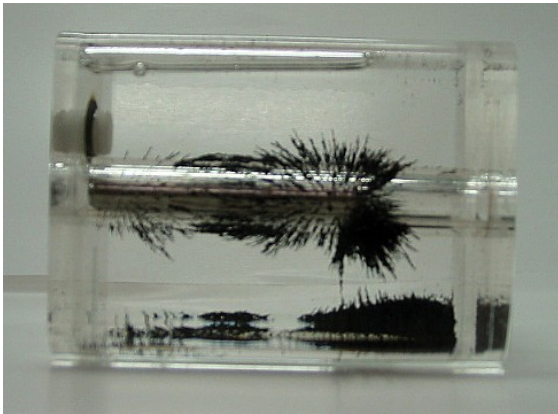
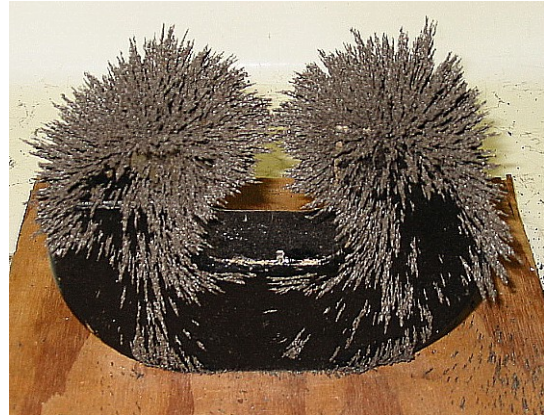


## 3D Magnetic Field



**Fluid-filled Cell**



**Iron-filings Method**

**Purpose:** Illustrates the  $B$  field surrounding a magnet.

- 1) We have a fluid-filled cell with suspended filings. Shake the cell to mix the suspended filings and insert the magnet. The cell is small so this demo is mostly suited for a smaller audience. Be careful not to drop the magnet out, or it will break.
- 2) If you do not mind handling it, the old method of shaking iron filings over a horseshoe magnet actually seems more impressive. Before lecture, pick the filings off the magnet back into the brass can. Then you will want to wash your hands! For the demo, (keeping the magnet in the plastic tray) sprinkle the filings lightly from above.

**Note:**

**Extra Equipment:** None

**Location:** Cell: Shelf F3, Iron: Shelf F2