

 <p>BLDEA'S Shri Sanganabasava Mahaswamiji College of Pharmacy & Research Centre Vijayapur 586103</p>	DEPT. : PHARMACEUTICAL QUALITY ASSURANCE	SOP NO.: BCP/CIL/SOP/0 07
	INSTRUMENT NAME – POLARIMETER	
	PROCUREMENT DATE : 08-06-1983	PAGE NO.: 1-2
	SUBJECT: SOP FOR POLARIMETER	EFFECTIVE DATE: 01/01/2022
		REVIEW PERIOD: 31/12/2022

- ✓ **PURPOSE:** The purpose of this standard operating procedure (SOP) is to describe the operation and calibration of the polarimeter.
- ✓ **OBJECTIVES:** This SOP gives the procedure of operation and calibration of polarimeter.
- ✓ **SCOPE:** The operation and calibration of polarimeter instrument to determine the specific optical rotation of given test sample.
- ✓ **PRECAUTIONS:**
 - Polarimeter tube should be filled in such a way so as to avoid air bubbles.
 - Before taking the reading clean the polarimeter tube with tissue paper.
 - Set the field telescope for better observation.
 - The optical elements must be cleaned and at exact alignment.
 - Tighten the end plate with caps and seal so as to make it leak proof.
- ✓ **STANDARD OPERATING PROCEDURE**
 - Ensure that the instrument is clean and free from dust.
 - Ensure all the parts including optical lens, telescope lens, polarimeter tube care clean.
 - Switch on the instrument and let the sodium lamp compartment to the optical bench.
 - Ensure all the settings are done in the zero-zero position.
 - Open the polarimeter tube compartment and place the polarimeter tube which is filled with sample in such a way as to avoid air bubbles.
 - Specific attention should be paid to temperature control of the solution and of the polarimeter.

- Note the observations readings and also perform a blank determination in the similar manner.
- Observations are done by observing through telescope when the half dark and half light portions of a circle are in equilibrium.
- This half dark and half light portion is matched with a knob by rotating it in clockwise or anticlockwise directions.
- Clean the instruments and keep under cover when not in use.

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