

Abstract Submitted  
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**Generating more electricity from water**<sup>1</sup> DANIEL MOSER, GUOPING ZHANG, Indiana State University: Department of Chemistry and Physics — The Kelvin water drop generator is an ingenious method of using naturally occurring water to induce charge separation in water droplets by allowing them to fall through cross-wired conductors. While being a simple and clean source of energy, the generator has never been considered practical due to its low current output. The goal of this experiment was to discover what conditions were required to obtain maximum voltage. Manipulating where a water stream breaks into droplets inside the conductor, we were able to take advantage of the conductor's geometry and electric field to induce the largest charge separation inside the water droplets. We also explored methods on how to reduce charge cancellation during the operation of the apparatus.

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