Question #336

Shown in the photograph at the left below is a plastic tube. If the tube is turned upside-down, a vibrating reed slides from one end to the other inside of the tube. As air passes through the reed a raspy sound is created due to the vibration of the reed. Sound gets out of the tube, so probably at least one end of the tube is open, as seen in the photograph at the right, but both ends **might** be open.



Clicking your mouse on the photograph at the right, you will be able to hear the tone that is produced when the tube is inverted. If end "A" is down, it sounds like an "oo-ah," whereas if end "B" is down it sounds like an "ah-oo."

The question this week involves the nature of this sound. All of the information that you need to answer the question can be observed in the video.

Which end of the tube is open, and which end (if either) is closed?

- (a) End A is open and end B is closed.
- (b) End B is open and end A is closed.
- (c) Both end A and end B are open.

Click here for <u>Answer #336</u> after February 9, 2009.

Question of the Week

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>.