

studia
geotechnica
et mechanica

published quarterly

Wrocław 2014

The journal is supported by the Ministry of Science and Higher Education

EDITOR IN CHIEF

WOJCIECH PUŁA

HONORARY EDITOR IN CHIEF

RYSZARD J. IZBICKI

VICE-EDITOR

DARIUSZ ŁYDŻBA

SECRETARY

MAREK KAWA

JOANNA PIECZYŃSKA-KOZŁOWSKA

ADRIAN RÓŻAŃSKI

EDITORIAL LAYOUT AND PROOF-READING

HALINA MARCINIAK

EDITORIAL OFFICE

Institute of Geotechnics and Hydrotechnics,

Faculty of Civil Engineering,

Wrocław University of Technology, 50-370 Wrocław, Wybrzeże Wyspiańskiego 27

PUBLISHER

Wrocław University of Technology, 50-370 Wrocław, Wybrzeże Wyspiańskiego 27

Orders should be addressed to:

Oficyna Wydawnicza Politechniki Wrocławskiej

Wybrzeże Wyspiańskiego 27, 50-370 Wrocław

CHZ "Ars Polona" S.A., Dział Prasy, ul. Obrońców 25, 00-933 Warszawa

© Copyright by Oficyna Wydawnicza Politechniki Wrocławskiej, Wrocław 2014

OFICYNA WYDAWNICZA POLITECHNIKI WROCŁAWSKIEJ

PL ISSN 0137-6365

Index 376450

Drukarnia Oficyny Wydawniczej Politechniki Wrocławskiej. Zam. nr 572/2014.

CONTENTS

L. BALACHOWSKI, N. KUREK, Deep compaction control of sandy soils	3
B.-K. BENZAOUZ, A nanoscale simulation study of elastic properties of gaspeite	9
L. FLORKOWSKA, J. WALASZCZYK, Key aspects of the proper formulation of the model in numerical analysis of the influence of mining exploitation on buildings	17
M. KRASIŃSKI, M. LEFIK, Two scales, hybrid model for soils, involving artificial neural network and finite element procedure	29
D. ŁYDŹBA, M. SOBÓTKA, State of strength in massive concrete structure subjected to non-mechanical loads	37
Z. MEYER, Static load tests, short series interpretation	45
B. WRANA, Dynamics coefficient for two-phase soil model	51
M. BARTLEWSKA-URBAN, T. STRZELECKI, Effect of variation of temperature field on the process of thermal consolidation of tailings pond "Żelazny Most"	57