

***studia
geotechnica
et mechanica***

published quarterly

Wrocław 2011

CONTENTS

F. BOUCHELGHOUUM, N. BENMEBAREK, Critical hydraulic head loss assessment for a circular sheet pile wall under axisymmetric seepage conditions	3
P. KUMAR, Effect of Hall currents on thermal instability of compressible dusty viscoelastic fluid in porous medium	25
R. P. MATHUR, N. KUMAR, Effects of neutral gas friction on the instability of superposed streaming plasmas	39
H. MOHAN, P. KUMAR, A mathematical theorem in double diffusive convection problem of viscoelastic fluid	49
M. WILLIAMS, G.S. GHATAORA, Effect of fibre reinforcement on the properties of ground granulated blast furnace slag-cement-bentonite slurry	63

EDITORIAL BOARD

ZENON MRÓZ – Chairman

Institute of Fundamental Technological Research, Polish Academy of Sciences,
ul. Pawińskiego 5B, 02-106 Warszawa, Poland.

WACŁAW KASPRZAK – Vice-Chairman

Institute of Materials Science and Applied Mechanics, Wrocław University of Technology,
Wybrzeże Wyspiańskiego 27, 50-370 Wrocław, Poland.

EUGENIUSZ DEMBICKI

Faculty of Civil and Environmental Engineering, Technical University of Gdańsk,
ul. Narutowicza 11/12, 80-952 Gdańsk, Poland.

WŁODZIMIERZ DERSKI

Institute of Fundamental Technological Research, Polish Academy of Sciences,
ul. Mielżyńskiego 27/29, 61-725 Poznań, Poland.

ANDRZEJ DRESCHER

University of Minnesota, 112 Mines and Metallurgy, Minneapolis, MA 55455, U.S.A.

G. GUDEHUS

Institut für Bodenmechanik und Felsmechanik, Universität Fridericiana,
Postfach Nr. 6380, D-7500 Karlsruhe I, BD.

SVEN HANSBO

Chalmers Tekniska Högskola, Fack, S-40 220 Göteborg 5, Sweden.

TOMASZ HUECKEL

Department of Civil and Environmental Engineering, Duke University,
Durham, NC 27708-0287, U.S.A.

ANTONI KIDYBIŃSKI

Main Institute of Mining, pl. Gwarków 1, 40-951 Katowice, Poland.

PIOTR KONDERLA

Institute of Civil Engineering, Wrocław University of Technology,
Wybrzeże Wyspiańskiego 27, 50-370 Wrocław, Poland.

MACIEJ KULISIEWICZ

Institute of Materials Science and Applied Mechanics, Wrocław University of Technology,
Wybrzeże Wyspiańskiego 27, 50-370 Wrocław, Poland.

ZBIGNIEW LECHOWICZ

Warsaw University of Life Sciences – SGGW, Department of Geotechnical Engineering,
ul. Nowoursynowska 159, 02-776 Warszawa, Poland.

ZBIGNIEW MŁYNAREK

Chair of Geotechnics, Poznań University of Life Sciences,
ul. Piątkowska 94, 61-664 Poznań, Poland.

STANISŁAW PIETRUSZCZAK

Department of Civil Engineering, McMaster University,
1280 Main Street West, Hamilton, Ontario, Canada L8S4L7.

ANDRZEJ SAWICKI

Institute of Hydroengineering, Polish Academy of Sciences,
ul. Kościarska 7, 80-953 Gdańsk, Poland.

ZBIGNIEW SIKORA

Chair of Geotechnics, Geology & Maritime Engineering,
Faculty of Civil and Environmental Engineering, Gdańsk University of Technology,
ul. Narutowicza 11/12, 80-233 Gdańsk, Poland.

BOGDAN SKALMIERSKI

Institute of Mechanics and Elements of Machine Construction,
ul. Deglera 35, 42-200 Częstochowa, Poland.

WOJCIECH WOLSKI

Department of Geotechnics, Main School of Farming, Agriculture Academy,
ul. Nowoursynowska 166, 02-766 Warszawa, Poland.