

3481
03460

Lecture Notes in Earth Sciences

Gilbert Change of Scale Method
Edited by Somdev Bhattacharji, Gerald M. Friedman,
Horst J. Neugebauer and Adolf Seilacher

14

N. Cristescu H.I. Ene (Eds.)



EXPERIMENTS AND APPLICATIONS.....	117
I. Hyde, Burke Undrained Creep Deformation of a Uniform Load on Clay.....	117
Reyssat A Closed-Form Solution for the Problem of a Viscoplastic Hollow Sphere - Application to Underground Cavities in Rock.....	121

Rock and Soil Rheology

Proceedings of the Euromech Colloquium 196
September 10–13, 1985
Bucharest, Romania



Springer-Verlag

Berlin Heidelberg New York London Paris Tokyo

CONTENTS

I.	THEORETICAL APPROACH.....	1
F. Gilbert	Change of Scale Methods Applied in Mechanics of Saturated Soils.....	3
Horia I. Ene	The Use of the Homogenization Method to Describe the Viscoelastic Behaviour of a Porous Saturated Medium.....	33
B. Cambou	A Statical Micromechanical Description of Yielding in Cohesionless Soil.....	43
L. Drăgușin	A Mathematical Model for the Liquefaction of Soils.....	63
R. Butterfield	The Kinematics of Self-Similar Plane Penetration Problems in Mohr-Coulomb Granular Materials.....	83
P. Habib	Slip Surfaces in Soil Mechanics.....	93
II.	EXPERIMENTS AND APPLICATIONS.....	117
A. F. L. Hyde, J. J. Burke	Undrained Creep Deformation of a Strip Load on Clay.....	119
P. Berest	A Closed-Form Solution for the Problem of a Viscoplastic Hollow Sphere. Application to Underground Cavities in Rock Salt.....	151
M. P. Luong	Characteristic State and Infrared Vibrothermography of Sand.....	173
R. Ribacchi	Non Linear Behaviour of Anisotropic Rocks.....	199
N. Cristescu, D. Fotă, E. Medveş	Rock-Support Interaction in Lined Tunnels.....	245
Y. Arkin	Deformation of Laminated Lacustrine Sediments of the Dead Sea.....	273
R. Traczyk	On the Construction of a Constitutive Equation of Soils by Making Use of the DLS Model.....	279