In Fig. S1, a linear range $-\log [\text{SO}_4^{2-}]$ from 1 to 4 has been plotted separately and slope has been evaluated with $R=0.999$ and slope $-28.7385$ mV/decade. The plot is shown in Fig. 1s.

**Fig S1** Calibration curve for sulfate ions using sulfate ion selective electrode at the range of $-\log [\text{SO}_4^{2-}]$ from 1 to 4. This plot is obtained from the first four concentrations ($10^1$ M, $10^2$ M, $10^3$ M, $10^4$ M) of Figure 1.