Surface Acidity and Catalytic Activity of Phosphomolybdic Acid/SnO2 Catalysts

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Description

The aim of this work is to prepare a series of SO4/ZrO2 catalysts precipitated by different sulphuric acid concentrations using sol gel preparation method. The surface acidity of the prepared catalysts was measured. It was observed that increasing of the calcination temperatures was associated with transformation of amorphous phase to crystalline phase. The incorporation of sulphate ions into ZrO2. The surface acidity and surface area of the catalysts were measured and the catalytic activity was tested for synthesis of 7-hydroxy 4- methyl cumarin. Usually the higher activity of these catalysts was attributed to its higher acidity

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Preparation, Characterization and pH-Metric Measurements of 4-Hydroxysalicylidenechitosan Schiff-Base Complexes of Fe (III), Co (II), Ni (II), Cu (II), Zn (II), Ru (III), Rh (III), Pd (II) and Au (III)

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Description

The 4-hydroxysalicylidenechitosan Schiff-base (2CS-Hdhba) was prepared by the condensation of 2, 4-dihydroxybenzaldehyde with chitosan, and its metal complexes,[M (2CS-dhba) Cl2 (H2O) 2](M (III)= Fe, Ru, Rh),[M′(2CS-dhba)(AcO)(H2O) 2](M′(II)= Co, Ni, Cu, Zn),[Pd (2CS-dhba) Cl (H2O)] and [Au (2CS-dhba) Cl2], are reported. These complexes were characterized by elemental analysis, by spectral data (FTIR, solid-phase 13C NMR, UV–vis and ESR spectroscopy), by morphological observations (SEM and XRD).

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Acidity and Catalytic Activity of Phosphomolybdic Acid Supported on MCM-41 Molecular Sieve

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Description

A series of $H_3 PMo_{12}O_{40}$/ MCM-41 (PMA/ MCM-41) catalysts with different Phosphomolybdic acid content of 30-70 wt % PMA was prepared. The acidity of these catalysts were examined and the catalytic activity was measured in the liquid phase condensation of resorcinol and ethyl acetoacetate.

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Preparation and Characterization of Sulphated Zirconia Catalyst Precipitated in Acidic Medium

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Description

A series of SO_4/ZrO_2 catalysts precipitated by different sulphuric acid concentrations using sol gel preparation method. The surface acidity of the prepared catalysts was measured . The incorporation of sulphate ions into ZrO_2, increased the surface acidity of the catalysts. The activity of these catalysts were tested for synthesis of 7-hydroxy 4- methyl cumarin. Usually the higher activity of these catalysts was attributed to its higher acidity.

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