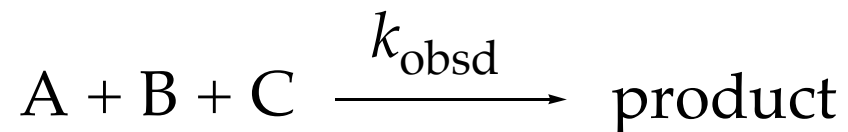
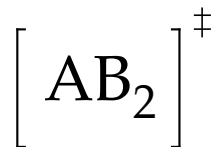


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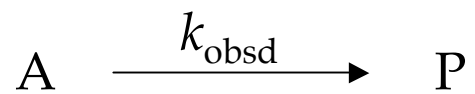
The rate law provides the stoichiometry of the rate-limiting transition structure relative to the reactants.



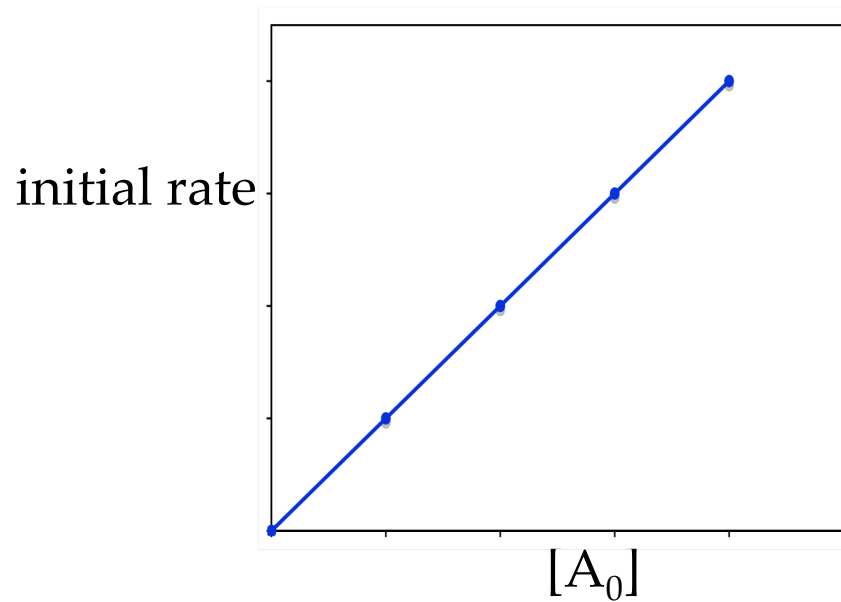
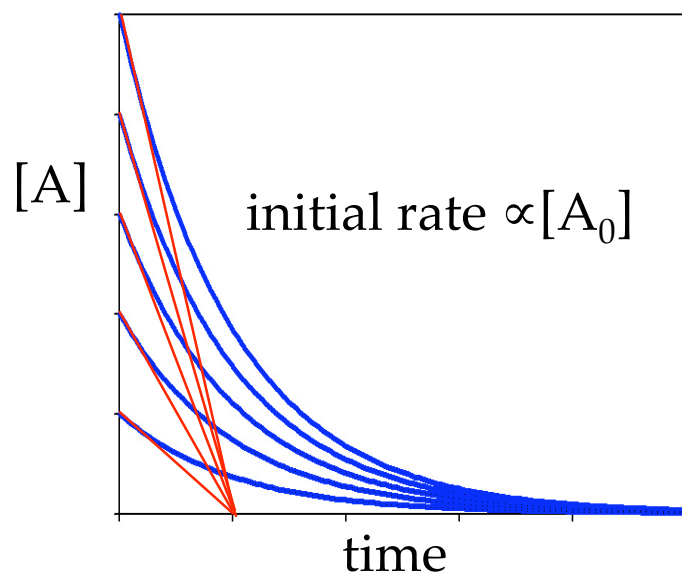
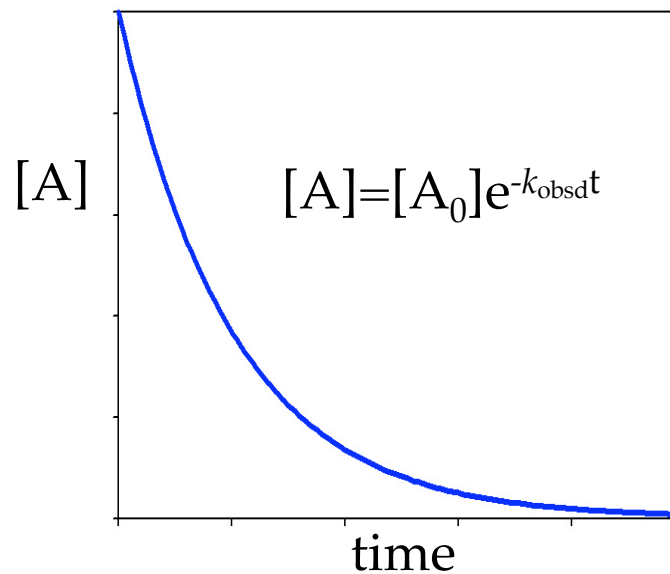
$$d[\text{product}]/dt = k_{\text{obsd}}[A]^1[B]^2[C]^0$$



