

Table of Contents

Preface

Chapter 1: Building Materials with Low Environmental Impact

Influence of Aggregate and Binder Content on the Properties of Pervious Concrete M. Kováč and A. Sicakova	3
The Properties of Concrete Based on Steel Slag as a By-Product of Metallurgical Production P. Martauz, V. Václavík and B. Cvopa	10
Evaluation of some Specific Effects of Pavement Kerbs Containing Cement Kiln Dust on Soil and Lawns - The First Experimental Phase L. Procházka and B. Vojvodíková	23
Physico-Mechanical Properties of Cellulose Fiber-Cement Mortars N. Števulová, V. Hospodarová, V. Václavík and T. Dvorský	31
Trends in the Use of Cement Bypass Dusts for their Application in Construction E. Terpakova and N. Števulová	39
The Temperature Impact on the Various Cement Type Consistency R. Figmig, A. Eštoková and A. Sicakova	46
Ladle Slag as an Admixture in Cement Composites R. Papesch, T. Dvorský, V. Václavík, J. Svoboda and L. Klus	53
The Utilization of a Combination of Recycled Rubber from Waste Tires and Waste Waters from a Concrete Plant in the Production of Cement Composites J. Svoboda, V. Václavík, T. Dvorský, L. Klus and J. Botula	59
Effect of Colour Pigment on Selected Properties of Fly Ash Concrete. Part 1: Compressive Strength and Water Absorption J. Junak, N. Junakova and V. Salkova	67
Building Materials as Potential Emission Sources of VOC in the Indoor Environment of Buildings K. Harčárová, S. Vilčeková and M. Balintova	74
Effect of Various Input Parameters on Compressed Earth Block's Strength P. Konrád, P. Gallo, R. Sovják, Š. Pešková and J. Valentin	81
Application of Nanomaterials for Sustainable Concrete K. Hrabová	88
Comparison of Degradation of Concretes with High Portions of Mineral Additions and Ordinary Portland Cement Based Concretes due to Simulated Acidic Rain A. Eštoková, V.O. Harbuláková and M. Smolakova	94

Chapter 2: Environmental and Sustainable Development

Assessment of Pyrogenic Carbonaceous Materials for Effective Removal of Radiocesium M. Pipiška, S. Ballova, V. Fristak, L. Ďuriška, M. Hornik, S. Demcak, M. Holub and G. Soja	103
Influence of Humidity on Radon Volume Activity on Lands J. Bouchalova, H. Raclavská and V. Klimantová	111
Dredged Material Quality in Anthropogenically Exploited Catchment Area N. Junakova, E. Šelingova and L. Demkova	118
Capabilities of Four Microorganisms for Bioremediation of Lead Contaminated Soil E.K. Osagie	125
Possibilities of Improving the Properties of Arable Land by Application of Composts J. Mudruňka, L. Hanuliaková, D. Vrublová and B. Lyčková	135
Monitoring of Particulate Matter Concentrations in Kosice-Krasna, Slovakia: A Case Study S. Vilčeková, E. Kridlova Burdova, L. Meciariova and R. Fijko	143
The Quality and Characteristics of Final Substrates from Different Composting Technologies B. Lyčková, J. Mudruňka and R. Kučerová	151

The Environmentally Friendly Possibility of Using Recycled Plastic from Electrical Waste to Rainwater Detention	
E. Pertile, P. Zamarsky, P. Tkacova and M. Novosadova	157
Soil Material Quality and Environmental Potential of Metallically Contaminated Soils	
J. Fazekas, D. Fazekasova and J. Chovancova	164
Reuse of Waste Materials from Sleeper Subsoil	
K. Kučová, R. Kučerová, B. Lyčková, V. Glogarová, D. Takač and M. Tichá	170
Biodegradation of Sleeper Subsoil	
R. Kučerová, B. Lyčková, J. Geryková, V. Glogarová, D. Takač and I. Sobková	178