Supplemental Information

Local pH Effects on Carbon Oxidation in Capacitive Deionization Architectures

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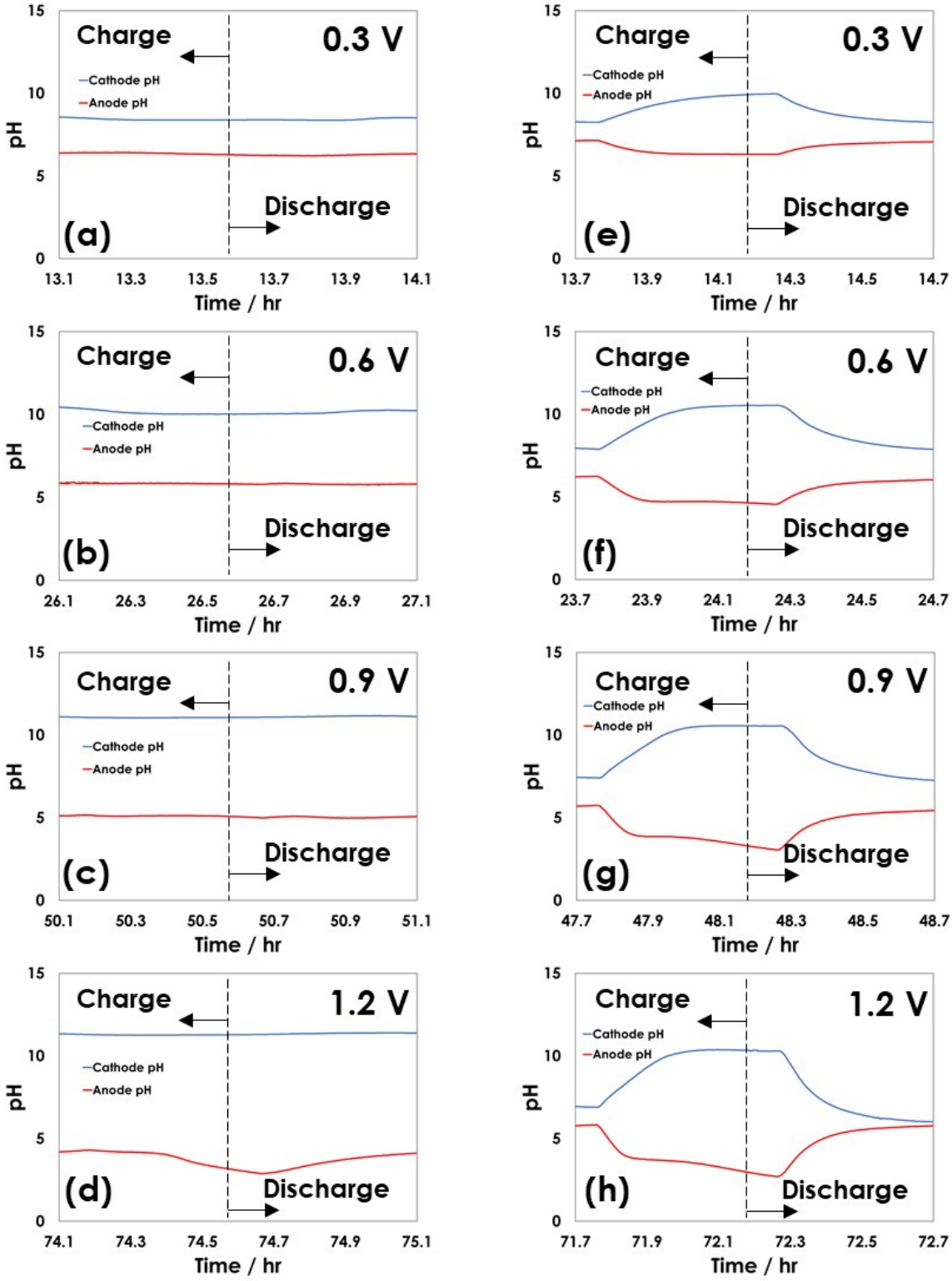

Figure S1. Near electrode pH response for the anode and cathode for MCDI cell at (a) 0.3 V, (b) 0.6 V, (c) 0.9 V, and (d) 1.2 V and CDI cell at (e) 0.3 V, (f) 0.6 V, (g) 0.9 V, and (h) 1.2 V.

