

1. Record Nr.	UNINA9910457952603321
Autore	Chanson Hubert
Titolo	Environmental hydraulics of open channel flows [[electronic resource] /] / Hubert Chanson
Pubbl/distr/stampa	Oxford, : Elsevier Butterworth-Heinemann, c2004
ISBN	1-281-00335-2 9786611003357 0-08-047269-9
Descrizione fisica	1 online resource (485 p.)
Disciplina	627.042
Soggetti	Channels (Hydraulic engineering) Environmental hydraulics Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Environmental Hydraulics of Open Channel Flows; Contents; Preface; Acknowledgements; About the author; Dedication; Glossary; A; B; C; D; E; F; G; H; I; J; K; L; M; N; O; P; R; S; T; U; V; W; Y; List of symbols; Reminder; Dimensionless numbers; Notes; Part 1 Introduction to Open Channel Flows; 1. Introduction; Summary; 1.1 Presentation; 1.1.1 Discussion: hydraulic engineering through history; 1.2 Fluid properties; 1.3 Fluid statics; 1.4 Open channel flows; 1.5 Exercises; 2. Fundamentals of open channel flows; Summary; 2.1 Presentation; Basic definitions; 2.2 Fundamental principles Discussion: the Bernoulli equationApplications to open channel flow situations; 2.3 Open channel hydraulics of short, frictionless transitions; Application to horizontal channels; Application to non-horizontal channels; Froude number; Discussion; 2.4 The hydraulic jump; 2.5 Open channel flow in long channels; 2.5.1 Presentation; 2.5.2 Uniform equilibrium flows; 2.5.3 GVF calculations; Integration of the GVF equation; 2.6 Summary; 2.7 Exercises; Part 2 Turbulent Mixing and Dispersion in Rivers and Estuaries: An Introduction; 3. Introduction to mixing and dispersion in natural waterways 3.1 IntroductionDiscussion; 3.2 Laminar and turbulent flows; Shear

stress; 3.3 Basic definitions; 3.4 Structure of the section; 3.5 Appendix A - Application: buoyancy force exerted on a submerged air bubble; Spherical bubble; Bubble rise velocity in still water; Bubble rise velocity in a non-hydrostatic pressure gradient; 3.6 Appendix B - Freshwater properties; 3.7 Exercises; 3.8 Exercise solutions; 4. Turbulent shear flows; 4.1 Presentation; Summary; DISCUSSION; The Couette flow; 4.2 Jets and wakes; Discussion; 4.3 Boundary layer flows; Velocity distribution; Applications  
Turbulent boundary layer development along a smooth flat plate  
4.4 Fully developed open channel flows; 4.5 Mixing in turbulent shear flows; 4.5.1 Presentation; 4.5.2 Discussion: effects of contaminants on shear flows; 4.6 Exercises; 4.7 Exercise solutions; 5. Diffusion: basic theory; 5.1 Basic equations; Summary; 5.2 Applications; 5.2.1 Initial mass slug; DISCUSSION; 5.2.2 Initial step function  $C_{\text{sub}(m)}(x, 0)$ ; 5.2.3 Sudden increase in mass concentration at the origin; DISCUSSION; 5.2.4 Effects of solid boundaries; 5.3 Appendix A - Mathematical aids; Differential operators; Error function  
Notation Constants; Mathematical bibliography; 5.4 Exercises; 5.5 Exercise solutions; 6. Advective diffusion; Summary; 6.1 Basic equations; 6.2 Basic applications; 6.2.1 Advective diffusion of a sharp front; 6.2.2 Initial mass slug introduced at  $t = 0$  and  $x = 0$ ; 6.2.3 Transverse mixing of two streams with different concentrations; 6.2.4 Sudden mass contamination in a river; 6.3 Two- and three-dimensional applications; 6.4 Exercises; 6.5 Exercise solutions; 7. Turbulent dispersion and mixing: 1. Vertical and transverse mixing; Summary; 7.1 Introduction; 7.2 Flow resistance in open channel flows  
7.3 Vertical and transverse (lateral) mixing in turbulent river flows

---

## Sommario/riassunto

Environmental Hydraulics is a new text for students and professionals studying advanced topics in river and estuarine systems. The book contains the full range of subjects on open channel flows, including mixing and dispersion, Saint-Venant equations method of characteristics and interactions between flowing water and its surroundings (air entrainment, sediment transport). Following the approach of Hubert Chanson's highly successful undergraduate textbook *Hydraulics of Open Channel Flow*, the reader is guided step-by-step from the basic principles to more advanced practical applicatio

---

2. Record Nr.	UNINA9910703613203321
Autore	Healy R. W.
Titolo	The water-energy nexus : an earth science perspective // by Richard W. Healy [and four others]
Pubbl/distr/stampa	Reston, Virginia : , : U.S. Department of the Interior, U.S. Geological Survey, , 2015
Descrizione fisica	1 online resource (122 unnumbered pages) : color illustrations, color maps
Collana	Circular ; ; 1407
Soggetti	Power resources - Environmental aspects - United States Water consumption - United States Water efficiency - United States Power resources - Environmental aspects Water consumption Water efficiency United States
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from title screen (viewed on May 15, 2015).
Nota di bibliografia	Includes bibliographical references (pages 91-105).

3. Record Nr.	UNISA996215915903316
Titolo	Country profile Kenya // EIU, the Economist Intelligence Unit
Pubbl/distr/stampa	London, U.K., : Economist intelligence Unit, ©1986-
Descrizione fisica	1 online resource
Disciplina	330.9676/2/005
Soggetti	Economic history Politics and government Periodicals. Kenya Economic conditions 1963- Periodicals Kenya Politics and government 1978-2002 Periodicals Kenya Politics and government 2002- Periodicals Kenya Conditions économiques 1963- Périodiques Kenya Politique et gouvernement 1978-2002 Périodiques Kenya Politique et gouvernement 2002- Périodiques Kenya
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Periodico