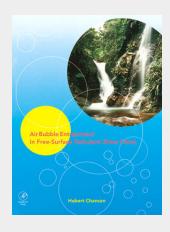
## Air Bubble Entrainment in Free-Surface Turbulent Shear Flows

This book develops an analysis of the air entrainment processes in free-surface flows. These flows are investigated as homogeneous mixtures with variable density. Several types of air-water free-surface flows are studied: plunging jet flows, open channel flows, and turbulent water jets discharging into air. Experimental observations reported by the author confirm the concept that the air-water mixture behaves as a homogeneous compressible fluid in each case. This book will be of great interest to professionals working in many fields of engineering: chemical, civil, environmental, mechanical, mining, metallurgy, and nuclear.

This book develops an analysis of the air entrainment processes in free-surface flows. These flows are investigated as homogeneous mixtures with variable density. Several types of air-water free-surface flows are studied: plunging jet flows, open channel flows, and turbulent water jets discharging into air. Experimental observations reported by the author confirm the concept that the air-water mixture behaves as a homogeneous compressible fluid in each case. This book will be of great interest to professionals working in many fields of engineering: chemical, civil, environmental, mechanical, mining, metallurgy, and nuclear. It covers new information on the air-water flow field: air bubble distributions, air-water velocity profiles, air bubble sizes and bubble-turbulence interactions. It features new analysis is developed for each flow configuration and compared successfully with model and prototype data. It includes over 372 references and more than 170 figures with over 60 photographs. It presents useful information for design engineers and research-and-development scientists who require a better understanding of the fluid mechanics of air-water flows.



**359,50 €** 335,98 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

ArtikeInummer: 9780121681104

Medium: Buch

ISBN: 978-0-12-168110-4 Verlag: Elsevier Health Sciences Erscheinungstermin: 22.10.1996

Sprache(n): Englisch

Auflage: Erscheinungsjahr 1996 Produktform: Gebunden

Gewicht: 943 g Seiten: 348

Format (B x H): 194 x 262 mm



