

# Supplementary Material

## A Pencil-Drawn Electronic Tongue for Environmental Applications

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**Table S1.** An example of potentiometric responses of sensors ( $\pm 3$  mV/dec).

	NaX	LTL	ZSM5	KX	BEA19	BEA12	K4	NaA	Na4	CLPT	MOR1	KA
sample1	297.5	304.0	318.1	294.7	305.1	281.2	302.1	294.5	314.3	291.9	347.9	29.9
sample2	300.1	305.8	318.6	292.1	305.5	279.8	302.9	292.4	312.7	290.2	350.6	50.0
sample3	302.5	307.3	311.1	300.4	303.3	288.1	309.1	300.9	318.8	297.5	336.5	60.1
sample4	306.1	310.2	313.4	302.8	307.1	289.9	309.9	302.6	317.9	290.8	337.6	56.7
sample5	298.8	309.1	313.2	306.0	301.4	281.6	308.4	299.5	317.3	297.6	317.4	91.6
sample6	302.3	310.0	312.6	304.9	305.9	287.6	311.6	301.8	320.8	298.9	327.7	49.5
sample7	302.6	308.8	315.6	301.6	305.2	289.9	308.7	301.8	318.9	290.2	344.4	77.7
sample8	306.9	306.4	312.0	298.7	305.9	286.9	305.5	304.8	316.2	288.8	347.4	33.7
sample9	298.5	307.7	316.5	305.5	301.7	287.6	309.7	307.2	322.9	304.8	330.9	38.8
sample10	301.4	314.0	315.5	304.6	303.6	288.7	312.6	303.8	323.4	304.3	333.4	94.1

**Table S2.** An example of reference data.

	Total Hardness	Total Alkalinity	SO4 = (ppm)	Cl (ppm)	Ca (ppm)	Mg (ppm)	Na (ppm)	K (ppm)	Cu (ppm)	Fe (ppm)
sample1	88,90	22,00	5,50	49,70	80,16	8,74	3,70	1,58	0,01	0,05
sample2	106,41	23,00	5,00	21,70	48,09	58,32	3,74	1,55	0,01	0,06
sample3	99,60	28,00	9,50	35,50	80,16	19,44	4,09	1,90	0,01	0,03
sample4	65,00	25,00	10,00	35,50	42,68	23,32	4,04	2,02	0,01	0,06
sample5	67,66	25,00	7,50	14,20	36,07	31,59	5,00	2,10	0,01	0,07
sample6	68,15	26,00	16,00	28,40	49,69	18,46	5,04	1,99	0,01	0,05
sample7	61,84	26,00	8,50	28,40	33,66	28,18	6,11	2,45	0,01	0,06
sample8	67,18	30,00	8,20	35,50	49,69	17,49	5,94	2,52	0,01	0,05
sample9	46,73	14,00	10,50	21,30	38,47	8,26	4,66	2,07	0,02	0,04
sample10	48,22	23,00	4,00	14,20	36,07	12,15	4,95	2,08	0,02	0,02