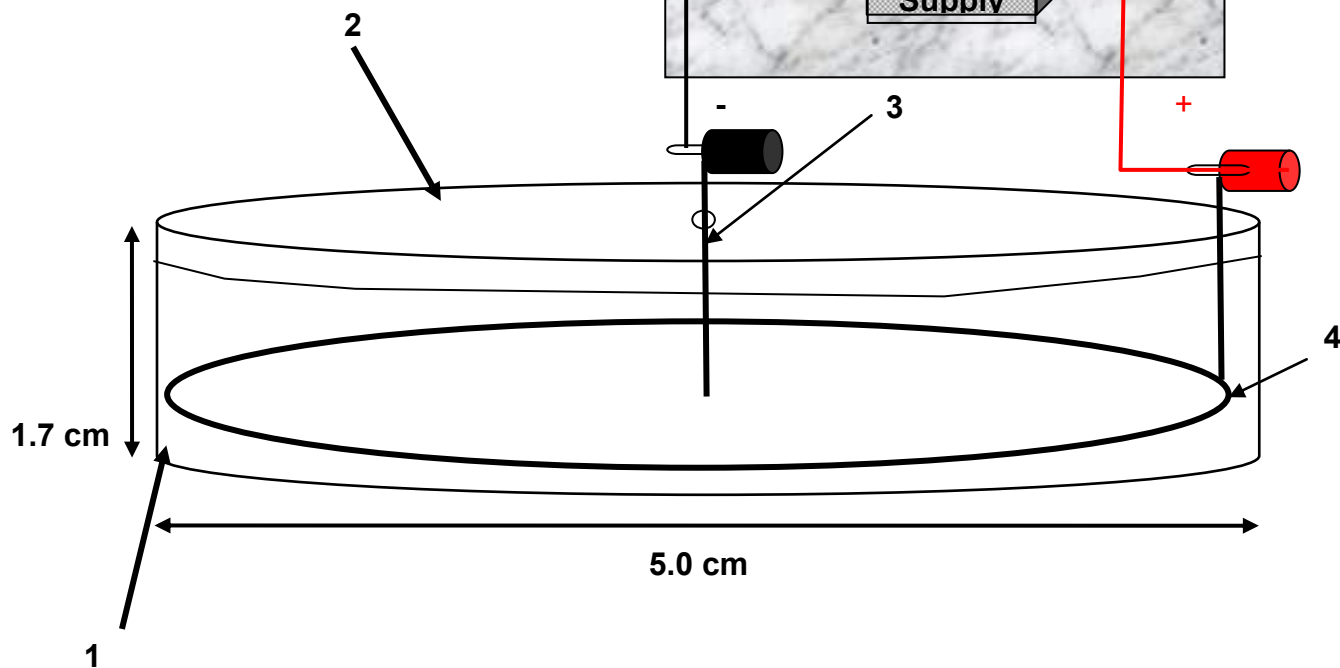
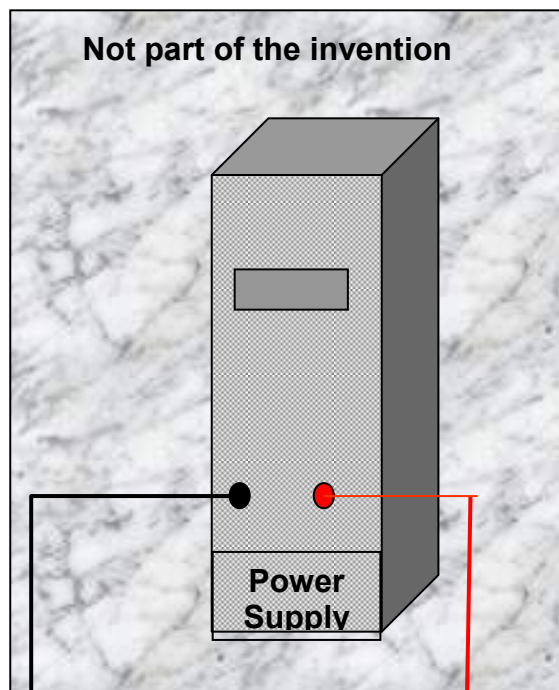


## **Circular Electrophoresis**

Nucleotide and protein electrophoresis is widely used to understand the changes occurring in their structure. The techniques currently available are horizontal electrophoresis for DNA /RNA; vertical, 2D and rod electrophoresis mainly for proteins. The major drawback in these techniques is the fact that the current flow is unidirectional and is applied to a large surface area. This reduces the extent to which these molecules can be resolved. The other problem is that these units are big and need a lot of power to be run hence they are not portable.

The present invention provides a process for making a circular electrode and product thereof for conducting electrophoresis of nucleotides (DNA, RNA) and proteins which comprises of a circular anode and a cathode in the middle, thereby providing a portable device with uniform electric field over a small surface area thereby increasing the resolution of macromolecules. This will not only allow the visualization of these macromolecules at a higher resolution but also in all directions in a live cell or from isolated material.

- 1. Glass petridish
- 2. Lid
- 3. Cathode
- 4. Circular Anode



*Drawing not to scale*