

DIFFUSION ACROSS THE MEMBRANE

Name:

Group:

Date:

1. Goal of the experiment:

2. Refractive index of the solution: $n_0 =$

Refractive index of water: $n_w =$

Initial concentration of the solution: $c_0 =$

Volume of the solution: $V =$

3. Results of measurements of the solution concentrations:

	time	refractive index		Percentage concentration of the solution		$\frac{c_0}{c_0 - 2c_B}$	$\ln \frac{c_0}{c_0 - 2c_B}$
		n_A	n_B	c_A	c_B		
1							
2							
3							
4							
5							
6							
7							

Make a graph of the function $\ln \frac{c_0}{c_0 - 2 \cdot c_B} = f(t)$

4. The value of the proportionality coefficient (the slope) a :

$a =$

5. The membrane thickness $dx =$

6. The constant of the measuring system $C =$

7. The diffusion coefficient $D =$

8. The membrane permeability $P =$

