

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 ŁYDŹBA

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 WROCLAWSKIEJ

PL ISSN 0137-6365

Index 376450

Drukarnia Oficyny Wydawniczej Politechniki Wrocławskiej. Zam. nr 184/2014.

CONTENTS

Z. BEDNARCZYK, Landslide geohazard monitoring, early warning and stabilization control methods	3
A. BOROWIEC, K. MACIEJEWSKI, Assessment of susceptibility to liquefaction of saturated road embankment subjected to dynamic loads	15
J. CIEŚLIK, Onset of crack initiation in uniaxial and triaxial compression tests of dolomite samples	23
E. KAWALEC-LATAŁA, Edge detection on images of pseudo-impedance section supported by context and adaptive transformation model images	29
A. K. KŁOPOTOWSKA, P. ŁUKASZEWSKI, The influence of the salt mist on the deterioration of rock materials	37
D. ŁYDŹBA, M. RAJCAKOWSKA, D. STEFANIUK, A. KMITA, Identification of the carbonation zone in concrete using X-ray microtomography	47
D. ŁYDŹBA, A. RÓŻAŃSKI, M. RAJCAKOWSKA, D. STEFANIUK, Efficiency of the needle probe test for evaluation of thermal conductivity of composite materials: two-scale analysis	55
W. J. MOŚCICKI, G. BANIA, M. ĆWIKLIK, A. BORECKA, DC resistivity studies of shallow geology in the vicinity of Vistula River flood bank in Czernichów village (near Kraków in Poland)	63
S. OLESIAK, On the possibility of testing Miocene clay from Cracow area using Weight Sounding Test (WST)	71
M. ONDRÁŠIK, M. KOPECKÝ, Rock pore structure as main reason of rock deterioration	79
R. PATYŃSKA, Methodology of estimation of methane emissions from coal mines in Poland	89
M. SOBÓTKA, Numerical simulation of hysteretic live load effect in a soil-steel bridge	103
M. STRZELECKI, Numerical three-dimensional model of airport terminal drainage system	111
List of reviewers (<i>Studia Geotechnica et Mechanica</i> 2013)	121