

**GEOMECHANICS  
AND  
CIVIL ENGINEERING  
1990 – 1993**

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**A.A.BALKEMA  
Rotterdam, Netherlands  
Brookfield, VT, USA**

## Introduction

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The titles listed are arranged systematically as far as possible. All books are hardcover, unless otherwise specified.

All titles marked **NEW** are listed for the first time.

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Structural concrete

## **STRUCTURAL CONCRETE** *THEORY AND ITS APPLICATION*

A.S.G.Bruggeling - G.

This book presents a new approach to the design of reinforced concrete structures. It contains many examples of structures without having recourse to the design codes. It is limited, as well as partially chosen, viz. 'structural members of structures in reinforced concrete; Properties of concrete in compression; Design of reinforced concrete; Design of structures of reinforced concrete; The practical application of reinforced concrete; Examples of different structures.

90 6191 182 6 Apr

Concrete

## **PREFABRICATION OF CONCRETE**

A.S.G.Bruggeling & C.

This book mainly deals with the connection between design and the manufacturing process. It presents important aspects of the design and calculation of the important parts of structures in prefabricated concrete frames or structures in prestressed concrete. It is used to connect beams and columns of structures with their supports. It shows such a way that it can be used by detailers of prefabricated concrete structures. The methods are discussed with recommendations.

90 6191 183 4 July

Concrete

## **INNOVATIVE WORKS** *international symposium*

**NEW**

Keynote lectures: The first 50 years experience in European concrete structures; Innovative concrete structures related to the modelling of concrete structures in orthotropic concrete beams; Methods of rehabilitation of concrete structures; Bondless prestressing technique for construction highway bridges.

90 5410 246 2 July 1993

A.A.Balkema, P.O.Box 1675, NL-3000 BR Rotterdam

Dam engineering

NEW

**ROCKFILL DAMS** – *Finite element analysis to determine stresses and deformations in membrane type rockfill dam*

The impervious face membrane type of rockfill dam has in recent years become increasingly popular with construction engineers in view of its many inherent advantages over central earth core type of rockfill dam. The design of concrete face is largely empirical and is based on experience, judgement and modifications due to design practice being made in the light of the performance of each new dam. An attempt has been made to understand the various aspects of the design of this type of dam and a rational method of analysis has been evolved, which is capable of predicting the prototype behaviour of this type of dam, especially the stresses and strains in the face slab to a fair degree of accuracy. *Topics:* Introduction & scope; Linear elastic analysis; Nonlinear analysis; Membrane analysis; Summary & conclusions. (No rights India)

90 6191 949 5 December 1992 334 pp. Hfl.150 / \$85.00 / £55

Dam engineering

**DESIGN OF EARTH DAMS – GEOTECHNIKA 2** – *Selected translations of Russian geotechnical literature*

A.L.Goldin & L.N.Rasskazov – translated by R.B.Zeidler

A translation of *Proyektirovaniye gruntovykh plotin*, Moscow, 1987. Primary properties of various soils filled in dam body are described & design guidelines for the strength, deformability & permeability of those soils are given. Methods of soil stress-strain & strength computations are presented together with procedures for assessment of slope stability, consolidation, pore water pressure, settlement & displacements, seepage & seismic stability. Modern methods are offered for evaluation of the performance of earth structures & background for geometrical & structural design of dams. Factor analysis is discussed as a novel tool for optimization of the design of earth dams.

90 6191 173 7 February 1992 304 pp. Hfl.205 / \$120.00 / £76

Civil engineering

NEW

**HYDROPOWER '92** – *Proceedings of the 2nd international conference on hydropower, Lillehammer, Norway, 16–18.06.1992*

E.Broch & D.K.Lysne (eds.) – University of Trondheim

Hydropower is the only renewable source derived from solar radiation of any consequence for electricity at the present time. The planning of hydropower developments is still a great challenge covering a wide range of technical, economic and environmental issues. The present volume addresses these issues and highlights the ways in which hydropower can be developed in a flexible manner to meet varying demands and changing conditions. The book provides a platform for the presentation of new developments and for exchanging experience of current methods of practice. *Topics:* Tunnelling & underground works, technical, economic & environmental aspects; Dam safety; Condition monitoring of hydropower systems; Optimization of electricity production on regional, national & international levels; Electricity supply; Hydropower schemes.

90 5410 054 0 June 1992 783 pp. Hfl.185 / \$105.00 / £69

Hydrogeology

**WELL LOGGING**

Dominique Chapelle  
The purpose of this book is to provide engineers and technicians with the information requisite for the design of well logs. This book enables scientists to answer the following questions: What information do I need? What information do I need? What information do I need? Role of logging in hydrogeology. gamma-ray, gamma-ray, gamma-ray accessory logs; Refer to 90 5410 207 1 M

Hydrogeology

**SUBSURFACE CONTAMINATION – FLUIDS** – *Proceedings of the 1st International Conference, April 1990*

Udo Weyer (ed.) – WKC Weyer Consultants  
Subsurface contamination is a lighter and heavier than air. It is of great importance for many, if not most, industrial and municipal installations (IMFs). These sites are an exceptional challenge of the conference sum were presented by leading experts from Europe. A number of papers were presented in the main session.

90 6191 175 3 Jar

Hydrology

NEW

**TRACER HYDROLOGY** – *symposium on water tracing techniques*

H.Hötzl & A.Werner  
Tracing techniques have been developed in order to assess and to predict the pollution of the environment. The application of artificial tracers to assess and to predict the pollution of the environment is a methodical development in the various fields of hydrogeology. The application of mathematical models to assess and to predict the pollution of the environment is a methodical development in the various fields of hydrogeology. The application of mathematical models to assess and to predict the pollution of the environment is a methodical development in the various fields of hydrogeology.

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