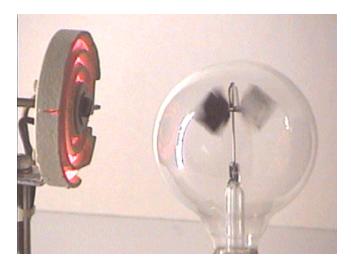
Question #180

Here is another question about the radiometer. Before answering this question you may want to review the two previous radiometer questions: Question #173 and Question #174.



For this experiment the heater is placed close to the radiometer and left on for about one minute. During this time the device rotates rapidly with the black sides of the vanes trailing, as seen in an mpeg video by clicking your mouse on the photograph above. This video is a compilation of two pieces, including about five seconds just after the heater is turned on then a couple of seconds a short time later with the vane spinning at its maximum rate. If the radiometer is heated to some high equilibrium temperature and maintained at that temperature, will it cease to rotate?

The question his week involves what will happen when the heater is left on *for about one minute* and then removed.

The radiometer will:

- (a) quickly stop.
- (b) slowly stop.
- (c) slowly stop then move slowly in reverse.
- (d) slowly stop then move rapidly in reverse.
- (e) other.

Click here for Answer #180 after March 22, 2004.

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>.