1. Vortex Shedding

* 1. Error can reach up to 10% of actual flow for Reynold’s Numbers less than 10,000.

The minimum flow rate therefore is larger than the flowrate used in part a of this problem, showing that the calculation above is not accurate.

1. Hydrogen bubbles will be created in this experiment using hydrolysis. Hydrolysis is an endothermic reaction which splits H2O and releases gaseous hydrogen bubbles. Presumably a current will run through a metal wire (likely copper), which will provide the needed energy. The metal ions will then gain the hydroxyl group from the water molecules, creating a metal hydroxide. The spare hydrogen ion (H+) will then become the gaseous hydrogen that will bubbles through the liquid to show the flow in the system.