

ENZYME REACTOR ENGINEERING Collection

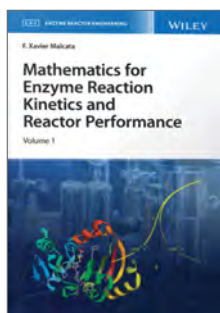
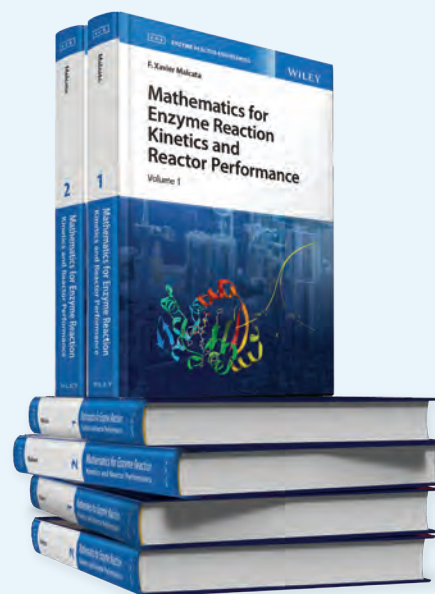
By *F. Xavier Malcata*

Chemical Engineering

SERIES INFORMATION

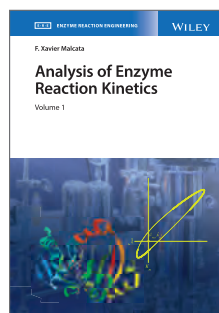
Enzyme Reactor Engineering is organized into eleven volumes in four major sets: *Enzyme Reactor Engineering*; *Analysis of Enzyme Reaction Kinetics*; *Analysis of Enzyme Reactor Performance*; and *Mathematics for Enzyme Reaction Kinetics and Reactor Performance*.

In particular, *Enzyme Reactor Engineering* provides an overview of the behavior of both biocatalyst and bioreactor, including biochemical relevance and industrial applications. *Analysis of Enzyme Reaction Kinetics* covers analysis of rate expressions and effects of processing conditions upon enzyme reactions. *Analysis of Enzyme Reactor Performance* looks at analysis of reactor design and performance using enzymes as catalysts, departing from the simplest cases of ideal (single and multiple) reactors, and expanding toward nonideal hydrodynamic patterns and multiphasic systems. Finally, *Mathematics for Enzyme Reaction Kinetics and Reactor Performance* examines mathematical background—from trivial to advanced mathematical concepts of algebra, calculus and statistics, useful for all aforementioned analyses.



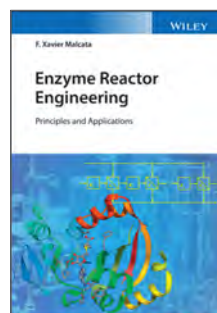
Mathematics for Enzyme Reaction Kinetics and Reactor Performance

2 Volumes | April 2020
Print ISBN 9781119490289
Hardcover | 1152 pages
List price US\$350
Online ISBN 9781119490319



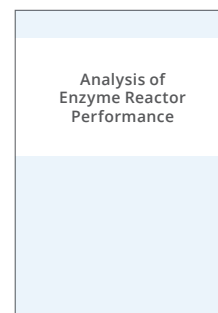
Analysis of Enzyme Reaction Kinetics

2 Volumes | July 2020
Print ISBN 9781119490241
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Enzyme Reactor Engineering

2 Volumes | September 2021
Print ISBN 9781119998969
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Analysis of Enzyme Reactor Performance

5 Volumes | August 2022
Print ISBN 9781119490272
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List price US\$643.95
Online ISBN 9781118673218

ABOUT THE AUTHOR

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ENZYME REACTOR ENGINEERING Collection

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Mathematics for Enzyme Reaction Kinetics and Reactor Performance, 2 Vol Set

This two volume-set relates specifically to the wide mathematical background required for systematic and rational simulation of both reaction kinetics and reactor performance; and to fully understand and capitalize on the modelling concepts developed.

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Basic Concepts of Algebra

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This second set in the volume describes rate expressions pertaining to enzymatic reactions, including modulation by physicochemical factors, as well as tools for prediction and control of how fast substrates are transformed to products.

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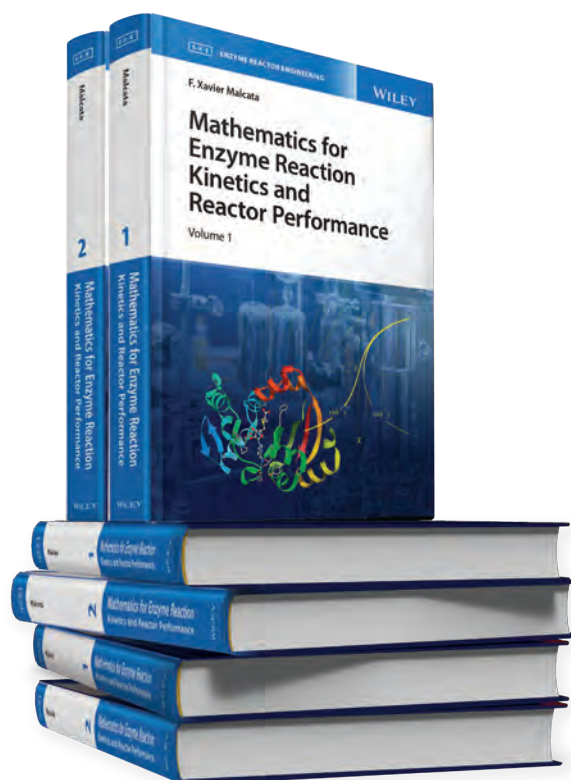
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