

CONTENTS

THE SIXTIETH BIRTHDAY OF PROFESSOR ZDENĚK BITTNAR <i>Jiří Šejnoha</i>	7
SHEAR BUCKLING OF SANDWICH PLATES : RESOLUTION OF PARADOX <i>Zdeněk P. Bažant</i>	11
NUMERICAL MODELING OF SIZE EFFECT ON FRACTURE ENERGY OF CONCRETE <i>Milan Jirásek, Simon Rolshoven, Peter Grassl</i>	25
COUPLED PROBLEMS IN STRUCTURAL ANALYSIS OF DAMS <i>Carsten Könke, Christoph König, Volker Bettzieche</i>	43
IMPLEMENTATION OF A GENERAL MESH REFINEMENT APPROACH <i>Paul Hammon, Petr Krysl</i>	57
DYNAMIC ALGORITHMIC COMPONENTS FOR THE DEVELOPMENT OF FINITE ELEMENT SOFTWARE <i>Rostislav Chudoba, Martin Konrad</i>	71
SOME EXPERIENCES WITH BORED PILES IN BRAZIL IN RELATION TO NUMERICALLY BACK-ANALYZED DESIGN PARAMETERS <i>Renato P. Cunha, Pavel Kuklik</i>	83
OPTIMISED BOX-COUNTING METHOD : EFFECT OF MESH SIZE DISTRIBUTION <i>Petr Frantík, Zbyněk Keršner, Miroslav Stibor</i>	103
STOCHASTIC ANALYSIS, FRACTURE MECHANICS AND PRE-STRESSED CONCRETE MEMBERS <i>David Lehký, Dita Matesová, Drahomír Novák, Břetislav Teplý, Václav Veselý, Miroslav Vořechovský</i>	111
THEORETICAL AND EXPERIMENTAL ANALYSIS OF COUPLED WATER AND SALT TRANSPORT IN CONCRETE <i>Robert Černý, Zbyšek Pavlík, Pavla Rovnaníková</i>	121
LOCALIZATION OF INELASTIC DEFORMATION AND PARTITION OF UNITY METHOD – ONE DIMENSIONAL CASE <i>Miroslav Audy, Michal Šejnoha, Jan Zeman</i>	139

USING A GENETIC ALGORITHM FOR OPTIMIZING SYNAPTIC WEIGHTS OF NEURAL NETWORKS	<i>Jan Drchal, Anna Kučerová, Jiří Němeček ...</i>	161
ON UNIAXIAL STRESS-STRAIN RELATIONSHIP OF FIBER REINFORCED CEMENTITIOUS COMPOSITES IN MULTIPLE CRACKING STATE	<i>Petr Kabele</i>	173
CHANGES OF MATERIAL CHARACTERISTICS OF CONCRETE UNDER THE FREEZE-THAW LOADING	<i>Petr Konvalinka</i>	187
IDENTIFICATION OF MATERIAL MODELS WITH MODERN METHODS	<i>Anna Kučerová, Michal Mühlbauer</i>	197
DP-FETI IN STRUCTURAL MECHANICS	<i>Jaroslav Kruis</i>	219
STRUCTURAL DAMAGE ASSESMENT USING DYNAMIC SYSTEM IDENTIFICATION	<i>Michal Polák, Tomáš Plachý</i>	237
ADAPTIVE SIMULATION OF BEHAVIOUR OF MATERIALS WITH STRAIN SOFTENING	<i>Daniel Rypl, Bořek Patzák</i>	251
EXPLICIT SOLVER FOR NON-LINEAR PROBLEMS	<i>Petr Řeřicha</i>	273
LONG-TERM DEFORMATION OF SHEAR WALL SYSTEMS	<i>Jiří Šejnoha, Petr Fajman</i>	285