

Shri Manibhai Virani & Smt. Navalben Virani Science College
Yogidham Gurukul, Kalawad Road, Rajkot – 360005, Gujarat, India

Doc. no. VSC/CIF/SOP/002	Doc. name: Standard Operating Procedure for Polarimeter	Location : CIF Lab-111
Model : MCP 100 Sr.No : 99018597	Make: Anton Paar	ID no. VSC/CIF/002
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1. OBJECTIVE

To describe the procedure for operation and maintenance of Polarimeter.

2. SCOPE

Applicable to Polarimeter in the Central Instrumentation Facility (CIF) Lab

3. REFERENCE & ATTACHMENTS:

- 3.1 User's operating manual supplied by manufacturer.
- 3.2 Attachment – I Log book record.
- 3.3 Attachment –II Maintenance Log

4. RESPONSIBILITY

4.1 Head of Department

- 4.1.1 To ensure the implementation of this SOP.
- 4.1.2 To initiate repairs and to make alternative arrangements during the pendency of repair.

4.2 Application Chemist

- 4.2.1 To ensure proper documentation as per SOP.
- 4.2.2 To maintain the instrument and its accessories.
- 4.2.3 To inform about any failure of instrument or calibration failure to Head and to make a record in maintenance log.

5. PROCEDURE

- 5.1 Connect the instrument to the mains and switch it on (placed back side of instrument)
- 5.2 For Calibration, press Deg.Z key and bring the instrument in Deg. position (LED glows near middle display window).
- 5.3 Put the simple tube (dually filled with distilled water) in tube chamber and close the lid.

- 5.4 Rotate the Polaroid wheel slowly(Deg.Z displays should move towards 0),till the sensor display reaches to the minimum position(reading will be in two digit only).
- 5.5 Move the wheel repetately to and fro position and confirm the minimum reading of sensor display.
- 5.6 Press 0 key till display shows 0,then release the key.
- 5.7 Replaced the distrilled water by standerd solution sucrose 34.6 celcius rotation.
- 5.8 Repeat the same procedure and press the span key till degree display show 34.6 and the release the key.
- 5.9 To read Deg.Z press Deg. Z key(Deg.Z LED glows).
- 5.10 Readins are stored or deleted using RECAL key and scrolled using up and down arrow key.


6. Maintenance

- 6.1 Keep the instrument in a dust, vibrations, spatial noise and corrosive gases free environment.
- 6.2 Wipe the instrument to make it dust free before operation.
- 6.3 Do not turn off power supply to the main electronic of the instrument while instrument in use.

7. Distribution of SOP:

- 7.1. Master copy (original): To be kept with Head of Department.
- 7.2. Reference copy: To be kept with Application Chemist
- 7.3. Reference copy: For display at instrument




Principal
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