Question #350

CDs are quickly going out of fashion as newer, slimmer and more robust thumb drives are taking their place. Unfortunately as such, the once-loved CDs are quickly being chucked out by many. However here at Lecdem, we felt it our moral duty to put the once loved CDs back into action. Out from the frying pan and into the fire as they say...

This week an ordinary CD is placed in a stand and held (nearly) vertically inside a microwave, as shown in the photograph below. Click on the image to see the apparatus in greater detail.



Question: When the door is closed and the microwave is turned on for approximately 5 seconds, what will happen to the CD?

- (a) The CD will become cooler to the touch, owing to the exhaust.
- (b) The CD will become warm to the touch, since the water vapor inside will increase in temperature and transfer some of its energy to the CD by convection.
- (c) Sparks will fly from the CD.
- (d) Nothing will happen to the CD; it will remain just as it was before.

Click here for Answer #350 after September 21, 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 Lecture-Demonstration Home Page.

