

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 partichosen, viz. 'structural dures of structures in reconcrete; Properties of sion member and the te concrete; Design of structurel application.

90 6191 182 6

26 Apr

Concrete

PREFABRICATIO:

ples of different structu

A.S.G.Bruggeling & (
This book mainly deals
and the connection betw
presents important aspe
with the manufacturing
calculation of the important tie models; Engines
frames or structures in pused to connect beams
structures with their sursuch a way that it can didetailers of prefabricate
methods are discussed v
recommendations.

90 6191 183 4

July

Concrete

NEW

INNOVATIVE WOL

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

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

ORCED SOIL RETAINING

e international symposium, Denver,

iversity of Colorado, Denver, USA netic-reinforced soil retaining walls have lent performance characteristics and conventional walls. The proceedings nt of two 10 ft-high geotextile reinforced walls'). Included in the proceedings are erformance of the Denver walls by countries. Among the predictions, 3 nod and/or strain compatibility analysis, 11 used the finite element methods.

400 pp.

Hfl.165 / \$99.00 / £61

NT PRACTICE – Proceedings of the ukuoka, Kyushu, 11 – 13 November 1992 mi (eds.) – Kyushu University, Japan ave become a useful & economical geotechnical engineering practice, such as tabilization of slopes, reduction of earth ques for earth reinforcement & their apneering practice are developing rapidly. In a mankments; Wall structures; Slopes &

2 c.1200 pp., 2 vols. Hfl.235/\$135.00/£87

R MATERIALS

is an international journal, published chnology of polymer materials – plastic, as and polymer composites. The journal nesis, characterization, morphology, cical techniques, reaction engineering, eplication of polymers and composites in ientation towards materials research.

s per year

Hfl.195/\$110.00/£72

NINTH ASIAN REGIONAL MECHANICS & FOUNDATION

December 1991, Bangkok, Thailand nes: Development of theory & practice in gional soils & their engineering behaviour; undations; Embankments - excavations; ards & environmental geotechniques;

ies; etc.

vols.

Hfl.575 / \$300.00 / £213

Soil mechanics

GROUTING TECHNOLOGY IN TUNNELLING AND DAM CONSTRUCTION

NEW

A.V.Shroff & D.L.Shah – M.S. Univ. of Baroda, Vadodara, India A systematic presentation of the essentials of grouting technology without going into the unnecessary details of any grouting project. Some of the important topics covered are grout mix design principles, rheological and strength aspects, theoretical and experimental developments, grouting plants and their specifications, geological investigations, drilling, monitoring of grouting, case studies on tunnelling, dam grouting and alternative applications of grouting. For better understanding of grouting principles, illustrative examples derived mainly from field studies have been given. (No rights India)

90 5410 210 1

March 1993

618 pp.

Hfl.135 / \$75.00 / £50

Soil mechanics

CENTRIFUGE 91 – Proceedings of the international conference Centrifuge 91, Boulder, Colorado, 13 – 14 June 1991

Hon-Yim Ko & Francis G.McLean (eds.) - Univ. Colorado, Boulder and US Bureau of Reclamation

The field of centrifuge testing has experienced tremendous growth in the decade of 1980's and has attained wide acceptance as a viable method of testing scale models of geotechnical structures for which gravity effects are important. A state of the art in this new field of experimental geotechnical research and highlight many new applications and new centrifuge facility developments worldwide. *Topics:* New facilities; Embankments & dams; Structures & settlements; Anchorages; Shallow & deep foundations; Ground improvement & retaining structures; Equipment for dynamic testing; Earthquakes effects; Explosive loading & dynamic soil-structure interaction; Flow processes; etc.

90 6191 193 1

June 1991

629 pp.

Hfl.205 / \$120.00 / £76

Soil mechanics

DEBRIS FLOW (IAHR Monograph)

T.Takahashi – Disaster Prevention Inst., Kyoto Univ., Japan
The phenomenon of debris flows itself has attracted attention of
geomorphologists for more than a century as a dominant agent of dissection and formation of alluvial cones in mountain areas. It has also been
the concern of engineers responsible for taming otherwise hazardous
mountain ravines. The mechanical characteristics of debris flows, however, have only become the object of quantitative discussions in the last
decade or so, helped by the researcher's untiring industry to see and understand the realities of debris flows. In Japan debris flow is an important
object of research in science and engineering. Observation systems have
been established in the basins with often occurring debris flows. Topics:
The nature of debris flow; Mechanics of flow; Processes of occurrence,
development and declination; Characteristics of fully developed flow;
Processes of deposition; References.

90 5410 104 0

August 1991

156 pp.

Hfl.120 / \$70.00 / £45