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9.7 Electrogenic biofilms10. Disperson; 10.1 Introduction; 10.2 Averaging properties to derive dispersion coefficients in turbulent fluids; 10.3 Dispersion in nonbounded turbulent sheared fluids; 10.4 Longitudinal dispersion coefficients for defined systems; 10.5 Dispersion in porous media; 11. Rivers, Lakes, And Oceans; 11.1 Introduction; 11.2 Chemical transport in rivers; 11.3 Mixing in lakes; 11.4 Mixing in estuaries; 11.5 Mixing in the ocean; 11.6 Transport of chemicals present as pure phases; 12. Chemical Transport In Porous Media; 12.1 Introduction; 12.2 Porous media hydraulics
12.3 Contaminant transport of conservative tracers

Sommario/riassunto

A unique approach to the challenges of complex environmental systems Environmental Transport Processes, Second Edition provides much-needed guidance on mass transfer principles in environmental engineering. It focuses on working with uncontrolled conditions involving biological and physical systems, offering examples from diverse fields, including mass transport, kinetics, wastewater treatment, and unit processes. This new edition is fully revised and updated, incorporating modern approaches and practice problems at the end of chapters, making the Second Edition more concise, accessibl