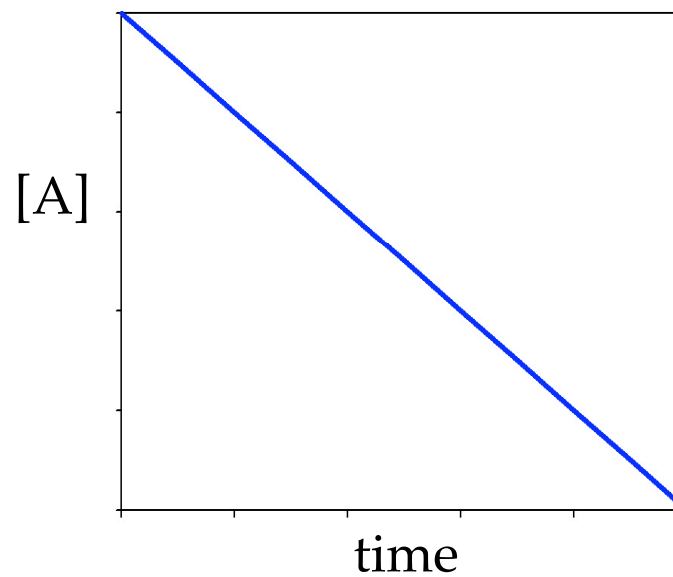
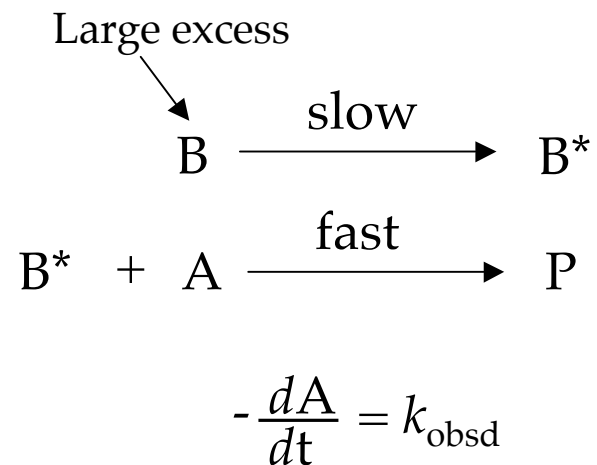
First-Order Kinetics -- A Tutorial



