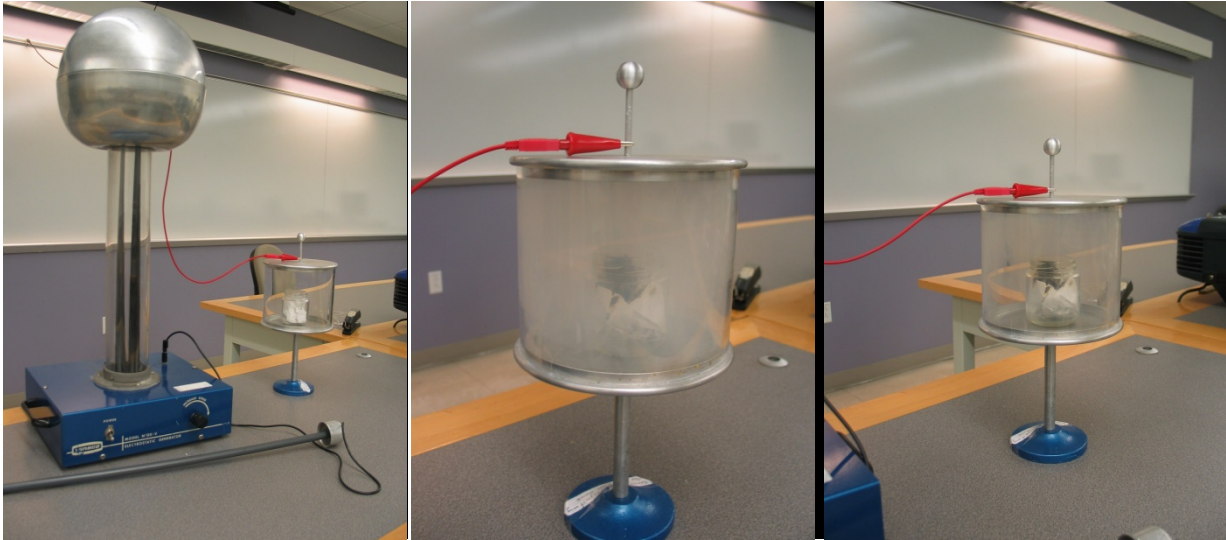


Smoke Precipitation (VdG)



Purpose: To demonstrate a practical application of electric fields.

Location: room 146; shelf L3 (VdG, L1)

Place a piece of paper in the small glass jar. Place them in the “Volta’s Hail Storm” apparatus near the VdG. Tape the banana plug end of the patch cord to the top of the VdG and clip the other end to the top post on the lid of the apparatus as shown in the first photo. Remove the top and place a lit match into the jar to ignite the paper. Once the fire is established, put the lid back on and the apparatus will fill with smoke as the fire burns out (second photo). Turn the Van de Graaff generator on and watch the smoke clear!

Electrostatic precipitators working on this principle are often used to remove smoke and other pollutants generated by industrial processes before they enter the atmosphere.