Movie S1. Side view of a transition for a voltage sweep from 0 to 50 V and back ($\tilde{V} = 160$). The recording is made with a ramp of approximately 5 volts per second, and sped up twice. Fiber diameter is 0.3 mm.

Movie S2. Head-on view of the transition shown in Movie S1. The vertical part of the L-shaped fiber is visible in the background when the droplet assumes the clamshell state.