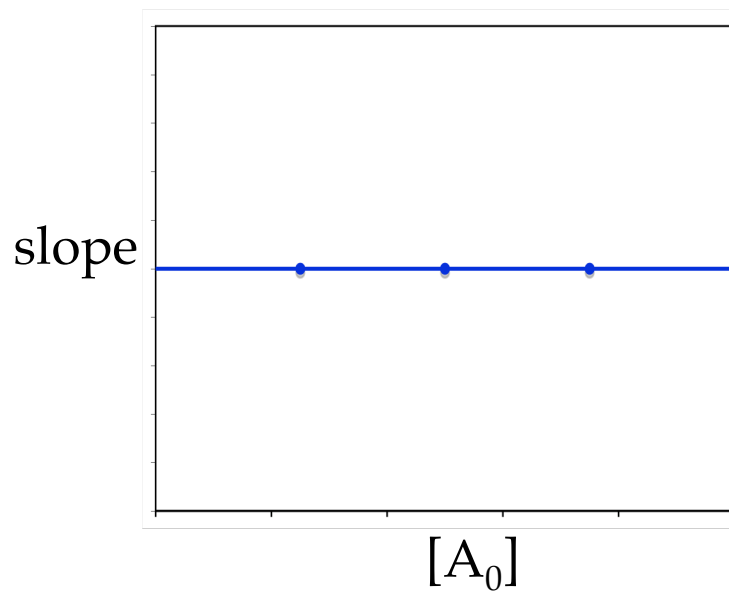
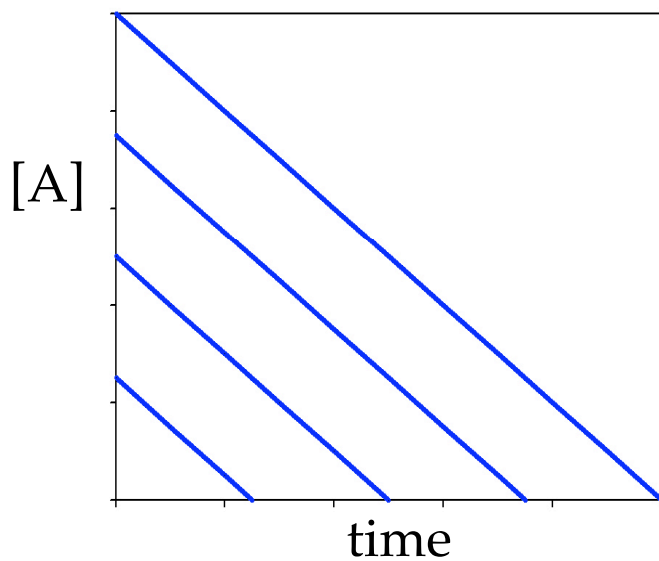
$$-\frac{dA}{dt} = k_{\text{obsd}}[A]$$



