

Microbial and Enzyme Kinetics Tutorial 1b

1. An enzymatic assay was carried out under two different sets of conditions using a pure substrate S. The results are tabulated below.

S /10 ⁻⁵ M	V _o (dimensionless)	
	Condition A	Condition B
2.50	8.2	11.6
5.00	12.9	18.9
7.00	15.3	23.0
10.00	17.8	28.0
15.00	20.5	32.6
20.00	22.2	36.0

- Plot the data using the Lineweaver-Burke plot
- Calculate the values of V_{\max} and K_m for both sets of conditions
- Suggest possible reasons why the two sets of results might be different.