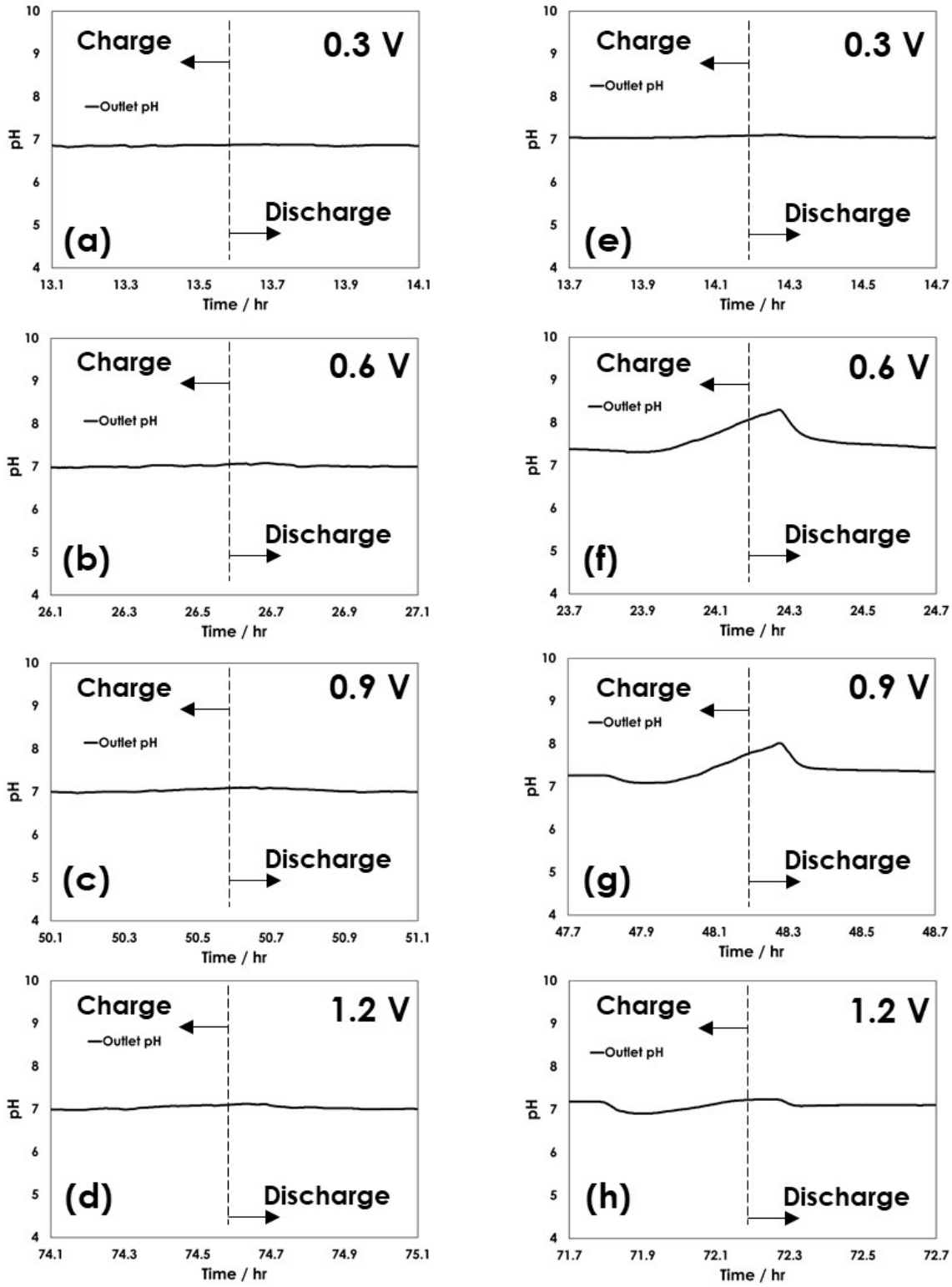

Figure S2. Outlet pH response for the anode and cathode for MCDI cell at (a) 0.3 V, (b) 0.6 V, (c) 0.9 V, and (d) 1.2 V and CDI cell at (e) 0.3 V, (f) 0.6 V, (g) 0.9 V, and (h) 1.2 V.