Zeroth-Order Kinetics -- A Tutorial

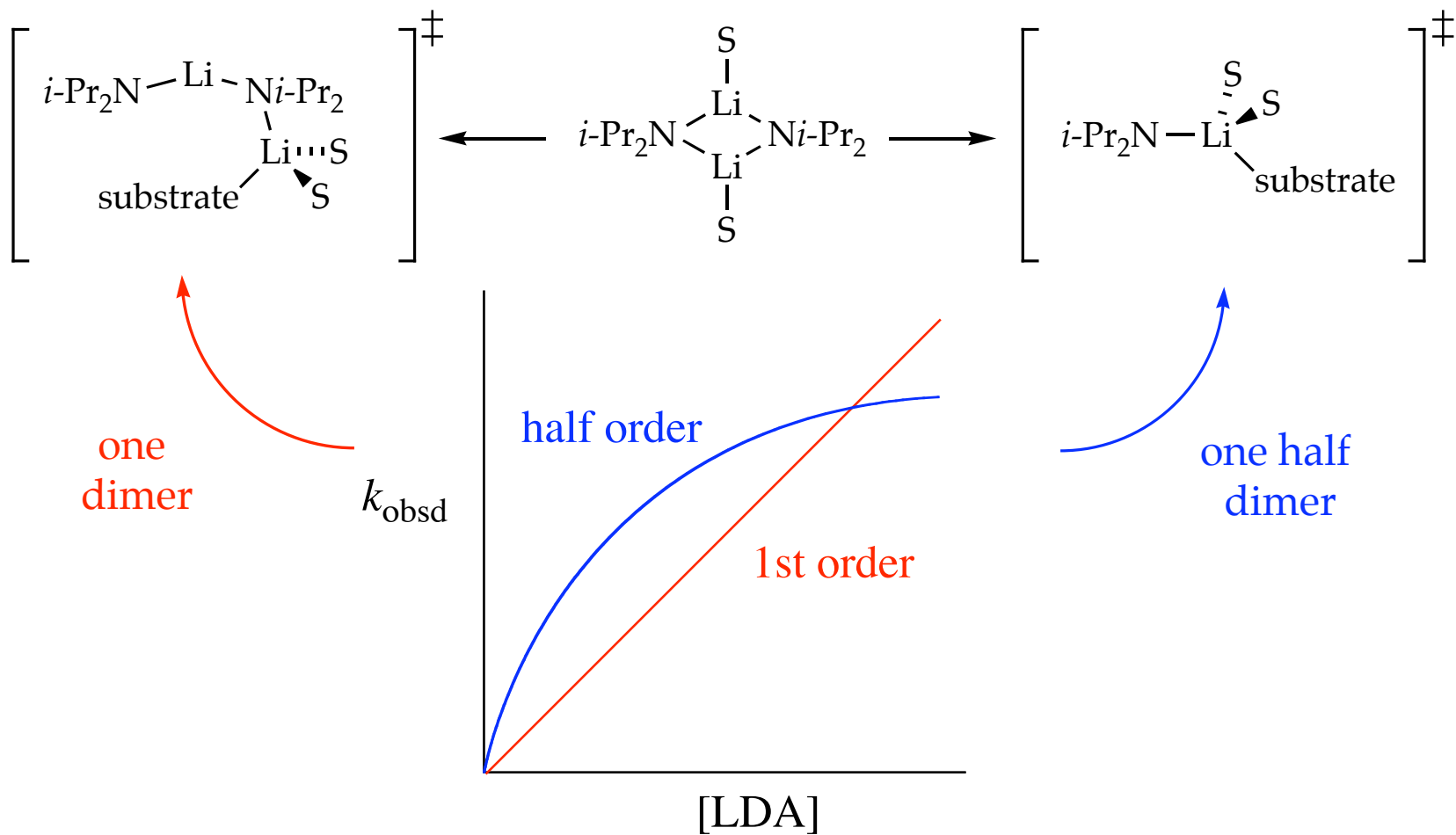


At different initial concentrations...



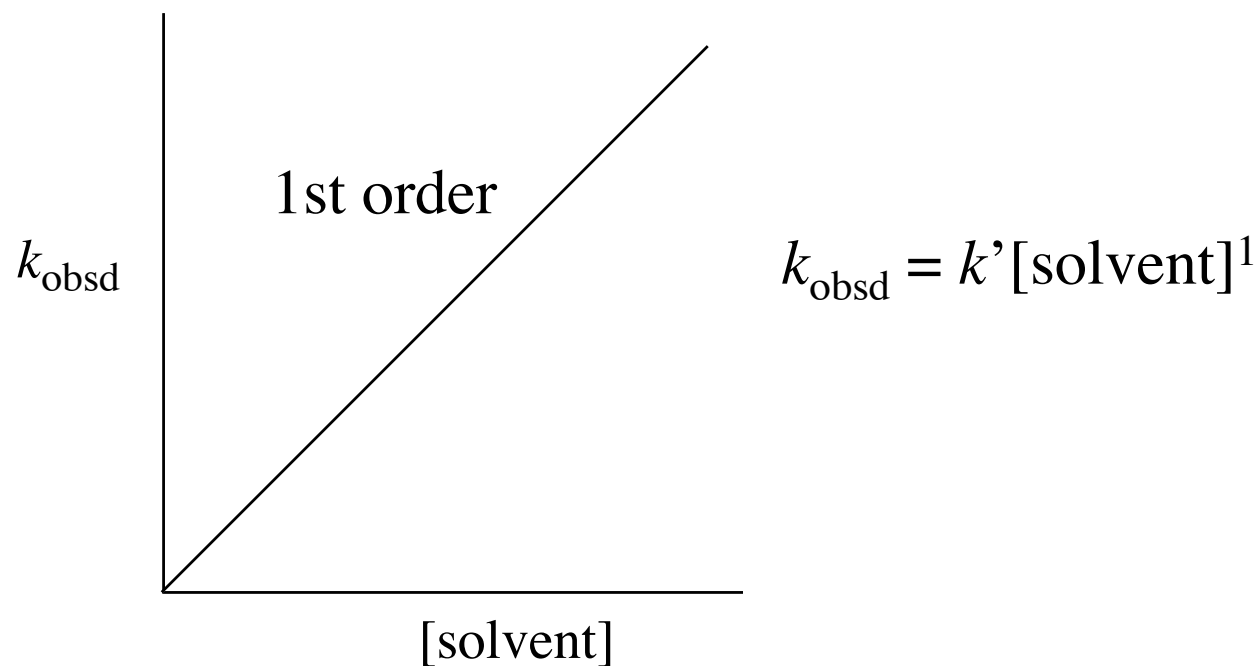
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Fractional reaction orders in LDA reveal deaggregations.



