

The Hydraulics of Open Channel Flow: an Introduction

NEWSLETTER

No. 1, Dec. 2000

First published in August 1999, the textbook "The Hydraulics of Open Channel Flow: an Introduction" is designed for undergraduate students in Civil, Environmental and Hydraulic Engineering. The book is an introduction to the hydraulics of open channel flows. It is assumed that the students are familiar with the basic principles of fluid mechanics: continuity, momentum, energy and Bernoulli principles.

CHANSON, H. (1999). "The Hydraulics of Open Channel Flows : An Introduction." *Butterworth-Heinemann*, London, UK, (ISBN 0 340 74067 1).

Support website :

<http://www.bh.com/companions/0340740671/>

Correction/addition :

<http://www.uq.edu.au/~e2hchans/reprints/errata.htm>

What's new !

+ Publisher

The book was originally published by *Edward Arnold*. In June 2000, *Edward Arnold* sold the rights of all its engineering titles, including "The Hydraulics of Open Channel Flow: an Introduction", to *Butterworth-Heinemann* {<http://www.bh.com>}.

In North-America, the book was distributed by *John Wiley* from October 1999 to December 2000. Since 1st January 2001, the book is distributed worldwide by *Butterworth-Heinemann*.

The publishing editor of the book has been Mrs Eliane WIGZELL {Eliane.Wigzell@repp.co.uk} since inception. She continues her solid support for the book with *Butterworth-Heinemann*.

+ Support website

The book support website includes exercises, solutions, a culvert software, two chapter samples. The Internet address is :

{<http://www.bh.com/companions/0340740671/>}

+ Correction / Errata

Up-to-date, one major error was found : i.e., in Equation (17-4), page 322. Corrections are listed at the address :

{<http://www.uq.edu.au/~e2hchans/reprints/errata.htm>}

The site contains also some technical updates.

+ Reviews of the book

"The Hydraulics of Open Channel Flow: an Introduction" was reviewed twice :

Professor W.H. HAGER, ETH-Zürich (Switz.), *Wasser, Energie & Luft*, Switzerland, 2000, No. 1/2, p. 55.

"The author has succeeded in producing yet another excellent piece of work. All in all, this is a well-written and carefully illustrated book which is useful for all civil and environmental engineers. It easily meets highest expectations."

Professor M. JOVANOVIC, Belgrade, *Urban Water*, Vol. 1, No. 3, p. 270.

"This book stands apart from similar previously published textbooks in two ways. Firstly, its scope has significantly been extended toward applications. Secondly, by including many exercises, notes, discussions, relevant photographs, and appendices with additional information, it has an original, hand-book-like presentation, very convenient for quick referencing, and use in engineering practice. Being more than a simple introductory textbook in open channel hydraulics, this book can be strongly recommended to students and engineers."

Further reviews are forthcoming in the *Journal of Hydraulic Research* IAHR and the *Journal of Hydraulic Engineering* ASCE (March 2001).

A Discussion Group ?

The textbook "The Hydraulics of Open Channel Flow: an Introduction" is used in over twelve subjects. It is felt that experience could be shared between academic colleagues.

Q1. Would you be interested to participate to a discussion group ?

Q2. Would you be willing to provide your email address and subject website address(es) to other lecturers involved in similar subjects ?

Q3. What other benefits would you expect from the discussion group ?

Q4. Should the discussion group be organised independently or with the publisher?

Please forward your response to :

{h.chanson@mailbox.uq.edu.au}

Additional Internet resources

Hubert CHANSON regrouped a number of relevant Internet resources for his students. He also developed specific websites. Some of these links may be of interest to the book readers, students, academics and professionals.

General Resources

Gallery of photographs in hydraulic engineering
{<http://www.uq.edu.au/~e2hchans/photo.html>}

Hydrotools softwares (Hydroculv, Hydrochan)
{<http://www.compumart.ab.ca/dwilliam/hydrotools.htm>}

Structurae, Intl Database and Gallery of Structures
{http://www.structurae.de/index_e.html}

Rivers Seen from Space
{<http://www.athenapub.com/rivers1.htm>}

Hydraulics of rubber dams
{<http://www.uq.edu.au/~e2hchans/rubber.html>}

History of arch dams
{http://www.uq.edu.au/~e2hchans/arch_dam.html}

The steel dams
{http://www.uq.edu.au/~e2hchans/steel_da.html}

The Formal Water Garden
{http://www.uq.edu.au/~e2hchans/wat_gard.html}

Part 1

The tidal bore of the Seine river
{<http://www.uq.edu.au/~e2hchans/mascaret.html>}

Engineering failures
{[http://www.uq.edu.au/~e2hchans/photo.html#Failures and accidents](http://www.uq.edu.au/~e2hchans/photo.html#Failures_and_accidents)}

Part 2

Extreme reservoir siltation
{http://www.uq.edu.au/~e2hchans/res_silt.html}

Part 4

Current expertise in stepped channel flows
{http://www.uq.edu.au/~e2hchans/dpri/topic_2.html}

Embankment overflow stepped spillways
{http://www.uq.edu.au/~e2hchans/over_st.html}

Minimum Energy Loss culverts and bridge waterways
{http://www.uq.edu.au/~e2hchans/mel_culv.html}

The Minimum Energy Loss (MEL) weir design
{http://www.uq.edu.au/~e2hchans/mel_weir.html}

Timber crib weirs
{http://www.uq.edu.au/~e2hchans/tim_weir.html}

Air entrainment on chute and stepped spillways
{http://www.uq.edu.au/~e2hchans/self_aer.html}

The full URL addresses are listed in between brackets {}.

Contact details

Hubert CHANSON
Dept. of Civil Engineering
The University of Queensland
Brisbane QLD 4072
Australia
Ph.: (61 7) 33 65 35 16
Fax: (61 7) 33 65 45 99
E-mail: h.chanson@mailbox.uq.edu.au
Web: <http://www.uq.edu.au/~e2hchans>