NAVIGATE THE COMPLEXITIES OF ENZYME KINETICS WITH MATHEMATICA®

Quantitative calculations on the rates of enzyme-catalyzed reactions can help identify mechanisms of catalysis and calculate the speed of catalyzed reactions under various conditions. This book shows how to use mathematical applications such as Mathematica® to conduct these calculations more easily and for more complicated mechanisms.

- Systematically describes the kinetics of an enzyme-catalyzed reaction using six steps, or six levels of understanding
- Provides the rate equations for a variety of types of enzyme-catalyzed reactions under various temperature, pH, and ionic strengths
- Requires a minimal number of velocity measurements in order to determine kinetic parameters for enzymatic reactions
- Shows step-by-step instructions for these calculations plus worked-out examples
- Provides a CD-ROM with the entire text of the book as well as programs you can use to estimate kinetic parameters from your own experimental data

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ROBERT A. ALBERTY received a BS in 1943 from the University of Nebraska and a PhD from the University of Wisconsin in 1947. He is the author of *Thermodynamics of Biochemical Reactions* in 2003 and *Biochemical Thermodynamics* in 2006, both from Wiley. In 2004, he coauthored *Physical Chemistry, Fourth Edition* with Robert J. Silbey and Moungi G. Bawendi.

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ISBN 978-0-470-63932-0
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