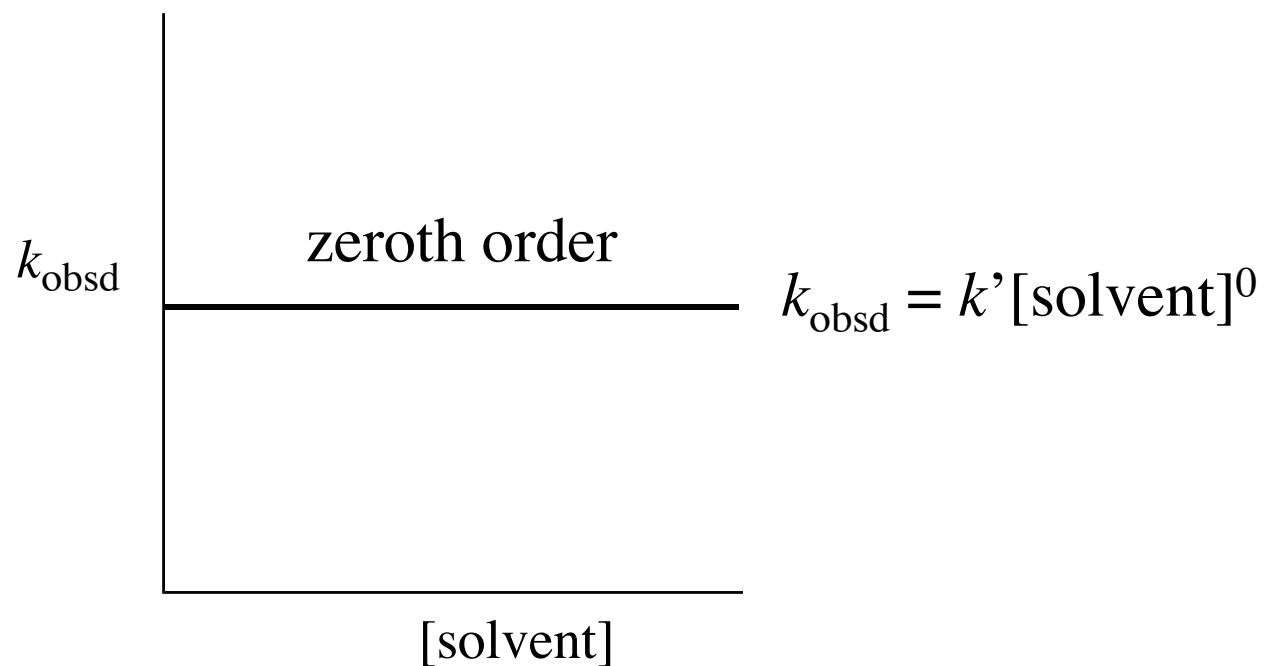
Kinetics -- A Tutorial

Solvents are ligands, not just reaction media.



