

1. Record Nr.	UNINA9910966426603321
Autore	Verma Ashok Kumar
Titolo	Process modelling and simulation in chemical, biochemical and environmental engineering // Ashok Kumar Verma
Pubbl/distr/stampa	Boca Raton : , : Taylor & Francis, , [2015] ©2015
ISBN	9781040195758 104019575X 9780429090691 0429090692 9781138075085 1138075086 9781482205930 1482205939
Edizione	[1st ed.]
Descrizione fisica	1 online resource (416 p.)
Classificazione	SCI013060TEC010000
Disciplina	660/.28
Soggetti	Chemical processes - Computer simulation Chemical engineering - Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Front Cover; Contents; Preface; Acknowledgements; Author; Nomenclature; Chapter 1: Introduction to Modelling and Simulation; Chapter 2: An Overview of Modelling and Simulation; Chapter 3: Models Based on Simple Laws; Chapter 4: Models Based on Laws of Conservation; Chapter 5: Multiphase Systems without Reaction; Chapter 6: Multiphase Systems with Reaction; Chapter 7: Population Balance Models and Discrete-Event Models; Chapter 8: Artificial Neural Network-Based Models; Chapter 9: Model Validation and Sensitivity Analysis; Chapter 10: Case Studies; Chapter 11: Simulation of Large Plants Appendix AAppendix B; Back Cover
Sommario/riassunto	The use of simulation plays a vital part in developing an integrated approach to process design. By helping save time and money before

the actual trial of a concept, this practice can assist with troubleshooting, design, control, revamping, and more. Process Modelling and Simulation in Chemical, Biochemical and Environmental Engineering explores effective modeling and simulation approaches for solving equations. Using a systematic treatment of model development and simulation studies for chemical, biochemical, and environmental processes, this book explains the simplification of a complicated
