



Department of Civil Engineering and Engineering Mechanics
Columbia University

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TECHNOLOGIES OF WASTE GLASS REUSE: NEW VIEW FOR THE OLD MATERIAL

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The presentation is devoted to the unsorted glass recycling by using of glass powder surface properties for manufacture of various products. Volume and surface glass properties are discussed from the reuse of waste glass point of view. It is found that the ion-exchange surface properties of various waste glass sorts are similar. It is shown that the glass power ion-exchange properties are the basis for binding properties of pastes like concrete. The possibilities of the binding composition preparation from glass powder for various products are discussed.

The real technologies samples of glass waste reusing for construction and heat insulation materials are described. Advanced products technologies are discussed. It is shown that the economic indicators of various foamed glass products manufacture is the key for using waste glass as a raw.

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