Supporting information

Potentiometric extractive sensing of lead ion over nickel oxide intercalated chitosan-grafted-polyaniline composite

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Figure S1. Potential variation against (a) pH-values, and (b) temperature at $1.0x10^{-4}$ M Pb^{2+} concentration.

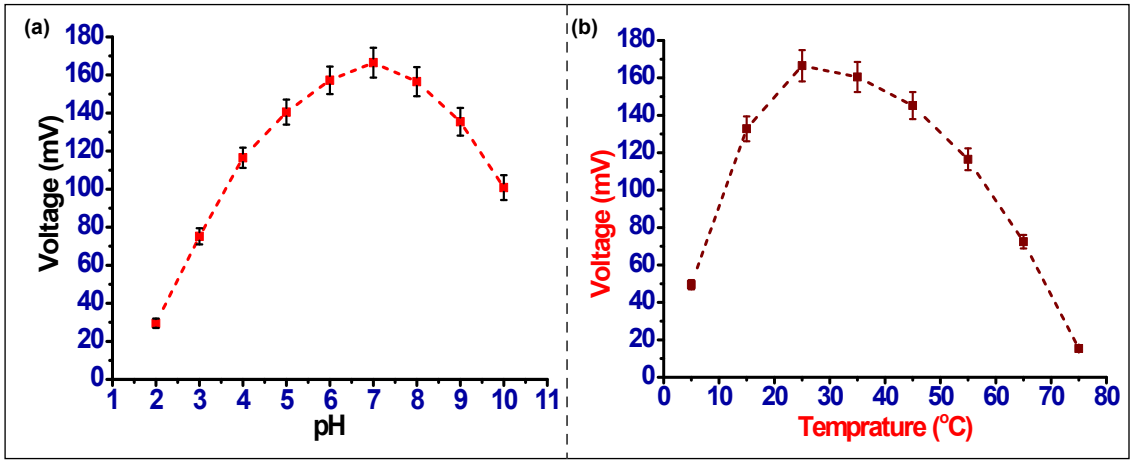

Table S1: Sensing parameters of PANI, CHIT, CHIT-g-PANI, and NiO-in-CHIT-g-PANI.

Sample	Measured range	Initial voltage	Final voltage	Sensitivity ($mV.\mu M^{-1}.cm^{-2}$)
PANI	$1.0x10^{-6}$ to $1.0x10^{-3}$ M	0.2 mV	19.5 mV	0.0096
CHIT	$1.0x10^{-6}$ to $1.0x10^{-3}$ M	nil	nil	nil
CHIT-g-PANI	$1.0x10^{-6}$ to $1.0x10^{-3}$ M	0.5 mV	55.0 mV	0.0545
NiO-in-CHIT-g-PANI	$1.0x10^{-6}$ to $1.0x10^{-3}$ M	0.3 mV	250.5 mV	0.2379

Table S2: Recovery study of electrode NiO-in-CHIT-g-PANI

S. No.	**Sample**	**Concentration**		
		Adsorbed	Recovery	Recovery (%)
1	Standard $Pb(NO_3)_2$ solution	30.5 µg	25.78 ± 0.05µg	84.5 %
2	Yamuna river	31.50 µg	26.70 ± 0.03µg	84.8 %
3	Sewage water	30.80 µg	25.95 ± 0.05µg	84.3 %