Supporting Information

Dual-modal detection of perfluorooctanoic acid (PFOA) using a single polymer platform: ACQ and IDA approaches

Arvin Sain Tanwar,[†] Parameswar Krishnan Iyer,^{*, §} and Franck Meyer^{*, †}

[†]Microbiology, Bioorganic and Macromolecular Chemistry (MBMC) Unit, Faculty of Pharmacy, Université Libre de Bruxelles, 1050, Brussels, Belgium

[§]Department of Chemistry and Centre for Nanotechnology, Indian Institute of Technology Guwahati, Guwahati–781039, Assam, India

AUTHOR EMAIL ADDRESS: franck.meyer@ulb.be and pki@iitg.ac.in

	Description	Page
Figure S1	LOD Plot for IDA approach.	S3
Figure S2	Selectivity plots for common electrolytes present in water.	S3
Figure S3	Selectivity plots for similar PFOA analogues	S4
Figure S4	PL emission spectra with different natural water samples (WS)	S4
Figure S5	Size distribution by DLS of PPMI with PFOA.	S4
Figure S6	Fluorescence spectra of PPMI and UD.	S5
Figure S7	Absorbance spectra	S5
Figure S8	Change in PL intensity maxima of UD/PPMI complex after addition of PFOA	S6
Figure S9	A plot of I/I _o versus the concentration of PFOA for IDA approach.	S6
Figure S10	Chemical structure of the PFOA analogues.	S7
Figure. S11	Corrected emission spectrum of PPMI after subtracting emission from blank HEPES solution.	S7

Table of Contents



Figure S1. LOD plot for IDA approach.







Figure S3. Selectivity plots for similar PFOA analogues.



Figure S4. PL emission spectra with different natural water samples (WS).



Figure. S5 Size distribution by DLS of PPMI with PFOA in water buffered with HEPES (10 mM, pH 7.2) (Zavg = 201.6 d.nm).



Figure S6. Fluorescence spectra of PPMI and UD in water buffered with HEPES (10 mM, pH 7.2) at different concentration of PFOA (excitation wavelength = 365 nm, slit width 2 nm).



Figure S7. Absorbance spectra of UD (0.1 μ M), UD and PPMI (80 nM) and UD+PPMI+PFOA (36.6 uM) in HEPES buffer (10 mM, pH 7.2)).



Figure S8. Change in PL intensity maxima of UD/PPMI complex after addition of PFOA in HEPES buffer (10 mM, pH 7.2) (excitation wavelength = 490 nm, slit width = 2 nm).



Figure S9. A plot of I/I_o versus the concentration of PFOA for IDA approach.



Figure. S10. Chemical structure of the PFOA analogues.



Figure. S11. Corrected emission spectrum of PPMI after subtracting emission from blank HEPES solution.