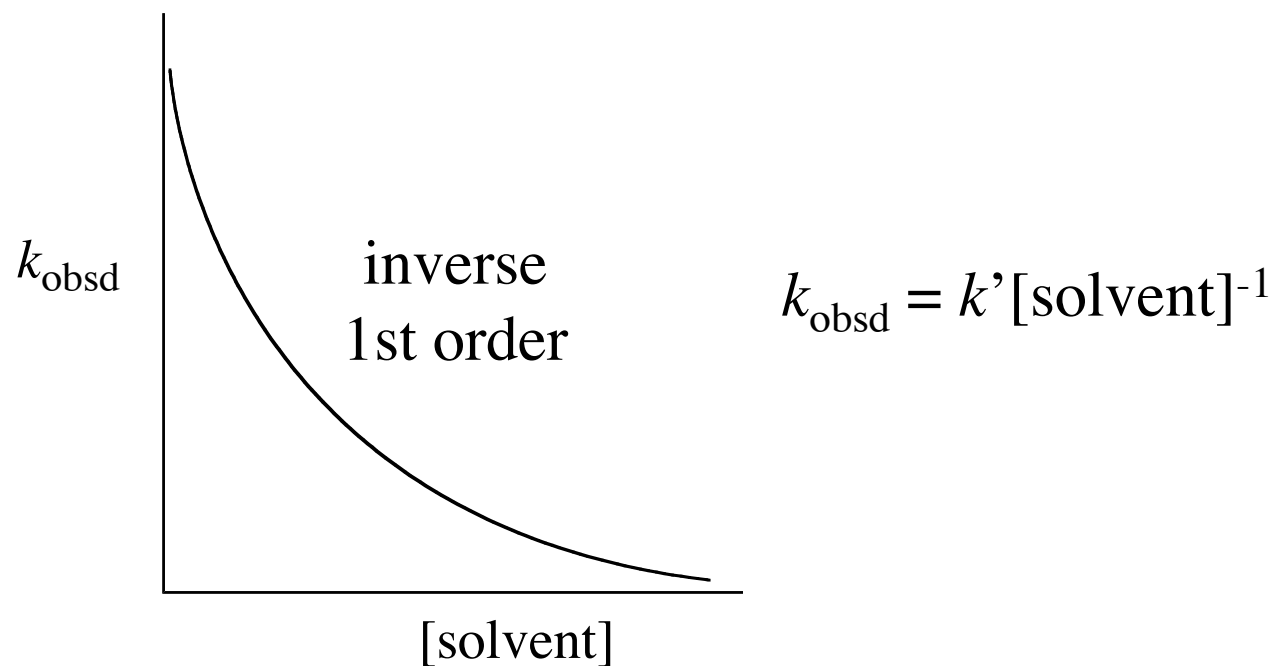
Kinetics -- A Tutorial

Solvents are ligands, not just reaction media.



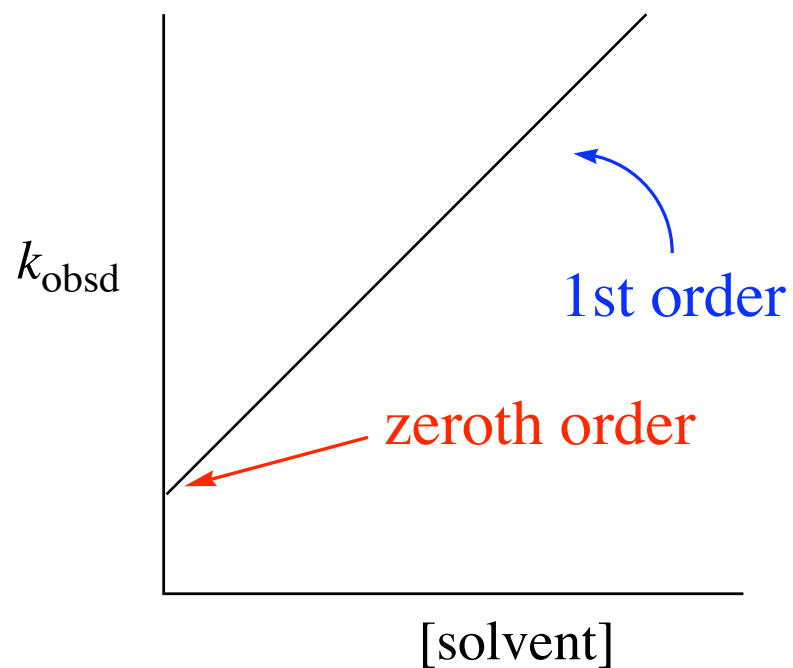
Kinetics -- A Tutorial

Solvents are ligands, not just reaction media.



Kinetics -- A Tutorial

Multiple reaction pathways are common.



$$k_{\text{obsd}} = k'[\text{S}]^1 + k''[\text{S}]^0$$