

OPTICAL ACTIVITY AND POLARIMETRY

Name:

Group:

Date:

1. Goal of the experiment:

2. Thickness of the optically active layer $l \pm \Delta l =$

3. The zero layout of the polarimeter (zero calibration procedure):

	1	2	3	4	5	$\bar{\phi}_0$
ϕ_0						

4. Results of measurements of the dependence of the angle of rotation of the plane of polarization on the solution concentration:

	Concentration	Δc^*	Angle ϕ of rotation of the plane of polarization				
	c		ϕ_1	ϕ_2	ϕ_3	$\bar{\phi}$	$\phi = \bar{\phi} - \bar{\phi}_0$
 <i>unit</i> <i>unit</i>					
1							
2							
3							
4							
5							
c_x							

* $\Delta c =$
formula

Error of the angle of rotation: $\Delta \phi =$

Make a graph of the function $\phi = f(c)$.

5. The slope a of the best-fit straight line:

$a \pm \Delta a =$

6. Specific rotation:

$[\alpha]_\lambda =$
value

$\Delta[\alpha]_\lambda =$
formula and value

$[\alpha]_\lambda \pm \Delta[\alpha]_\lambda =$

