Question #280

A few ml of water is heated in a 12-ounce soda can (photograph at left below) until the water boils, producing steam as evidenced by the condensation coming out of the can (photograph at the center below). The steam-filled can is then grabbed by a pair of tongs and quickly placed upside down on a dish of room-temperature water, as seen in the photograph at the right below, taken just before the top of the can reaches the water. You can see how the demonstration is set up in an mpeg video by clicking your mouse on the photograph at the right below.





The question this week involves exactly what happens after the can hits the water.

When the can reaches the surface of the water:

- (a) The can will RAPIDLY implode.
- (b) The can will SLOWLY implode.
- (c) Water will be pulled up into the can, filling the can with water.
- (d) Nothing will happen.

Click here for Answer #280 after April 2, 2007.

Outreach Index Page

Lecture-Demonstration Home Page



For questions and comments regarding the *Question of the Week* contact <u>Dr. Richard E. Berg</u> by e-mail or using phone number or regular mail address given on the <u>Lecture-Demonstration Home Page</u>.