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Supporting information

Multibranched carbazole linked triazine based fluorescent molecules for selective detection of picric acid

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Fig. S1 ¹H-NMR spectrum of 2,4,6-tris(4-(bromomethyl)phenyl)-1,3,5-triazine (1)



Fig. S2 ¹³C-NMR spectrum of 2,4,6-tris(4-(bromomethyl)phenyl)-1,3,5-triazine (1)



Fig. S3 ¹H-NMR spectrum of 2,4,6-tris[4-(diethylphosphonomethyl)phenyl]-1,3,5-triazine (**TRZ**)



Fig. S4 ¹³C-NMR spectrum of 2,4,6-tris[4-(diethylphosphonomethyl)phenyl]-1,3,5-triazine **(TRZ)**



Fig. S5 ¹H-NMR spectrum of Cz-octyl



Fig. S6 FT-IR spectra of TRZ-Cz, TRZ and Cz-Octyl



Fig. S7 ¹H-NMR spectrum of TRZ-Cz



Fig. S8 TGA curve of TRZ-Cz



Fig. S9 Fluorescence excitation spectra of TRZ-Cz in different solvents



Fig. S10 HOMO, LUMO energy level of TRZ-Cz and PA



Fig. S11 UV-vis spectra of before and after treatment of ZnCl₂ with TRZ-Cz compounds



Fig. S12 Fluorescence emission spectra of before and after treatment of ZnCl₂ with TRZ-Cz compounds



Fig. S13 Fluorescence emission spectra of ZnCl₂ treated TRZ-Cz compound with PA



Fig. S14 Optical microscope images TRZ-Cz compounds (a) with PA (b)