

## CONTENTS

Preface	III
Contents	IV

### TOPIC 1

#### HYDROGEOLOGICAL PROPERTIES OF ROCKS, HYDRAULIC PARAMETERS

P. K. DARKO & J. KRÁSNÝ: Comparison of hardrock hydraulic parameters in distinct climatic zones: The Ghana and the Bohemian Massif areas	3
M. HAVLÍK & J. KRÁSNÝ: Transmissivity distribution in southern part of the Bohemian Massif: Regional trends and local anomalies	11
B. BREUER: Hydrogeological situation in the weathered zone near the continental deep drilling project (KTB), Upper Palatinate, Germany	19
K.-P. SEILER: Ground water protection in consolidated rocks with matrix porosity	25

### TOPIC 2

#### GROUND WATER RESOURCES AND GROUND WATER PROTECTION

A. PULIDO BOSCH, J. GISBERT & G. AL ALWANI: On the characterization of hydrologic behavior of a high mountain schistous catchment	29
D. K. CHADA & S. K. SHARMA: Hydrogeological aspects of ground water resource evaluation – Case studies from Indian shield region	35
V. MYSLIL, K. POSMOURNY & M. STIBITZ: Groundwater protection in hard rocks with respect to mining activities. Two methodical case studies	43
S. STASKO: Groundwater resources evaluation - Case study based on long term observation	49

### TOPIC 3

#### HYDROGEOCHEMISTRY, THERMAL AND MINERAL WATERS

S. BENDER & S. WOHNLICH: Temporal variations of the physico-chemical parameters in the catchment of the Rötzer springsystems	57
J. DVOŘÁK: Hydrogeology and the genesis of mineral waters of the Carlsbad type in western Bohemia	63
J. HANZLÍK & J. KRÁSNÝ: Brine occurrences in Czech-German border region	71
P. JAKES & J. KRÁSNÝ: The Teplice Spa in the northern Bohemia: 120 years of hydrogeological issues and possibilities of its future development	79

H. MARSZALEK: The hydrogeochemical zonality in crystalline rocks of western Sudetes (SW Poland)	87
R. VICENTE, I. MUÑOZ & A. ANDRÉS: Geochemical trends of brackish groundwaters in the SW limit of Spanish central system of Campo Arañuelo detrital aquifer	95
V.MYSLIL & M. STIBITZ: Geothermal resources of the Czech Republic - General overview	103

#### TOPIC 4

### INVESTIGATION AND INTERPRETATION METHODS

R. BÄUMLE, H. HÖTZL, C. THÜRINGER & K. WITTHÜSER: Rock test site for investigations of flow and transport processes in porous fractured media	111
P. LACHASSAGNE & N. RAMPNOUX: Coupling radon emanometry and geophysics for borehole implementation in hardrock aquifers with thick weathered cover	117
M. STIBITZ: Investigation of groundwater potential in the crystalline of the Bohemian Massif in Austria. – Methodical framework	123
M. VESELY & J. MLS: Groundwater flow in a long fracture with variable aperture	129
T. HIMMELSBACH & U. STENZEL: Quantification of vertical orientated seepage and mass transfer in a fault zone of fractured granite with the help of hydrochemical modelling of groundwater composition	135

#### TOPIC 5

### POSTER SESSION

K. DORSCH, S. BENDER & S. WOHNLICH: The influence of granitic intrusions on the hydrochemistry in gneiss areas	143
J.A. SANCHEZ NAVARRO: Characterization on groundwater flow in an heterogenous geological medium: the Bailin hazardous waste landfill case (Huesca, Spain)	149
I. MASAKOVA & M. KOBR: Fracture aquifer well-log analysis for hard rock evaluation	157
S. BENDER, P. OBERNDORFER & S. WOHNLICH: The leaching behaviour of soils in the catchment of the „Old Springsystem of Rötz“ (Upper Palatinate, Bavaria)	163
A. STUMM, B. MERKEL, H. JORDAN & T. ABRAHAM: Origin of the high concentration of chloride in the mineral waters in the region „Vogtland“	171
A.CIMINO: Hydrogeological surveys in hard rocks of north-eastern Sicily	177
S.M. WEISE, K. BRÄUER, G. STRAUCH, H. KÄMPF, U. KOCH & J. TESAŘ: Seismically induced release of deep-seated fluids as tracer of fast transport up to surface in fractured rocks of the Bohemian Massif	183