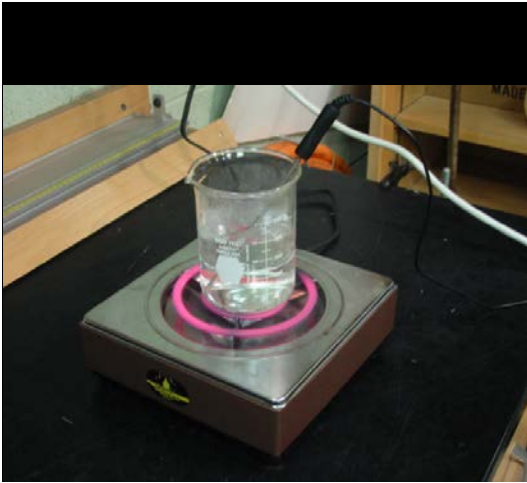
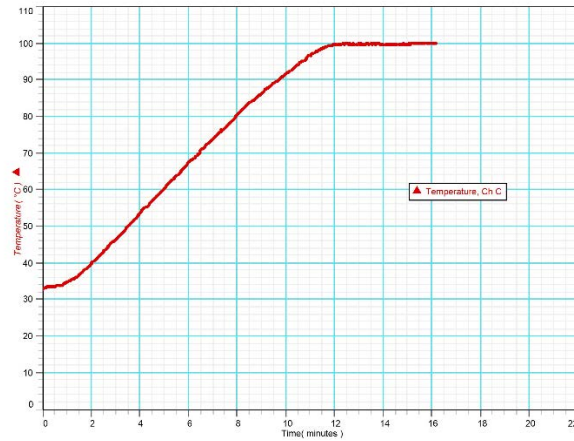


Latent Heat



**Temperature Probe
Stuck in a Beaker**



DataStudio T vs. t Plot

Purpose: Demonstrates the idea behind latent heat (of vaporization).

This is another DataStudio-based experiment to be projected onto a big screen. Because this demo takes some time (16 min. on the example below), do it in the background while you lecture about the subject.

Put about 400 ml of hot tap water into a beaker, and place it in the middle coils of the hot plate. Plug the temperature probe into channel A of the laptop interface box, and place the probe into the water.

Start the data acquisition by double-clicking the 'T-probe' icon on the laptop's desktop. Once the program is up and loaded, click on the START button.

Note: The 'T-probe' DataStudio script can be used to measure the temperature vs. time for whatever the probe is inserted into. Use it for any demo that you think up.

There is an additional window showing the digital temperature at the moment. You can maximize or minimize either window, depending on what you want to show the class.

The operating range for the stainless-steel probe is -35°C – 135°C .

Extra Equipment: Hot plate, beaker, and DataStudio Laptop cart.

Location: Shelf D3