Laboratory Report

Paschen Curve and Optical Emission Spectroscopy (OES) of discharge plasma

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Chapter 1

Introduction to the experiment

Objectives:

- 1. To study the generation of plasma, here using breakdown voltage method
- 2. To study the Paschen curve for various gases (N_2 and Ar) and find its properties
- 3. To try computing the value of the second Townsend coefficient γ
- 4. To analyse the Plasma spectrum of the two gases $(N_2$ and Ar) and try to get the electron temperature.

Theory:

Chapter 2

Study of Paschen curves

2.1 Observations:

Chapter 3

Optical Emission Spectroscopy(OES)

3.1 Observations:

References: