conducting particle for which $\varepsilon_1 \to \infty$, the force becomes

$$f = F_\infty = r^3 E \text{ grad } E$$

Thus the force will urge the particle to move to the strongest region of the field. In a uniform field gap or where gap of small spacing the strongest field is in the uniform region. In this region grad E is equal to zero so that the particle will remain in equilibrium there. Accordingly, particles will be attracted into the uniform field region. There will also be a concentration of electric [illegible] the surface of the particle. So, other particles will be attracted in the region [illegible] concentration of in this manner a stable chain of particles will be formed between the electrodes to form a bridge. The field in the liquid bet^n the particles will be enhanced. & if it reaches a critical value, breakdown will result.

If there is only one conducting particle bet^n the electrodes, it will give rise to local field enhancement depending on its shape. If this field exceeds the breakdown strength of the liquid, local breakdown will occur near the particle, & this will result in the formation of gas bubbles which may lead to the breakdown of the liquid.