

# Cogeneration and Polygeneration Systems

1st Edition

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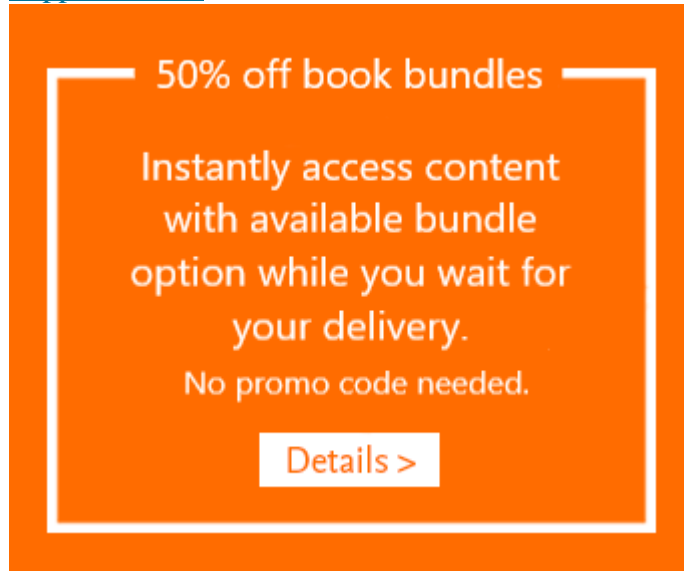
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## Description

*Cogeneration and Polygeneration Systems* explores the suite of state-of-the-art modeling, design, analysis and optimization procedures for creating and retooling optimally efficient combined heat and power (CHP) and polygeneration energy systems. The book adopts exergetic and thermoeconomic analysis and related modeling and simulation tools to inform performance and systems design in modern cogeneration plants. Chapters provide a methodical approach to the design, operation and troubleshooting of cogeneration systems when they are integrated with industrial processes. Cogeneration targets, environmental impacts, total site integration, and availability and reliability issues are addressed in-depth.

## Key Features

- Explores exergetic and exergoeconomic analysis for optimization purposes of CHP systems
- Addresses availability and reliability issues within cogeneration systems
- Reviews modern polygeneration systems based on renewable energy resources and fuel cells

## Readership

Researchers focusing on feasibility studies, modeling, simulation, analysis, design and optimization of energy systems, cogeneration, tri-generation, polygeneration, thermal and renewable power plants. Mechanical engineers, chemical and process engineers, environmental engineers and energy engineers that work on the evaluation, modeling, simulation, optimal design, optimization of cogeneration systems. Utility industries

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