

Fluorescence Quenching Report

Name _____

Volume or mass of CCl_4 used to make up stock soln.: _____ units _____

$[\text{CCl}_4]$ stock _____ M

Stern Volmer Quenching:

Volume CCl_4 stock	$[\text{CCl}_4]$	I	I_0/I

slope _____ \pm _____ units _____

intercept _____ \pm _____ units _____

Attach Stern-Volmer plot and plot for the determination of $k_f + k_{nr}$

Fluorescence Lifetime:

slope _____ \pm _____ units _____

intercept _____ \pm _____ units _____

$k_f + k_{nr}$ _____ \pm _____ units _____

Attach Stern-Volmer plot and plot for the determination of $k_f + k_{nr}$

k_q _____ \pm _____ units _____

- fraction of collisions that result in quenching _____
- time for excited anthracene to become quenched _____
at $[\text{CCl}_4]$ _____