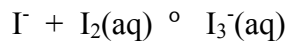


Laser-Raman Temperature-Jump Experiment.

Reference: Douglas H. Turner, George W. Flynn, Norman Sutin and James V. Bleitz;
Journal of the American Chemical Society **1972**, 94, 1554 – 1559.

The relaxation times, at 298 K for the iodine-triiodide equilibrium were found to vary as follows.



$[\text{I}^-]/10^3$	$[\text{I}_2]/10^3$	$\tau \text{ s}/10^9$	$([\text{I}^-] + [\text{I}_2])/10^3$	$\tau^{-1} \text{ s}^{-1}/10^{-7}$
.57	.36	70.7	.93	1.414
1.58	.24	50.0	1.82	2.0
2.39	.39	39.0	2.78	2.56
2.68	.16	37.9	2.84	2.64
3.45	.14	32.4	3.54	3.09

The first 3 columns represent experimental data. The last two columns are the data we have prepared for our plot of $1/\tau$ vs $[\text{I}^-] + [\text{I}_2]$.

Slope of the graph should give k_f and the intercept will give k_r .

See Graph below on next page.

2D Graph 1

