

# GEOMECHANICS AND CIVIL ENGINEERING 1990 – 1993

Concrete 1
Construction 3
Earthquake engineering 7
Soil mechanics 8
Geomechanics 14
Engineering geology 20
Rock mechanics 23
Mining engineering 28
Tunnelling 35
Dam engineering 36
Hydrogeology & Geochemistry 39
Index 44



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



### Introduction

About the catalogue

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.

## A note on the publisher

A.A. Balkema is an independent publishing house, owned by A.T. Balkema. The firm publishes about 75 new titles annually, mainly in the fields of geotecnics, mining engineering, civil engineering, hydraulics, geology, Quaternary research, palaeontology, agriculture, aquaculture, marine biology, botany (monographs on floras, plant families and genera), African studies, and history of Africa.

A special free service offered by A.A. Balkema is the publication of hardbound symposium proceedings. The complete production occurs within eight weeks, which guarantees the availability of the proceedings before the actual congress starts. These proceedings are usually in the field of geomechanics or Quaternary research and are published for international societies such as IAHR, INQUA, ISSMFE, IAEG & ISRM.

The history of A.A. Balkema Publishers goes back to 1932, when A.A. Balkema started a bookshop in Amsterdam. During the German occupation A.A. Balkema was one of the most active underground publishers, mainly of texts of a literary nature in Dutch, French and English. Even in those days much attention was given to the typographical presentation of each title. Since 1973 the office is located in Rotterdam.

## An invitation to prospective authors

A.A. Balkema is an internationally oriented publishing house specializing in the publication of academic books and journals. We are able to produce these books quickly and economically. Write to A.T. Balkema of A.A. Balkema Publishers, Vijverweg 8, P.O. Box 1675, NL-3000 BR Rotterdam, Netherlands, regarding publication arrangements for conference proceedings, research projects and individual manuscripts. You will receive a prompt reply.

Editorial enquiries and manuscripts should be directed to:

A.A. Balkema, Vijverweg 8, P.O. Box 1675, NL-3000 BR Rotterdam, Netherlands Telephone: (+31.10) 4145822, Telefax: (+31.10) 4135947

Please give this catalogue to a friend or colleague when you no longer require it. © 1993, A.A. Balkema, Rotterdam. No permission is required for reproducing or photocopying any part of this catalogue.

A.A. Balkema Publishers / Rotterdam / Brookfield / 1993

Structural concrete

STRUCTURAL CO THEORY AND ITS A

A.S.G.Bruggeling - (

This book presents a ne presented contains mar without having recours of using terms like rein limited, as well as parti chosen, viz. 'structural dures of structures in re concrete; Properties of sion member and the te concrete; Design of stru The practical application ples of different structu

90 6191 182 6

Concrete

#### PREFABRICATIO!

A.S.G.Bruggeling & ( This book mainly deals and the connection betv presents important aspe with the manufacturing calculation of the impor and tie models; Enginee frames or structures in p used to connect beams structures with their sur such a way that it can d detailers of prefabricate methods are discussed v recommendations.

90 6191 183 4

Concrete

NEW

INNOVATIVE WOL

July

international symposis Keynote lectures: The fi years experience in Euro concrete structures; Inno related to the modelling in orthotropic concrete b methods of rehabilitatio bondless prestressing ter struction highway bridge 90 5410 246 2 July 19

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

Geochemistry

#### GEOCHEMISTRY, GROUNDWATER AND POLLUTION

C.A.J.Appelo & D.Postma

NEW

Groundwater geochemistry is an interdisciplinary science concerned with the chemistry in the subsurface environment. The chemical composition of groundwater is the combined result of the quality of water that enters the groundwater reservoir and reactions with minerals and organic matter of the aguifer matrix may modify the water quality. Apart from natural process as controlling factors on the groundwater quality, in recent years also the effect of pollution, such as nitrate from fertilizers and acid rain, influences the groundwater chemistry. Due to the long residence time of groundwater in the invisible subsurface environment the effect of pollution may first become apparant tens to hundreds of years afterwards. This book presents a comprehensive and quantitative approach to the study of groundwater quality. Practical examples of application are presented. 90 5410 105 9 March 1993 500 pp. Hardback, Hfl. 150/\$85.00/£55

90 5410 106 9 March 1993 500 pp.

Paper, Hfl.80/\$45.00/£28

Geochemistry

WATER-ROCK INTERACTION - Proceedings of the 7th international symposium, WRI-7, Park City, Utah, 13 - 18 July 1992 Y.K.Kharaka & A.S.Maest (eds.) - US Geological Survey, Menlo Park, Calif., USA

NEW

Water-rock interactions play a major role in nearly all physical and chemical processes operating on the Earth's surface and subsurface. Understanding how these reactions work through laboratory, field, and theoretical studies will help provide solutions to many global and local environmental problems that face our society today. The 368 papers provide the latest research results in this rapidly expanding field of study. The papers are of interest to professionals & graduate students in earth sciences including geologists, geochemists, hydrologists & water chemists, especially those involved in the study of natural & polluted systems, as well as to applied scientists & engineers in the fields of environmental science, energy & natural resources. Topics: Mineralfluid interface geochemistry; Geochemical modeling; Organic geochemistry; Natural hazards & environmental contamination; Global processes; Oxidation-reduction reactions in surface & ground waters; Weathering processes & surface water environments; Saline lakes & evaporite deposits; Unsaturated zone environments; Groundwater environments; Stable & radioactive isotopes; Geochemical modelling; Sedimentary basins; Geothermal systems; Metamorphic environments; Hydrothermal ore deposits; Seawater-rock interactions.

90 5410 075 3

July 1992 1730 pp., 2 vols

Hfl.285/\$160.00/£106

Also available:

WATER-ROCK INTERACTION - Proceedings of the 6th international symposium, WRI-6, Malvern, UK, 3 - 8 August 1989 D.L.Miles (ed.) - British Geological Survey, Wallingford

90 6191 970 3

1989

838 pp.

Hfl.150 / \$85.00 / £55

A.A.Balkema Publishers, Old Post Road, Brookfield, VT 05036, USA

Hydraulic research

UNSTEADY FLOY of the international of 1,October1992

NEW

Roger Bettess & Jac This book contains si unsteady flow & fluid range from the theoret describe failures as we survey of recent work concerned with the pre fluid system.

Sei

90 5410 046 X

Hydraulic research

ARTIFICAL SANI CUR - Report 152

NEW

Across the whole wor the construction of a s among others, include reduction or for the be islands or coastal exte of submerged tunnels been gathered on a gre in large ports, pipeline the Deltaworks for the part of the Netherland institutes and consulta design or construction experiences are based framework of the prep executed with sand. T developments as well site observations. After important not to leave study reports and desi usefriendly compilation aim this manual has be 90 5410 138 5

Hydraulics

NEW

**GUIDE FOR THE** Upper river area - ( Introduction; Starting-Management and main Loads on the flood de ics & geohydrology in head; Design calculati 90 3760 011 5 Se

A.A.Balkema, P.O.Box 1675, NL-3000 BF