



Properties of porous alumina ceramics

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Abstract:

Porous materials are commonly used as catalyst supports in the processes of oxidation, hydrogenation and dehydrogenation at high temperature, corrosion in feed processing- corrosive environments at endothermic and exothermic reactions. In particular, for this purpose various types of corundum materials with high chemical inertness is needed. Porosity materials due to the high porosity and the peculiar structure have specific properties dramatically different from those of the corresponding chemical composition of dense materials. Then a highly porous cellular material of alumina carriers for catalysts was obtained. The filler used to be electro corundum, as reinforcing filler, forming on fire a bundle used porcelain. The samples were prepared by impregnating the ceramic slurry polyurethane foam (PUF), followed by drying and calcining at 1450 °C. The porosity after firing was 60-65%, the compressive strength of 3.5 MPa.

Biography:

Zaw Ye Maw Oo has completed his PhD from D Mendeleev University of Chemical Technology of Russia. Currently, he is attending Postdoctoral studies in the same university. He has published more than 5 papers in reputed journals.

Publication of speakers:

- Zaw Ye Maw Oo et al..Permeable Ceramic with Three-Fraction Electromelted Corundum Filler and Porcelain Binder Highly Porous Permeable Cellular Ceramic Based on Silicon Carbide with Added Mullite



- Zaw Ye Maw Oo et al..Effect of Electrocorundum Powder Grain Size Composition with a Porcelain Binder on Porous Ceramic Gas Permeability and Strength
- Zaw Ye Maw Oo et al..Strengthening Binders for Porous Permeable Ceramic with Electromelted Corundum Filler
- Zaw Ye Maw Oo et al..Effect of Adding Porcelain on Properties of Porous Ceramic Based on Electromelted Corundum
- Zaw Ye Maw Oo et al..Varying the Granulometric Composition of an Electrofused-Corundum-Based Ceramic with a Porcelain Binder to Control its Open Porosity and Strength

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