3rd International Conference on Applied Geophysics (AG 2017)

E3S Web of Conferences Volume 24 (2017)

Gniew, Poland
21 - 23 June 2017

Editors:

Pilecki Zenon
Marcak Henryk

ISBN: 978-1-5108-5228-0

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571

Some format issues inherent in the e-media version may also appear in this print version.

This work is licensed under a Creative Commons Attribution license:
http://creativecommons.org/licenses/by/4.0/
You are free to:
Share – copy and redistribute the material in any medium or format.
Adapt – remix, transform, and build upon the material for any purpose, even commercial.
The licensor cannot revoke these freedoms as long as you follow the license terms.
Under the following terms:
You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. The copyright is retained by the corresponding authors.

Printed by Curran Associates, Inc. (2017)

For additional information, please contact EDP Sciences – Web of Conferences
at the address below.

EDP Sciences – Web of Conferences
17, Avenue du Hoggar
Parc d'Activité de Courtabœuf
BP 112
F-91944 Les Ulis Cedex A
France

Phone: +33 (0) 1 69 18 75 75
Fax: +33 (0) 1 69 28 84 91

contact-edps@webofconferences.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

BASIC PRINCIPLES FOR THE IDENTIFICATION OF LANDSLIDES USING GEOPHYSICAL METHODS 1
Pilecki Zenon

NUMERICAL MODELLING OF GPR ELECTROMAGNETIC FIELDS FOR LOCATING BURIAL SITES 9
Carcione José M., Karczewski Jerzy, Mazurkiewicz Ewelina, Tadeusiewicz Ryszard, Tomecka-Suchon Sylwia

RELATIONSHIP BETWEEN THE FOCAL MECHANISM OF MAGNITUDE ML 3.3 SEISMIC EVENT INDUCED BY MINING AND DISTRIBUTION OF PEAK GROUND VELOCITY 17
Dubinski Józef, Stec Krystyna, Mutke Grzegorz

THE INFLUENCE OF REGIONAL GEOLOGICAL SETTINGS ON THE SEISMIC HAZARD LEVEL IN COPPER MINES IN THE LEGNICA-GLOGÓW COPPER BELT AREA (POLAND) 26
Burtan Zbigniew

AN APPLICATION OF THE GEOPHYSICAL METHODS AND ALS DTM FOR THE IDENTIFICATION OF THE GEOLOGICAL STRUCTURE IN THE KRASNIK REGION – LUBLIN UPLAND, POLAND 34
Kaminski Miroslaw

AN APPLICATION OF THE GROUND LASER SCANNING TO RECOGNISE TERRAIN SURFACE DEFORMATION OVER A SHALLOWLY LOCATED UNDERGROUND EXCAVATION 44
Pilecka Elzbieta, Szwarkowski Dariusz

ASSESSMENT OF THE IMPACT OF AN OVERLYING COAL SEAM EDGE USING SEISMIC PROFILING OF REFRACTED PWAVE VELOCITY 52
Szreder Zbigniew, Barnas Maciej

WIRELESS ACQUISITION OF MULTI-CHANNEL SEISMIC DATA USING THE SEISMOBILE SYSTEM 62
Isakow Zbigniew

CAUSES OF SOME HAZARDOUS ENGINEERINGGEOLOGICAL PROCESSES ON URBAN TERRITORIES 70
Kril Tetiana

THE IMPACT OF THE STRUCTURAL FEATURES OF THE ROCK MASS ON SEISMICITY IN POLISH COAL MINES 79
Patynska Renata

CHANGE IN THE PHYSICAL PARAMETERS OF ROCKS DUE TO HYDROFRACTURING 87
Marcak Henryk

COMPARATIVE ANALYSIS OF ROCK POROSITY IN A SELECTED REGION IN THE CARPATHIANS BASED ON LABORATORY DATA AND WELL LOGS 96
Barnas Maciej, Puskarczyk Edyta

DEFORMATION OF THE ROCK PILLAR CAUSED BY BED OPERATION USING THE ROOM AND PILLAR SYSTEM 104
Grzebyk Wieslaw, Stolecki Lech

PETROLOGICAL FEATURES OF SELECTED COMPONENTS OF THE CERGOWA SANDSTONES (OUTER CARPATHIANS) RECORDED BY SCANNING ELECTRON MICROSCOPY – PRELIMINARY STUDY 112
Pszonka Joanna

USE OF PETROPHYSICAL DATA FOR SITING OF DEEP GEOLOGICAL REPOSITORY OF RADIOACTIVE WASTE 120
Petrenko Liliana, Shestopalov Vyacheslav

PRELIMINARY STUDIES OF THE DYNAMIC STIFFNESS MODULES OF SOIL SAMPLES FROM THE SOLVAY SODIUM PLANT WASTE LANDFILL IN KRAKOW 128
Pilecka Elzbieta, Zieba Jakub

IMPACT OF ROCK MASS TEMPERATURE ON POTENTIAL POWER AND ELECTRICITY GENERATION IN THE ORC INSTALLATION 136
Kaczmarczyk Michal

COMPARISON OF AN EMPIRICAL S-WAVE VELOCITY MODEL AND A CALCULATED STRESS-STRAIN MODEL FOR A ROCK MASS DISTURBED BY MINING 144
Krawiec Krzysztof, Czarny Rafal
NUMERICAL SIMULATION OF PORE PRESSURE CHANGES IN LEVEE UNDER FLOOD CONDITIONS 154
Stanisz Jacek, Borecka Aleksandra, Pilecki Zenon, Kaczmarczyk Robert
Author Index