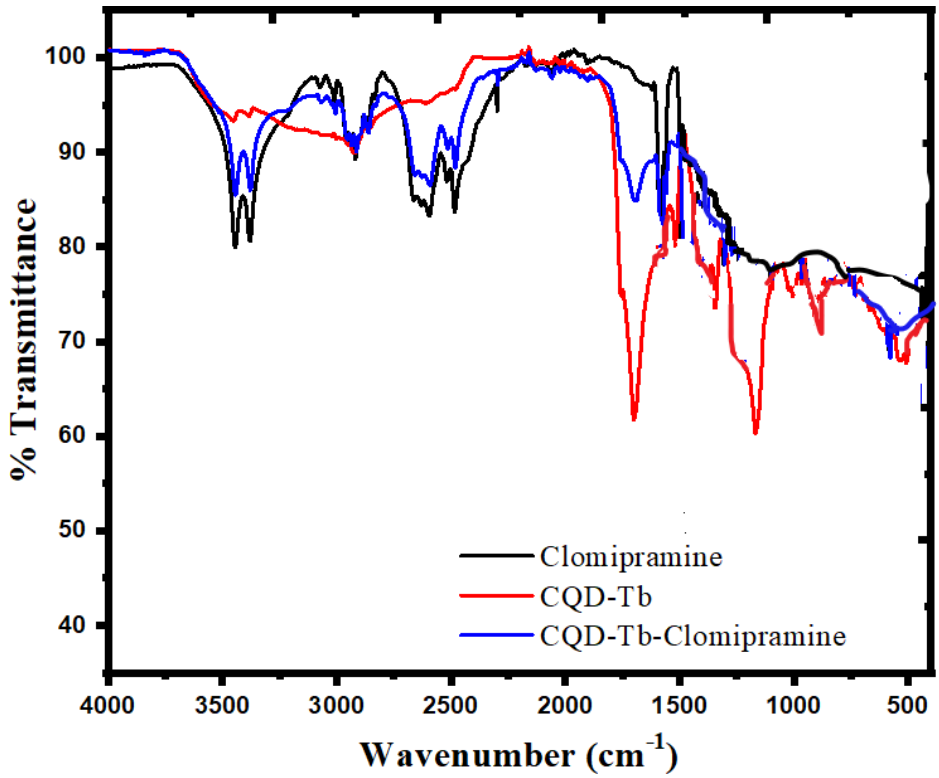
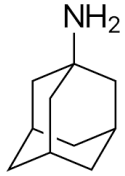
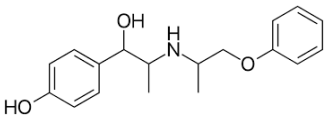
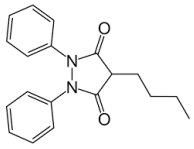
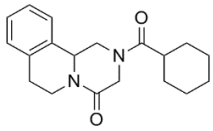
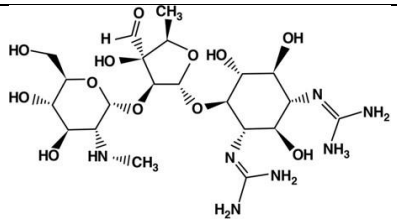
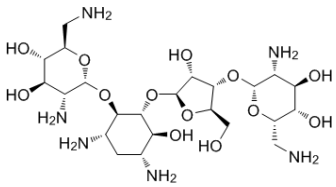
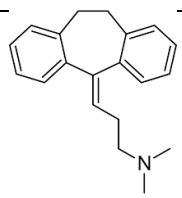
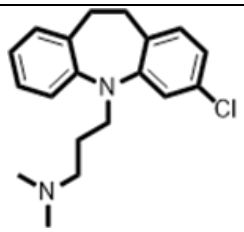


Figure S3 FTIR spectra of CQD-Tb, Clomipramine, CQD-Tb+ Clomipramine.

Supplementary Table 1: Drugs and their structures

Drug	Structure
Amantadine	
Isoxsuprine	
Phenylbutazone	
Praziquantel	
Streptomycin	
Neomycin	
Amitriptyline	

Clomipramine	

Supplementary Table 2: Comparison of Detection Limit of Clomipramine

S.No.	Medium	Technique Used	Detection Limit	Reference
1.	Non-aqueous	Spectrophotometric	0.57 µg/ml	26
2.	Non-aqueous	DPV*	4.37×10^{-7} g/ml	58
3.	Non-aqueous	Spectrofluorimetric Method	0.32 µg/ml	59
4.	Non-aqueous	CLPME#-HPLC-UV	0.7 µg/L	60
5.	Non-aqueous	HPLC	1-10 µg/L	20
6.	Non-aqueous	CZE¶	0.2 µg/ml	23
7.	Non-aqueous	Spectrofluorimetric	0.0385 µg/ml	31
8.	Non-aqueous	Spectrofluorimetric	0.074 µg/ml	32
9.	Non-aqueous	DPV*	1×10^{-9} M	61
10	Non-aqueous	Flow Injection Analysis	0.17 mg/L	25

*Differential Pulse Voltammetry. #Continuous Liquid Phase Micro Extraction. ¶ Capillary Electrophoresis.

58. G. Y. Jin, F. Huang and J. L. Kong, *Anal. Letters*, 2007, **40**, 3392-3404.
59. N. Rahman and N. Alfaq, *Anal. Methods*, 2010, **2**, 513-518.
60. L. Haghnazari, H. Nomani, N. Fattahi, K. Sharafi and M. Moradi, *New J. Chem.*, 2018, **42**, 4450-4456.
61. M.S. Jat, K. Meena, K. K. Jhankal and D. K. Sharma, *J. Pharm. Sci. and Res.*, 2019, **11**, 700-707.