

CONTENTS

A MODIFIED DIFFUSION-ADVECTION MODEL FOR COMPUTATIONAL SIMULATION OF SALT TRANSPORT AND CRYSTALLIZATION IN POROUS MATERIALS JAN KELNAR, JIŘÍ MADĚRA, ROBERT ČERNÝ	5
APPLICATION OF COMPUTATIONAL INVERSE ANALYSIS OF MOISTURE AND SALT CONCENTRATION PROFILES FOR DETERMINATION OF MOISTURE AND SALT TRANSPORT PARAMETERS LUKÁŠ FIALA, ZBYŠEK PAVLÍK, MILENA PAVLÍKOVÁ, ROBERT ČERNÝ	13
TRANSIENT METHOD FOR HIGH-TEMPERATURE MEASUREMENT OF THERMAL DIFFUSIVITY JAN TOMAN, LUCIE ZUDA, ROBERT ČERNÝ	17
COMPARISON OF DIFFERENT SILICATE WATERPROOFINGS CHARACTERISTICS IN CONCRETE SURFACE OLDŘICH SVITÁK, PATRIK BAYER	23
SALT SOLUTION TRANSPORT IN DESALINATION PERFORMED USING HYDROPHILIC MINERAL WOOL PETR MICHÁLEK, VRATISLAV TYDLITÁT, MILENA PAVLÍKOVÁ, ROBERT ČERNÝ	29
APPLICATION OF DE LOOR'S MIXING RULE IN DIELECTRIC MEASUREMENT OF MOISTURE CONTENT ZBYŠEK PAVLÍK, LUKÁŠ FIALA , ROBERT ČERNÝ	35
PROPERTIES OF WATER VAPOR RETARDERS MILOŠ JERMAN, PAVEL TESÁREK, ROBERT ČERNÝ	43
MATERIAL MODELS FOR CONCRETE FAILURE OMAR BACARREZA, PETR KONVALINKA	51
APPLICATION OF TDR METHOD FOR MEASURING MOISTURE CONTENT IN CELLULAR CONCRETE: EFFECT OF DENSITY ZBYŠEK PAVLÍK, LUKÁŠ FIALA, MILENA PAVLÍKOVÁ, ROBERT ČERNÝ, HENRYK SOBCZUK, ZBIGNIEW SUCHORAB	57
COMPUTATIONAL MODELLING OF TIMBER BEAM REINFORCED WITH CARBON LAYER LENKA HLUŠÍ, PETR KONVALINKA	67
TEMPERATURE INFLUENCE ON MEASUREMENT OF SORPTION ISOTHERMS OF POROUS BUILDING MATERIALS RADKA PERNICOVÁ, MILENA PAVLÍKOVÁ	73
EFFECT OF SALTS ON WATER AND VAPOR TRANSPORT PROPERTIES OF HIGH-PERFORMANCE CONCRETE EVA MŇAHONČÁKOVÁ, MILOŠ JERMAN, ROBERT ČERNÝ	81

**HIGH-TEMPERATURE THERMAL PROPERTIES OF COMPOSITE MATERIAL
BASED ON ALKALI ACTIVATED SLAG** LUCIE ZUDA, PAVEL ROVNANÍK,
PATRIK BAYER, ROBERT ČERNÝ 87

SEMI-SCALE EXPERIMENT FOR SIMULATION OF DRYING-OUT PROCESS
ZBYŠEK PAVLÍK, PETR MICHÁLEK, ROBERT ČERNÝ 99

SEQUENTIAL IDENTIFICATION OF MICROPLANE MODEL PARAMETERS
ANNA KUČEROVÁ, MATĚJ LEPŠ, JAN ZEMAN 105

**EFFECT OF LIME GRAIN FINENESS ON MECHANICAL PROPERTIES OF
LIME-POZZOLANA PLASTERS** RADKA PERNICOVÁ, MILENA PAVLÍKOVÁ,
ROBERT ČERNÝ 119

MATERIAL PARAMETERS IDENTIFICATION FROM INDENTATION TEST
ZUZANA VITINGEROVÁ 127

**PROPERTIES OF SELF COMPACTING CONCRETE BASED ON CEMENT
CONTAINING BLAST FURNACE SLAG** EVA MŇAHONČÁKOVÁ, MILOŠ JERMAN,
PAVEL TESÁREK, STEFANIA GRZESZCZYK, ROBERT ČERNÝ 133