Geotechnical Problems and Practice of Dam Engineering

Edited by

A.S.BALASUBRAMANIAM / YUDHBIR / A.TOMIOLO
Asian Institute of Technology, Bangkok

J.S.YOUNGER
Vallentine Laurie & Davies, Bangkok





A.A.BALKEMA/ROTTERDAM/1982

Table of contents

	Preface	VI
	Section A: Principles, problems and practice of dam engineering	
9	Practice, precedents, principles, problems, and prudence in embankment dam engineering Victor F.B.de Mello	Philosophia Management
Š	Lessons from earth dam failures P.Londe	19
10	Recent trends in the design of earth-rock dams Piero Sembenelli	29
Š	Earthquake-resistant design of earth dams H.Bolton Seed	41
	Comparative behaviors of similar compacted earthrock dams in basalt geology in Brazil Victor F.B.de Mello	61
	Some problems and revisions regarding slope stability assessment in embankment dams Victor F.B.de Mello	81
	Some examples of design changes required during construction J.R.Hunter	99
9	Dam engineering activities in Japan E.Mikuni	109
	The problems and practice of dam engineering in India Yudhbir	131
	The problems and practice of dam engineering in Hong Kong A.J. Vail & D.J. Eastaff	145
	Section B: Investigations, instrumentation and foundation treatment	
2	Geotechnical investigations for dams A.C.Meigh	163
fs 0	Instrumentation requirements for earth and rockfill dams A.D.M.Penman	183
NO	Grouting works in dam engineering S.Marchini	211
170	Seepage through jointed rock — Sealing and drainage measures for earthfill and masonry dams $K.H.Idel$	225

No	Section C: Environmenta	l considerations,	geologic control	and c	case histories	of dam	construction
----	-------------------------	-------------------	------------------	-------	----------------	--------	--------------

Environmental parameters in planning and operation of multi-purpose reservoir projects <i>H.F. Ludwig</i>	235
Construction works and geology Hikoji Takahashi	241
Systematic weak seams in dam foundations Ranji Casinader	253
Use of Roller Compacted Concrete in dam construction Jack C.Jones & Gary R.Mass	265
Geotechnical aspects of the Larona Hydroelectric Project in Sulawesi, Indonesia Richard L. Kulesza	28
Core material for Lahor Dam Soerjono	295
Stability of rock cavern for underground pumped-storage power stations Keiichi Fujita	30
Section D: Country reports	
Dam engineering in Pakistan Amjad Agha	31
Dam engineering in Philippines Eduardo P.Abesamis	347
Dam engineering in Taiwan David S.L.Chu	359
Dam engineering in Indonesia Soerjono	371
Dam engineering in Singapore and west Malaysia, 1967-1979 Hooi Kah Hung	383
Dam engineering in Korea S.K.Kim & W.T.Kim	387

NO