



**US\$  
49.00  
only**

**Author:**

**Abdallah Sofiane Berrouk  
United Arab Emirates**

**eISBN: 978-1-60805-296-7**

# Stochastic Lagrangian Modeling for Large Eddy Simulation of Dispersed Turbulent Two-Phase Flows

[www.benthamscience.com/ebooks/9781608052967](http://www.benthamscience.com/ebooks/9781608052967)

## About the ebook

This e-book explains the use of stochastic tools to enhance the accuracy of the Eulerian-Lagrangian large eddy simulation of particle-laden turbulent flows of practical interest. The book should be a useful resource for chemical, mechanical, petroleum and environmental engineering postgraduates and researchers interested in applying tractable yet powerful numerical tools to solve problems involving multiphase flows.

### Contents

- ▶ Large Eddy Simulation of Single-Phase Flow
- ▶ Large Eddy Simulation of Particle-Laden Flows
- ▶ Lagrangian Stochastic Modeling of Subfilter Motion for LES of Particle- Laden Flow
- ▶ Large Eddy Simulation of Solid Particle Dispersion in a Downward Turbulent Pipe Flow
- ▶ Large Eddy Simulation of Liquid Particle Deposition in a Turbulent 90° Bend Flow
- ▶ Expiratory Droplet Dispersion in a Mechanically Ventilated Enclosure
- ▶ Epilogue

For Sales Advertising Inquiries: Contact: [marketing@benthamscience.org](mailto:marketing@benthamscience.org)