

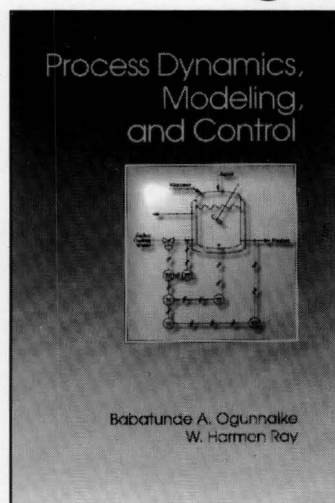
New in the *Topics in Chemical Engineering* series

A modern view of process control engineering in the age of new technology!

Process Dynamics, Modeling, and Control

BABATUNDE A. OGUNNAIKE, ADJUNCT PROFESSOR, DEPARTMENT OF CHEMICAL ENGINEERING, UNIVERSITY OF DELAWARE, AND W. HARMON RAY, STEENBOCK PROFESSOR OF ENGINEERING, DEPARTMENT OF CHEMICAL ENGINEERING, UNIVERSITY OF WISCONSIN, MADISON

This text offers a modern view of process control in the context of today's technology. It provides the standard material in a coherent presentation and uses a notation that is more consistent with the research literature in process control. Topics that are unique include a unified approach to model representations, process model formation and process identification, multivariable control, statistical quality control, and model-based control. This book is designed to be used as an introductory text for undergraduate courses in process dynamics and control. In addition to chemical engineering courses, the text would also be suitable for such courses taught in mechanical, nuclear, industrial, and metallurgical engineering departments.



FEATURES:

- Provides a modern view of process control engineering; topics include digital computer data acquisition, process monitoring, and process control.
- The text is logically organized; basic concepts are presented to students and details of the most advanced material are left to later chapters.
- Mathematical concepts are reviewed throughout the text to assist engineers with limited mathematical backgrounds.
- The text is designed to provide the theoretical background for courses that include a laboratory.
- Close to 500 review questions and over 200 problems are drawn from many areas of application and appear throughout the text. More than 100 worked examples are also included.
- Appendices are provided that cover topics including modern instrumentation capabilities, complex variables and solution methods for ordinary differential and difference equations, Laplace transforms and z-transforms, matrix methods and computer packages for computer-aided control system design.

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(Topics in Chemical Engineering)
1,296 pages; 446 illus.
509119-1 1994 \$79.95

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