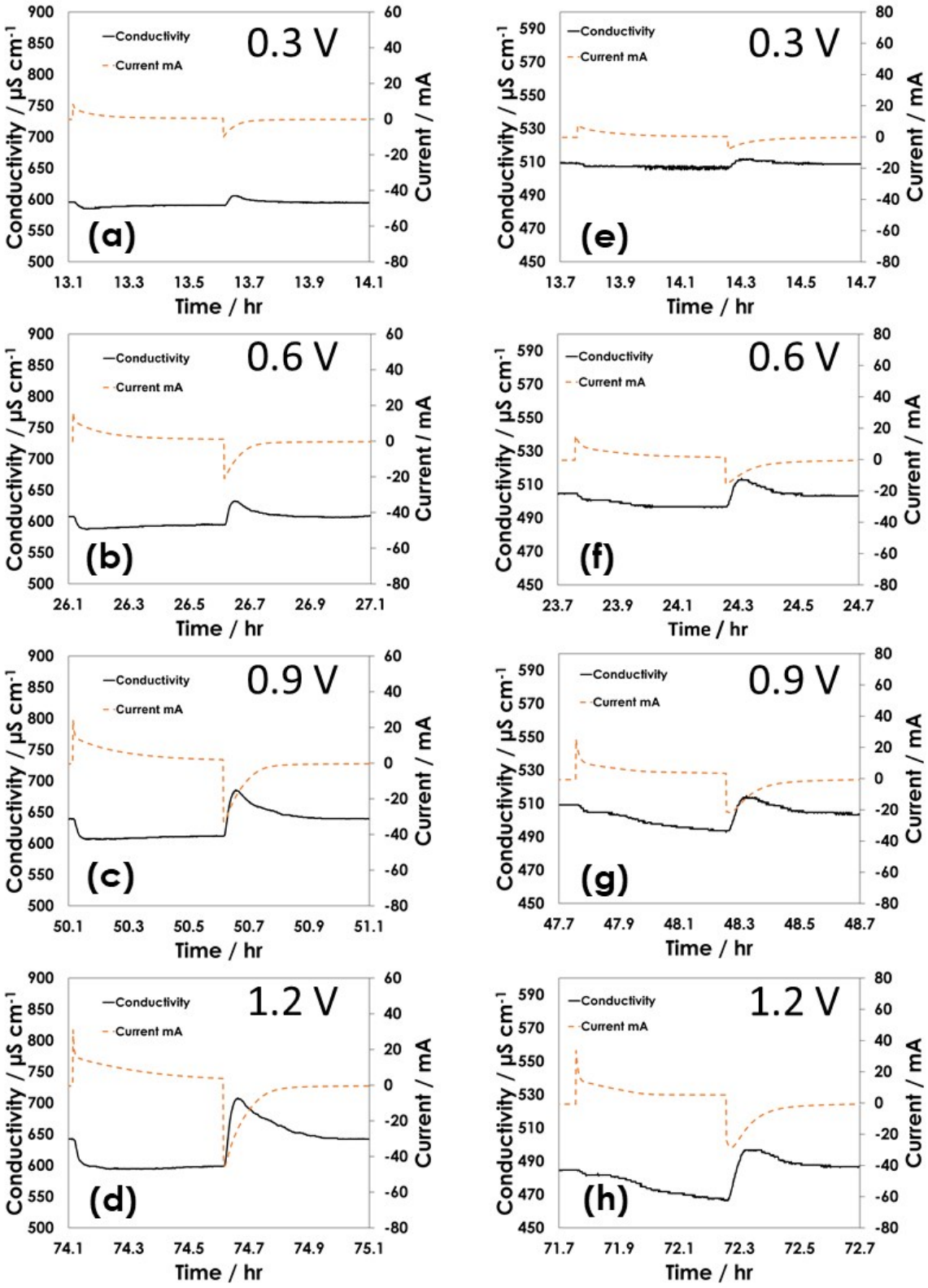

Figure S3. Conductivity and current traces for MCDI at (a) 0.3 V, (b) 0.6 V, (c) 0.9 V, and (d) 1.2 V and for CDI at (e) 0.3 V, (f) 0.6 V, (g) 0.9 V, and (h) 1.2 V.

