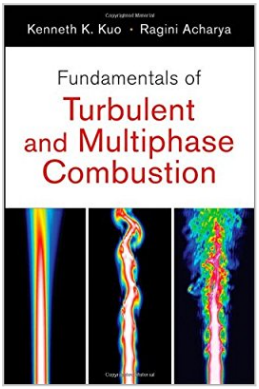

Fundamentals of Turbulent and Multi-Phase Combustion

By Kenneth Kuan-yun Kuo, Ragini Acharya

Fundamentals of Turbulent and Multi-Phase Combustion By Kenneth Kuan-yun Kuo, Ragini Acharya

Detailed coverage of advanced combustion topics from the author of Principles of Combustion, Second Edition

Turbulence, turbulent combustion, and multiphase reacting flows have become major research topics in recent decades due to their application across diverse fields, including energy, environment, propulsion, transportation, industrial safety, and nanotechnology. Most of the knowledge accumulated from this research has never been published in book form—until now. Fundamentals of Turbulent and Multiphase Combustion presents up-to-date, integrated coverage of the fundamentals of turbulence, combustion, and multiphase phenomena along with useful experimental techniques, including non-intrusive, laser-based measurement techniques, providing a firm background in both contemporary and classical approaches. Beginning with two full chapters on laminar premixed and non-premixed flames, this book takes a multiphase approach, beginning with more common topics and moving on to higher-level applications.

In addition, Fundamentals of Turbulent and Multiphase Combustion:

- Addresses seven basic topical areas in combustion and multiphase flows, including laminar premixed and non-premixed flames, theory of turbulence, turbulent premixed and non-premixed flames, and multiphase flows
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- Provides experimental setups and results whenever appropriate

Supported with a large number of examples and problems as well as a solutions manual, Fundamentals of Turbulent and Multiphase Combustion is an important resource for professional engineers and researchers as well as graduate students in mechanical, chemical, and aerospace engineering.

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