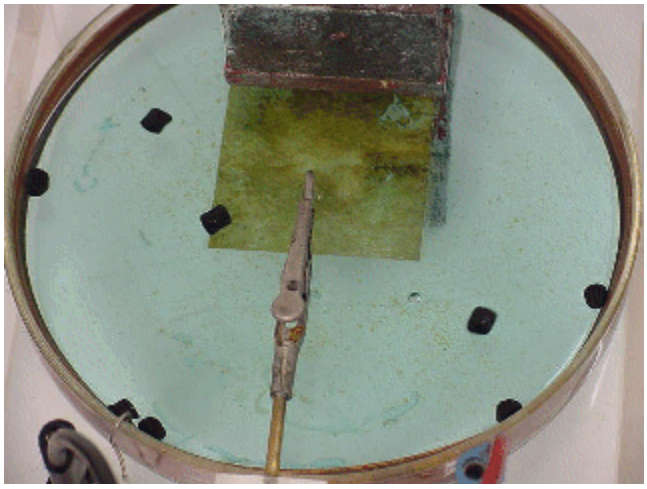
Answer #184

The answer is (a): the water will rotate clockwise around the circular container, as seen in an mpeg video by clicking your mouse on the photograph below.



When the power is activated, free electrons in the water experience a force in the inward direction and begin to move toward the center of the container. Some electrons or negative ions will move through the magnetic field of the magnet seen at the back of the photograph. The magnetic field is pointed upward from the north to the south pole of the magnet, so electrons moving inward toward the center of the dish will therefore experience a force to the right in the photograph. (Equivalently, the positive ions moving outward in the magnetic field will also experience a force to the right.) This force results in a clockwise flow of the water around the container, as verified by the motion of the little black dudes. Click here for another video.

This device, called a "magnetohydrodynamic generator," can be used by boats to reduce the sound of the engine, which in this case is noiseless. The only sound made by such an engine is the sound of the moving water.

Strangely, this device is described in a paper (see references) under the title "An Interesting Exhibit." And guess what? It is! This shows you why you should create good, descriptive titles for your papers!

Archive 10

Question of the Week

Outreach Index Page

Lecture-Demonstration Home Page

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