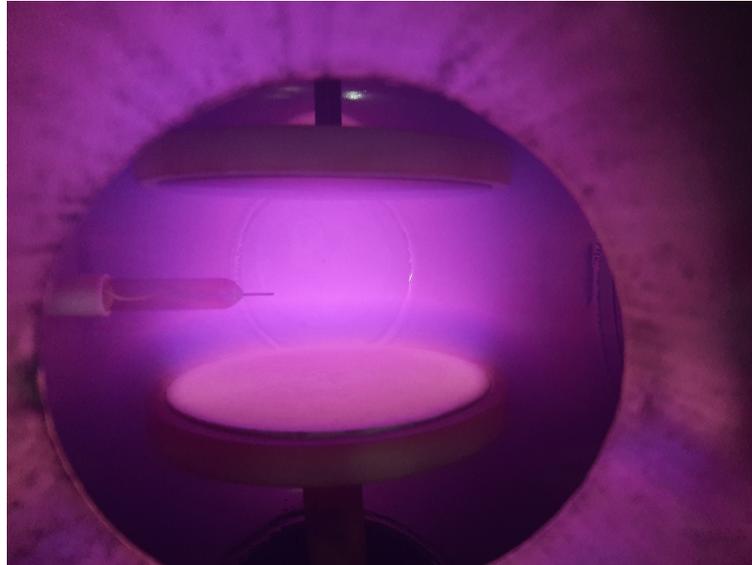


GLOW DISCHARGE SYSTEM ALONG WITH LANGMUIR PROBE DIAGNOSTIC



INTRODUCTION

Glow Discharge plasma systems in universities and colleges will provide an opportunity for students to understand the basics of plasma. This will also help them to understand the generation of DC low pressure plasma and its properties using Langmuir probe diagnostics.

APPLICATIONS

- Institutes and Universities where plasma physics subject is taught.
- Basic plasma physics experiments.
- Plasma processing industries can use the Langmuir probe with some modification to measure plasma parameters on day to day basis

SALIENT FEATURES

- Compact system to study Pachen's curve, Striation and plasma properties.



- Electrodes distance can be controlled accurately for studying Paschen curve.
- Probe Movement without disturbing vacuum in the chamber.
- Magnetic coupling for probe movement.
- Minimum spatial resolution of probe is less than 0.5 mm.
- Plasma parameters can be measured at the span of 250 mm.

INFRASTRUCTURE REQUIRED

- About 3 square meter space is required for assembly, testing & installation of the system
- The system consists of a vacuum chamber with all accessories like rotary pump, pressure measure devices, valves, DC power supply, Langmuir probe, probe movement system, probe biasing power supply and data acquisition

MAJOR RAW MATERIALS

SS304 for the manufacturing of Vacuum system, glass tubes, Tungsten for probe

MANPOWER REQUIRED

One graduate having a BSc. Physics degree is required.

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