Two new silver(I) complexes with 2,4,6-tris(2-pyridyl)-1,3,5-triazine (*tptz*): preparation, characterization, crystal structure and alcohol oxidation activity in the presence of oxone.

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Streszczenie

Two new silver(I) complexes ((*tptz*)$Ag_2(NO_3)_2$ and $[Ag_5(tptz)_4](NO_3)_5$) with 2,4,6-tris(2-pyridyl)-1,3,5-triazine (*tptz*) have been synthesized and characterized by X-ray diffraction, elemental analysis, ^1H NMR, IR, fluorescence, UV–Vis spectroscopy and electrochemistry. Oxidation of alcohols to their corresponding aldehydes and ketones was conducted with one of the Ag complexes as a catalyst, soluble enough in organic solvent, using oxone ($2KHSO_5{\cdot}KHSO_4{\cdot}K_2SO_4$) as an oxidant under biphasic reaction conditions (CH_2Cl_2/H_2O) and tetra-*n*-butylammonium bromide as phase transfer agent under air at room temperature.

Słowa kluczowe

Silver(I) complexes, Alcohol oxidation, catalysis

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