

# Shadows and lights in enzyme kinetics: quasi-steady state approximation revisited

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*Abbreviated Title:* Quasi-Steady State Approximation revisited

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## Abstract

In this paper we re-examine the commonly accepted meaning of the two kinetic constants characterizing any enzymatic reaction, according to Michaelis-Menten kinetics. Introducing a new asymptotic expansion (in terms of exponentials) of the solutions of the ODEs governing the reaction, we determine a new constant, which corrects some misinterpretations of current biochemical literature and suggest a new method to estimate the characteristic parameters of the reaction.