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# **Geomorphology in Environmental Management**

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An Introduction

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R. U. Cooke and John C. Doornkamp

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In relating geomorphology to management of the environment this textbook offers a new approach to the study of the subject. It concentrates on such practical problems as soil erosion, flooding, landslides, and permafrost, and it includes many case studies. The book should interest students of agriculture, soil science, land management, land planning, geology, and civil engineering, as well as geomorphologists. £8 paper covers £3.50

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## **Ice Physics**

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Peter V. Hobbs

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Our knowledge of the physics and chemistry of ice has increased substantially in recent years, primarily as a result of the increasing interest taken in ice by physicists, chemists, glaciologists, meteorologists, geophysicists, and molecular biologists, and the practical importance of ice in hydrology, ice engineering and cryobiology. This book provides the first comprehensive account of the subject. Emphasis is placed on the basic physical properties of ice (electrical, optical, mechanical, and thermal), the modes of nucleation and growth of ice, and the interpretation of these phenomena in terms of molecular structure. Applied aspects of ice physics are also discussed. £20 *forthcoming*

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**Oxford**

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MEMBERSHIP OF THE ENGINEERING GROUP

There are no rigid requirements for election to Fellowship. It is usually expected that candidates shall be graduates in geology or an allied subject, or have equivalent qualifications or experience. Membership of the Engineering Group is open to all Fellows without additional charge. Enquiries concerning Fellowship of the Society together with membership of the Engineering Group should be sent to the Secretary of the Engineering Group, Geological Society of London, Burlington House, Piccadilly, London, W1V 0JU.

Members of the Engineering Group are entitled to receive for their subscription the issues of the Quarterly Journal of Engineering Geology. On payment of an additional £3.50 on the annual subscription, members may obtain the Journal of the Geological Society in addition to the Quarterly Journal of Engineering Geology. Members of the Engineering Group resident overseas are entitled, on request, to receive either or both of the Journals for their annual subscription.

*SI UNITS—Selected Conversion Factors*

	<i>British</i>		<i>Reciprocal</i>		<i>British</i>	<i>SI</i>	<i>Reciprocal</i>	
Length	1 in	25.4 mm	$39.37 \times 10^{-3}$	Density	1 lb/ft <sup>3</sup>	16.02 kg/m <sup>3</sup>	$62.43 \times 10^{-3}$	
	1 ft	0.3048 m	3.281		Force	1 lbf	4.448 N	0.2248
	1 mile	1.609 km			Force/Unit	1 lbf/ft	14.59 N/m	$68.52 \times 10^{-3}$
Area	1 in <sup>2</sup>	$645.16 \times 10^{-6} \text{ m}^2$ ( $10^{-6} \text{ m}^2 = 1 \text{ mm}^2$ )	1.550	Length	1 lbf/in <sup>2</sup>	6895 N/m <sup>2</sup>	$145.0 \times 10^{-6}$	
	1 ft <sup>2</sup>	$92.90 \times 10^{-3} \text{ m}^2$	10.76		Pressure, Stress	1 tonf/in <sup>2</sup>	$15.444 \times 10^6 \text{ N/m}^2$	$64.75 \times 10^{-9}$
	1 yd <sup>2</sup>	0.8361 m <sup>2</sup>		1 In Hg		3.386 kN/m <sup>2</sup> (= 33.86 mb)		
	1 acre	4047 m <sup>2</sup> (or 0.4047 ha)		Coefficient of Compressibility (Mv)	1 ft <sup>2</sup> /ton	9.3 mm <sup>2</sup> /N		
	1 mile <sup>2</sup>	2.590 km <sup>2</sup> (or 259 ha)						
Volume	1 in <sup>3</sup>	16.39 cm <sup>3</sup>		Moment, Torque	1 lbf in	0.1130 N m	8.850	
	1 ft <sup>3</sup>	$28.32 \times 10^{-3} \text{ m}^3$	35.31		1 lbf ft	1.356 N m	0.7376	
	1 yd <sup>3</sup>	0.7646 m <sup>3</sup>	1.308		1 tonf ft	3037 N m	$0.3293 \times 10^{-3}$	
	1 pint	0.568 litre (1 litre = $10^{-3} \text{ m}^3$ )		Temperature	1 degF	5/9 degC (Celsius)	9/5	
	1 gal	4.546 litres	220		Velocity	1 ft/min	5.08 mm/s	
Mass	1 lb	0.4536 kg	2.205	Volume Rate of Flow	1 gal/s	4.546 dm <sup>3</sup> /s		
	1 ton	1.016 Mg			1 gal/h	1.210 cm <sup>3</sup> /s		