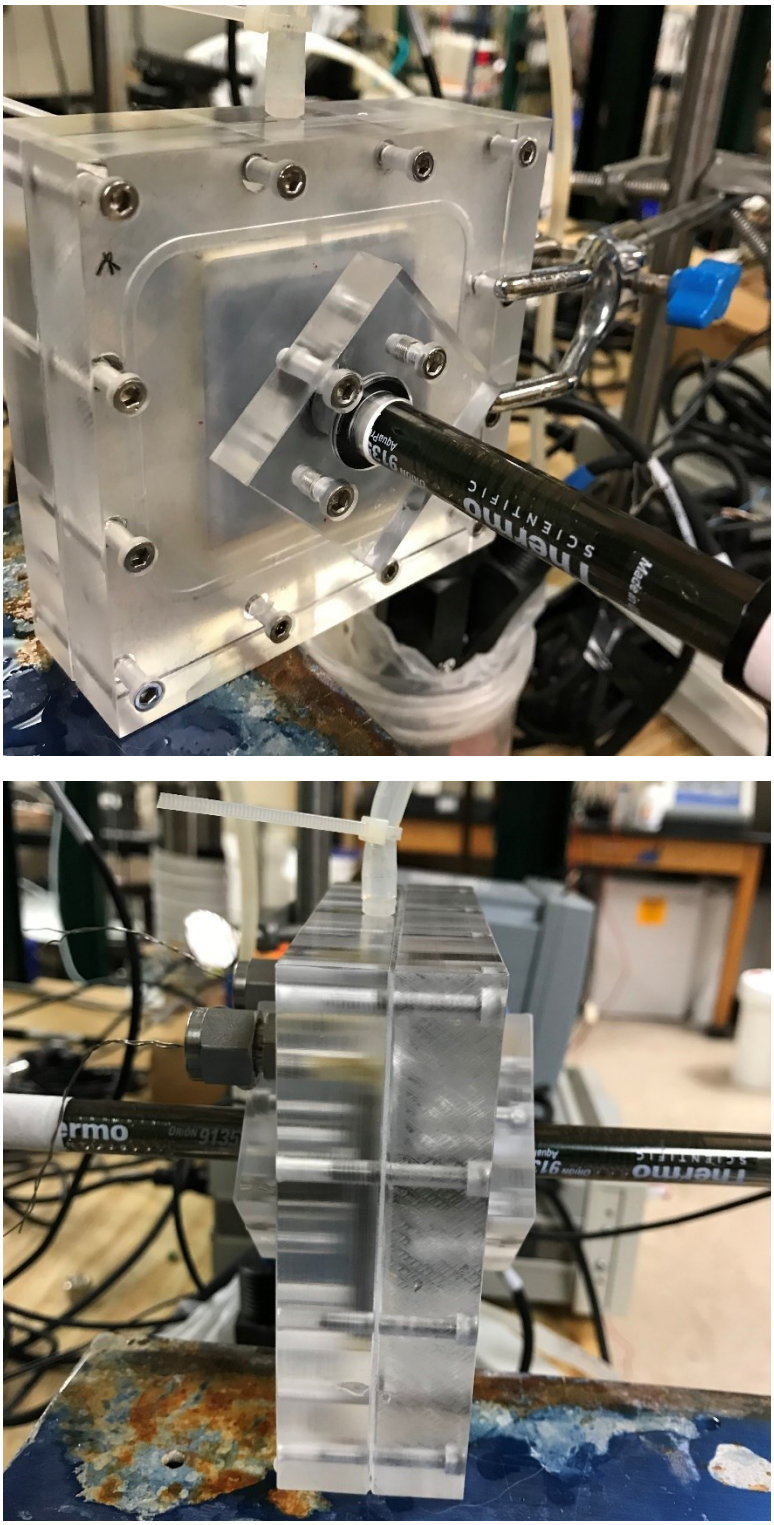

Figure S4. Near electrode pH from the side (above) and showing both near electrode pH probes (bottom).

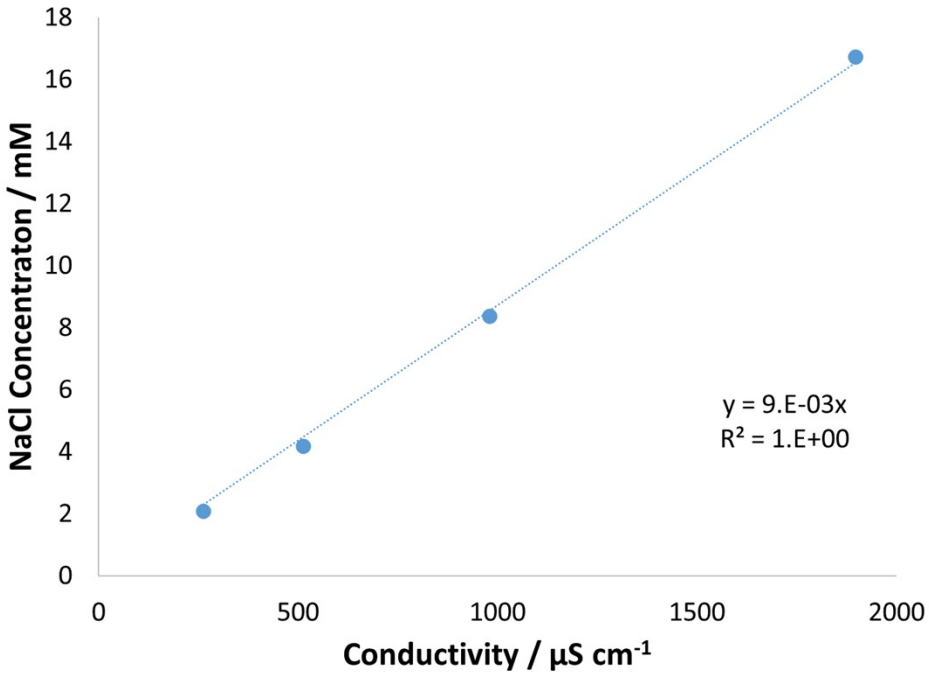

Figure S5. Calibration plot for NaCl concentration versus conductivity.