

A Study of Crookes Dark Space in a Hot Lime Cathode Ray Beam

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Crooke's dark space (first observed by Sir William Crookes some 60 years ago) is present whenever there is an electrical discharge between two electrodes no matter what the pressure of the surrounding gas. The length of this space is dependent on several conditions within the tube, such as the pressure of the gas, the temperature at the source of the beam, the voltage applied between the electrodes, etc. In this study the beam emanated from a hot lime surface. The dark space is very sensitive to slight changes in potential and temperature. The paper dealt with the experimental data obtained.