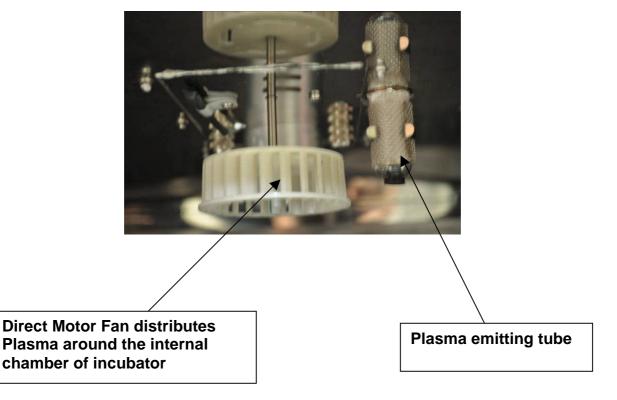
What is Plasma ?

Plasma: plasma is a partially <u>ionized gas</u>, in which a certain proportion of <u>electrons</u> are free rather than being bound to an <u>atom</u> or <u>molecule</u>. The ability of the positive and negative charges to move somewhat independently makes the plasma <u>electrically conductive</u> so that it responds strongly to <u>electromagnetic fields</u>

Plasma typically takes the form of neutral gas-like clouds, as seen, for example, in the case of stars. Like gas, plasma does not have a definite shape or a definite volume unless enclosed in a container; unlike gas, in the influence of a magnetic field, it may form structures such as filaments, beams and double layers

How does the Plasma sterilise the CO2 Incubator ?

Sterilization Mechanism: Plasma is created in the form of oxygen ion clusters generated by the application of pressure on an Infrared glass tube. Microorganisms are lysed in the presence of these plasma ion clusters. The additional application of heat at 90 degrees ensures complete sterility in the chamber.



Plasma Emitting Tube and Fan Assembly

Benefits of Plasma over steam or UV sterilisation

- 1. There is no need to remove any delicate sensors
- 2. No need to dry oven after sterilisation
- 3. Plasma reaches all parts of the chamber
- 4. 30 % less power consumption compared to steam