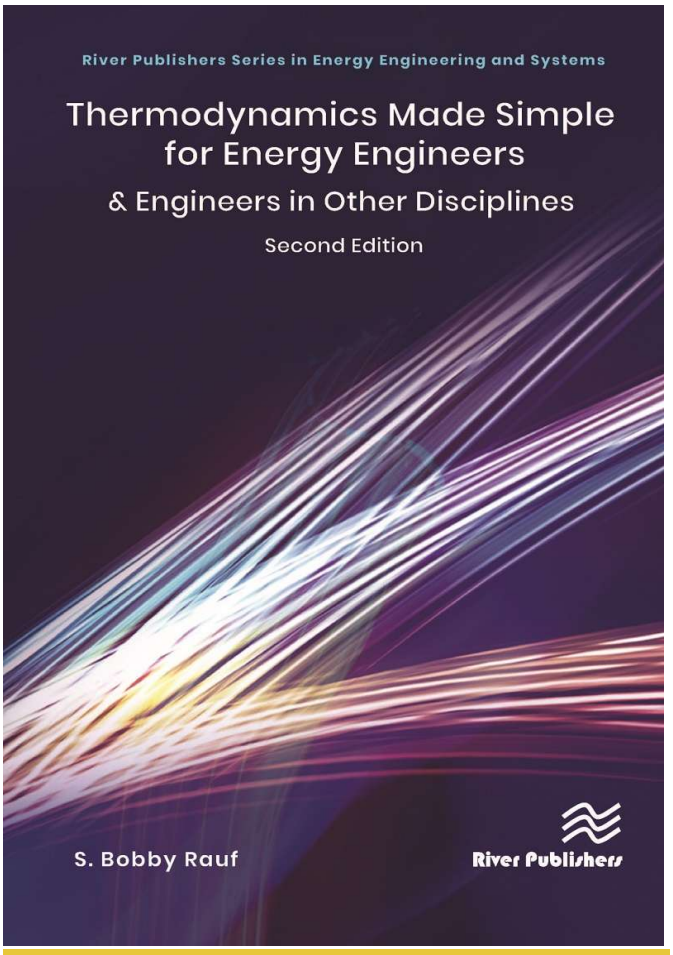
River Publishers

Thermodynamics Made Simple for Energy Engineers, Second Edition

& Engineers in Other Disciplines

Author: Shahid “Bobby” Rauf, Sem-Train, USA

Every non-fiction book has an objective or mission. The mission of this book is to give the reader an overview of the important principles, concepts and analytical techniques pertaining to thermodynamics, written in a fashion that makes this abstract and complex subject relatively easy to comprehend. The audience this text speaks to includes engineers, professionals with science and math backgrounds, energy professionals, and technicians. The content is presented in a way which also allows many non-engineering professionals to follow the material and glean useful knowledge. For energy engineers who have been away from direct engineering practice for a while, this book will serve as a quick and effective refresher. Thermodynamics topics such as enthalpy, entropy, latent heat, sensible heat, heat of fusion, and heat of sublimation are explained and illustrated in detail. Also covered are phases of substances, the law of conservation of energy, SFEE, the first and second laws of thermodynamics, ideal gas laws, and pertinent formulas. The author examines various thermodynamic processes, as well as heat and power cycles such as Rankine and Carnot. Case studies are used to illustrate various thermodynamics principles, and each chapter concludes with a list of questions or problems for self-assessment, with answers provided at the end of the book.



River Publishers Series in Energy Engineering and Systems

ISBN: 9788770223492
e-ISBN: 9788770224505
Available From: July 2023
Price: € 108.50 $ 140.00

KEYWORDS:
Thermodynamics, power, energy, efficiency, enthalpy, entropy, Mollier Diagram, psychrometric chart, saturated and superheated steam tables, thermodynamic phases, critical point, critical properties, laws of thermodynamics, thermodynamic processes, heat engine cycles, steam turbines, temperature-enthalpy diagrams, pressure-enthalpy diagrams, pressure-volume diagrams, temperature-entropy diagrams, gas dynamics, psychrometry, psychrometric charts, automated HVAC systems, and refrigeration cycle.

www.riverpublishers.com
marketing@riverpublishers.com