

1. OVERVIEW

- 1.1 Introduction
- 1.2 Particle properties
- 1.3 Flow properties

2. THRESHOLD OF MOTION

- 2.1 Shields parameter
- 2.2 Inception of motion in normal flow
- 2.3 Effect of slopes

3. BED LOAD

- 3.1 Dimensionless groups
- 3.2 Bed-load transport models

4. SUSPENDED LOAD

- 4.1 Inception of suspended load
- 4.2 Turbulent diffusion
- 4.3 Concentration profile
- 4.4 Calculation of suspended load

Recommended Textbooks

Chanson, H., 2004, *Hydraulics of Open Channel Flow: An Introduction*, 2nd Edition, Butterworth-Heinemann, ISBN 0-750-65978-5

Chadwick, A.J., Morfett, J.C., and Borthwick, M., 2013, *Hydraulics in Civil and Environmental Engineering*, 5th Edition, CRC Press, 978-0415672450