# Effects of piecewise electric field operation on sludge dewatering: phenomena and mathematical model

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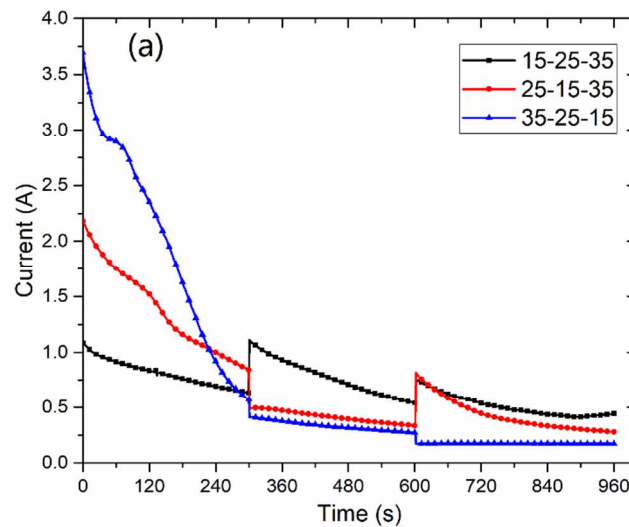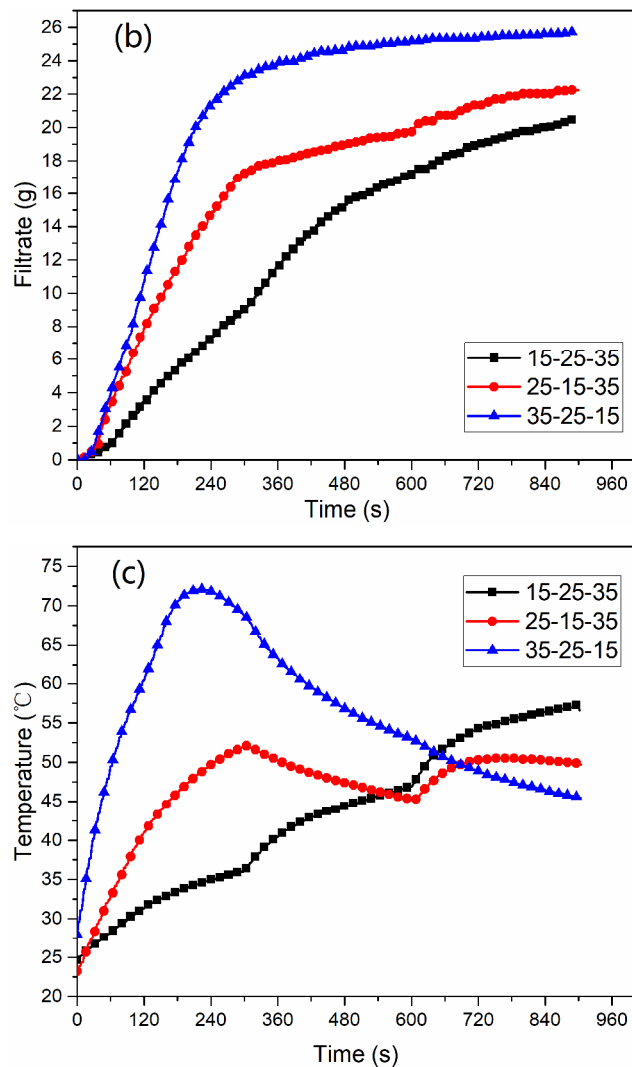
Figure S1 Effect of piecewise voltage dewatering for three combinations (15-25-35, 25-15-35, 35-25-15). (a) Current, (b) mass of filtrate, and (c) sludge temperature at applied voltages in piecewise voltage EDW mode
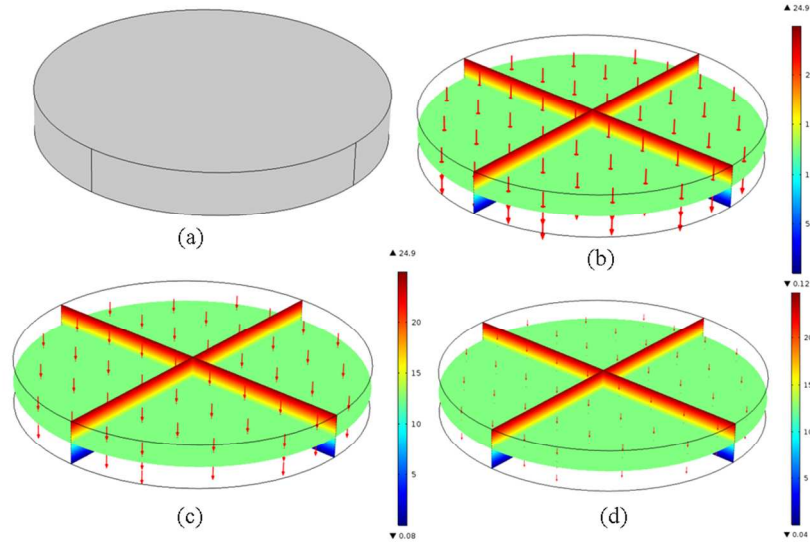
Figure S2. (a) Sludge cake 3D geometry, (b) t=0 s, (c) t=80 s, and (d) t=500 s potential distribution and the flow velocity vector of electro-osmotic under 25V. The arrow represents water flow velocity u_0. The length of arrow represents the magnitude of the velocity.