# HYDROGEN SPECTRUM & RYDBERG CONSTANT

#### **Experiment(s):**

#### 1. Determination of Rydberg constant

(For more details, procedure & manual visit: www.kamaljeeth.net)

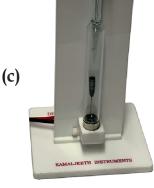
Reference: Lab Experiments Journal vol-5, No.3, Page-239





(b)





#### **Experiment setup consists:**

Model: HS-0601/017

- a) Spectrometer
- b) Diffraction grating
- c) Hydrogen discharge tube and power supply

#### **Specifications:**

#### a) Spectrometer

Scale: 6" diameter (Brass)
Base: Cast iron with levelling
screw

All moving parts made of Brass for accuracy

Collimator with adjustable slit Horizontal axis alignment for collimator: Yes

Horizontal axis alignment for telescope: Yes

Centre table: Height adjustable with provision for prism and grating holder

Telescope with user changeable cross wire and eyepiece

#### b) Diffraction grating

Grating constant: 15000

Lines/inch

Window size: 40 mm x 30 mm

## c) Discharge tube power supply

High voltage power supply variable from 0-5 KV Rated Input: 220 V/50 Hz or 110 V/60 Hz Suitable for other discharge tubes

Discharge tube: Hydrogen

filled (Qty: 2 Nos)

Stand: Height adjustable to accommodate all Kamaljeeth

make discharge tubes



### KAMALJEETH INSTRUMENTS

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