

Supplementary Information

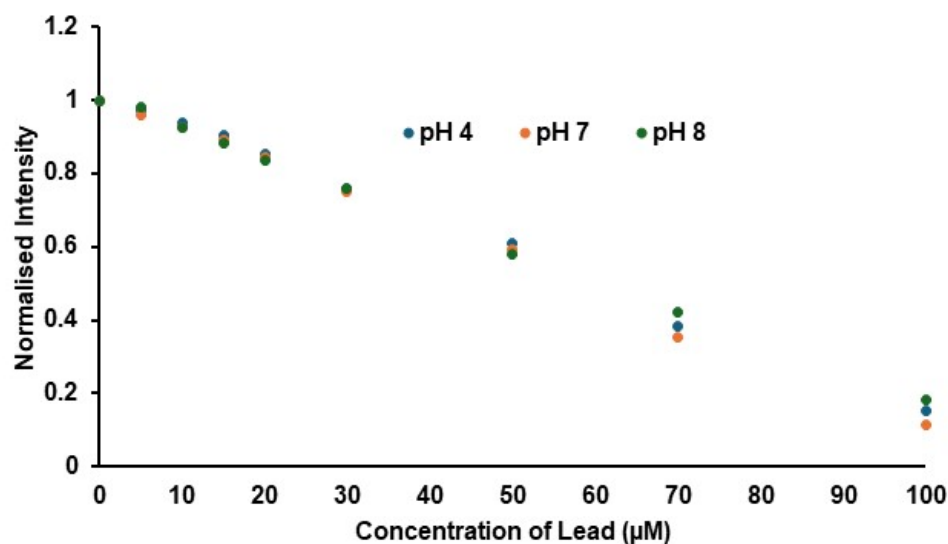


Figure S1: Comparison of calibration curve of lead different concentrations with fluorescence intensity of Dithizone -CQDs thin film in different pH buffers pH 4, pH 7, and pH 8.

Table S1: Accuracy result of spike and recovery studies in real tap water samples.

Spiked Concentration	Recover concentration	% Recovery (Accuracy)
5 µM	5.07 µM	101.4%

10 μM	10.07 μM	100.7%
15 μM	15.08 μM	100.5%
20 μM	20.15 μM	100.7%
30 μM	30.09 μM	100.3%
50 μM	50.05 μM	100.1%
70 μM	70.09 μM	101.2%
100 μM	100.69 μM	100.69%

Table S2: Accuracy result of spike and recovery studies in real Narmada river samples.

Spiked Concentration	Recover concentration	% Recovery (Accuracy)
5 μM	5.10 μM	102%
10 μM	10.15 μM	101.5%
15 μM	15.11 μM	100.7%
20 μM	20.16 μM	100.8%
30 μM	30.24 μM	100.7%
50 μM	50.16 μM	100.3%
70 μM	70.22 μM	100.4%
100 μM	100.26 μM	100.2%

Table S2: Accuracy result of spike and recovery studies in real Kshipra river samples

Spiked Concentration	Recover concentration	% Recovery (Accuracy)
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5 μM	5.08 μM	101.6%
10 μM	10.02 μM	100.2%
15 μM	15.07 μM	100.4%
20 μM	20.06 μM	100.3%
30 μM	30.15 μM	100.5%
50 μM	50.11 μM	100.2%
70 μM	70.02 μM	100%
100 μM	101.05 μM	101%
