

# CONTENTS

SUMMARIES .....	313
ROBERT CZARNOTA, DAMIAN JANIGA, JERZY STOPA, PAWEŁ WOJNAROWSKI Predicting relative permeability from experimental capillary pressure porous plate test for two phase flow .....	323
MARCIN KREMIENIEWSKI, STANISŁAW STRYCZEK, RAFAŁ WIŚNIEWSKI, MARCIN RZEPKA, ANDRZEJ GONET Influence of bentonite addition on parameters of fresh and hardened cement slurry .....	335
ZBIGNIEW FAFAŁA, ROMAN MAZUR, RAFAŁ MATUŁA The study of unsteady operation mode of the crude oil trunk pipeline in case of a sudden stop flow .....	349
JOANNA LEWANDOWSKA-ŚMIERZCHALSKA, BARBARA ULIASZ-MISIAK Application of AHP method to assess the possibilities of using of geological structures located in the aquifers as underground storage sites .....	361
STANISŁAW J. DUBIEL, MIROSLAW RZYZCZNIK, MAREK L. SOLECKI, MICHAŁ MARUTA Analysis of Drill Stem Test (DST) results at Osobnica oil field, in terms of sampling of selected technology parameters .....	375
PIOTR KRZECZEK, PAWEŁ KARASEK, PAWEŁ WOJNAROWSKI Analysis impact fracturing fluid acidity on structural strength of crosslinked gel complex .....	385
JAROSŁAW ŚLIZOWSKI, RAFAŁ SMULSKI, STANISŁAW NAGY, STANISŁAW BURLIGA, KRZYSZTOF POLAŃSKI Tightness of hydrogen storage caverns in salt deposits .....	397
	309

DARIUSZ KNEZ, JAN ZIAJA, MONIKA PIWOŃSKA	
Computer simulation of the influence of proppant high diameter grains damage on hydraulic fracturing efficiency .....	411
JAN MACUDA, EWA STYRKOWIEC	
Many years' extraction of groundwater in the context of established usable groundwater reserves .....	419
ROSTYSLAV APOSTOL, MARIUSZ ŁACIAK, ANDRII OLINYK, ADAM SZURLEJ	
Analysis of the methods for gas demand forecasting .....	429
TOMASZ CIEŚLIK, KLAUDIA METELSKA	
Modeling of gas consumption in the city .....	439
JERZY GASIŃSKI, JAN MACUDA, SŁAWOMIR SZEWCZYK	
Drainage wells as an integral part of a deep dewatering system in Szczerców field in the Bełchatów Lignite Mine .....	455
MICHAŁ KRUSZEWSKI, SVERRIR THORHALLSSON, MOHSEN ASSADI, TOMASZ ŚLIWA	
Slimhole well casing design for high-temperature geothermal exploration and reservoir assessment .....	465
TOMASZ ŚLIWA, MAREK KUCPER	
Accessing Earth's heat using Geothermal Radial Drilling for borehole heat exchangers .....	495
RAFAŁ KOWALSKI, MARIUSZ ŁACIAK, KRYSZTIAN LISZKA, ANDRII OLINYK, PIOTR PASZYLIK	
Application of ORC systems at natural gas compression station .....	513
YURIY P. DENYSOV, VASYL V. KLYMENKO, VICTOR V. MARTYNYENKO, CZESŁAW RYBICKI	
Technology for development of methane-hydrate deposits jointly with receiving fresh water .....	531

JAN MACUDA, ŁUKASZ ŁUKAŃKO	
Monitoring of explosive gases with a portable gas detector Dräger X-am 5600 .....	543
ARGENTINA TĂTARU, SÁNDOR BALÁZS, ION FOIDAŞ	
Underbalanced interventions in gas wells belonging to mature fields .....	553
IOANA VLASIN, DAN-PAUL ŞTEFĂNESCU, FLORINEL ŞUŢOIU	
Productivity stimulation of depleted reservoirs by applying new technologies to open the productive layers .....	569
RODICA SASU, ARGENTINA TATARU	
Brown Field Rehabilitation Success through an Effective Project Management System .....	577
JAN MACUDA, SŁAWOMIR WYSOCKI, MAGDALENA GACZOŁ	
Water well activation with application of clay minerals disintegration agent .....	587
TOMASZ ŚLIWA, MICHAŁ KRUSZEWSKI, MOHSEN ASSADI, ANETA SAPIŃSKA-ŚLIWA	
The application of Vacuum Insulated Tubing in Deep Borehole Heat Exchangers .....	597
DAN M. DUSE, CARMEN S. DUSE	
Creativity and innovation in engineering education .....	619
SŁAWOMIR WYSOCKI	
Influence of ionic hydration inhibitors on triple inhibition system mud properties – clay rock swelling .....	629
THEODORE YAO, ANDREW WOJTANOWICZ	
Criteria and risk of integrity loss for wells with sustained casing pressure .....	639
Style Sheet .....	655