

Table of Contents

Preface

Effect of Ash-Slag Mix and Polypropylene Fiber on the Performances of Concrete Composite	
R. Fediuk, S.V. Klyuev, A.V. Olisov, A. Taskin and M.A. Mosaberpanah	1
Comparative Assessment of Effectiveness of Calcium Silicate Dispersions Produced Using Sucrose and Lactose as Components of Composite Cement Binder	
E.A. Shoshin, V.V. Strokova and Z.M. Ye	11
Practical Application of the Similarity Law of Structures in the Reconstruction of the Surface Layer of Bricks	
V. Danilov, A. Ayzenshtadt and M. Frolova	21
Mineral Powders Dispersion Degree Effect on the Properties of the Cementing Alkaline System	
S.A. Murtazaev, M. Mintshev, M. Salamanova, Z. Aymenov and A. Alaskhanov	31
Effect of Mixing Procedure and Chemical Composition on Physical and Mechanical Performance of Geopolymers	
N.I. Kozhukhova, A.Y. Teslya, N.I. Alfimova and M.I. Kozhukhova	41
Effective Application of 3D Additive Technologies for Creation of Construction Compositions Using Technogenic Raw Materials	
E.S. Glagolev	51
Effects of Calcination Temperature and Time on the Physical-Chemical Efficiency of Thermally Activated Clays in Cement Systems	
A. Balykov, T.A. Nizina, V.V. Volodin and V.M. Kyashkin	61
The Method of Creating and Measuring the Printability of Fine-Grained Concrete	
V. Lesovik, E.S. Glagolev, M.Y. Elistratkin, M.A. Pospelova and N.I. Alfimova	71
The Effect of Composition and Fineness of Mineral Fillers on Structure of Asphalt Binder	
M.S. Lebedev, M.I. Kozhukhova and E.A. Yakovlev	81
Microstructural Analysis of Changes in the Morphology of Quartz Raw Materials of Different Genesis at Dry Milling	
E.V. Fomina, N.I. Kozhukhova, E.A. Belovodsky, V.A. Klimenko and M.I. Kozhukhova	91
Analysis of the Effectiveness of the New Generation of Additives in Improving Physical and Mechanical Properties of Highway Subgrades	
A. Trautvain, E.A. Yakovlev and A.M. Gridchin	101
Glass Micro Balls Based on Glass Domestic Waste for Road Construction	
V.S. Bessmertny, V.A. Klimenko, M. Bondarenko, A.V. Olisov and L. Bragina	111
Characterization of Different Brazilian Soils for the Production of Ceramic Artifacts	
A.R.G. Azevedo, S.V. Klyuev, V.A. Klimenko, M.T. Marvila and R. Fediuk	123
Comparative Resistance of Concrete with Aggregates and Fillers of Different Composition	
S.M. Rakhimbayev, N.M. Tolypina, E.N. Khakhaleva and D.A. Tolypin	133
Recipes and Properties of Multicomponent Systems "Aspiration Dust - Mineral Powder - Na_2SiO_3"	
M. Salamanova, S.A. Murtazaev, D. Bataev, M. Nakhaev and B. Sarsenbayev	143
Specifics of Structure Formation of Cement Stone with Silica Raw Material - A Substrate of Photocatalytic Composite Material	
V.V. Nelyubova, Y.N. Ogurtsova, M.N. Sivalneva, V.V. Strokova and P.Q. Zhao	153
Effectiveness Evaluation Criteria of Using Fine Powders of Secondary Concrete as a Component of Composite Binder	
T. Drozdyuk, A. Ayzenshtadt and S. Aksenov	163