Bending Water

(Frequently done)

Purpose:

To show polarity.

Required Materials:

2 – 25 mL Burettes Metal Pan Ring Stand 1L Distilled Water 1 – 3 inch Balloon

2 – Burette Holder Clamps 1L Hexane Silk Cloth

Procedure:

Place 2 25mL burettes in a 2 burette holder mounted on a ring stand. Place distilled water in one burette and place the Hexane in the other burette. Inflate a 3 inch balloon with air(inflate the balloon by mouth), and rub the balloon thoroughly with a silk cloth. Place a metal pan under the burette with distilled water; open the stopcock on the burette to let out a stream of water. Place the charged balloon close to the water stream, and the stream of water bends. Move the metal pan to the burette with Hexane, open the burette stopcock holding back the Hexane, place the charged balloon close to the Hexane stream and observe that the stream of Hexane was unaffected by the charged balloon.

Reaction:

Water is ionic and Hexane is not ionic.

Waste:

Pour Hexane in a 1 L bottle for later use, and pour the water down the drain.

