

TABLE OF CONTENTS

BUILDING STRUCTURES AND STRUCTURAL MECHANICS

Jindra Daniel, Hradil Petr

Finite Element Modelling of Reinforced Concrete Slab Exposed to Extreme Fire Loads 1

Král Petr, Kala Jiří, Hradil Petr

Study of the Efficiency and Accuracy of Optimisation Algorithms within Inverse Identification of the Parameter Values of a Nonlinear Concrete Material Model 9

Major Maciej, Major Izabela, Kuliński Krzysztof

Stress Distribution in Spread Footing Foundations - Numerical Analysis 17

Major Maciej, Major Izabela, Kuliński Krzysztof

Analysis of the Mechanical Wave in the Composite Made of Concrete and Rubber - Numerical Analysis 25

Miarka Petr, Merta Ildikó, Seitl Stanislav

Numerical Analysis of Brazilian Disc Test with a Central Notch: Constrain Level for Various Notch Inclination Angles 29

Miarka Petr, Furgieri Guido, Růžička Vladimír, Seitl Stanislav, Merta Ildikó

A Comparison of Crack Paths Growth in Brazilian Disc with a Central Notch Using Various Criteria for Crack Initiation 33

Moravčík Milan

Dynamic Behaviour of Railway Bridges under Moving Mass Load – Iterative Modal Analysis .. 39

Novák Lukáš, Novák Drahomír

Stochastic Spectral Methods in Uncertainty Quantification 48

Seitl Stanislav, Miarka Petr, Pokorný Pavel, Fintová Stanislava, Kunz Ludvík

Comparison of Mechanical Properties of Old Steel from Truss Crane Runway with S235 and S355 Grades 54

Šimonová Hana, Kucharczyková Barbara, Lipowczan Martin, Lehký David, Bílek Vlastimil Jr., Kocáb Dalibor

Identification of Mechanical Fracture Parameters of Alkali-Activated Slag Based Composites during Specimens Ageing 59

Sýkora Miroslav, Mlčoch Jan, Ryjáček Pavel

Uncertainties in Characteristic Strengths of Historic Steels Using Non-Destructive Techniques . . 65

Vokál Marek, Drahorád Michal

Legion Bridge in Prague - Assessment of Stone Arches 71

BUILDING ENVIRONMENT, PREPARATION AND REALIZATION OF CONSTRUCTION WORKS

Smugala Stanislav, Kubečková Darja

Modelling the Building Process using Software, Case Study 81

FACILITY MANAGEMENT, MUNICIPAL ENGINEERING AND ARCHITECTURE

Endel Stanislav, Kutá Dagmar, Kuda František

Future Development Assessment in Jablunkov Region 93