

Synthesis and characterisation of triethyl ammonium BIS (aminobenzoato)phenylsilicate

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Synthetic chemistry of hypervalent silicon compounds have been mainly confined to the O,O type ligands like Catechol, Salicylic Acid, Glycerol, Pinacol etc. where silicon is bonded to oxygen atoms. There has been very less report on the isolation of anionic silicates having O,N type ligands. In order to understand the effect of these atoms attached to silicon atom and on the structure and reactivity of zwitterionic silicates it is desirable to bring variation in the environment around silicon atom. Therefore we have attempted the synthesis of title compound with a view to incorporate a different environment around silicon atom i.e. using ligand having heteroatom (O,N type ligand) e.g. Anthranilic acid. The title compound is prepared by the reaction of Phenylsilane, Triethylammonium and Anthranilic acid in 1:1:2 molar ratio in dry acetonitrile. The compound is characterised by elemental analysis, molar conductance, IR, multinuclear (^1H , ^{13}C , ^{29}Si) NMR, FAB mass spectroscopy and X-ray crystallography.

Biography

Neena Garg, did B.Sc. (hons.), M.Sc. (hons.), in Chemistry from Panjab University, Chandigarh, in 1998, and then completed Phd in chemistry in 2004 from Panjab University, Chandigarh, on the topic "Synthesis and characterisation of some hypervalent silicon compounds". I have published two research papers in international journals, one in "Main Group Metal Chemistry" and the other in "Phosphorous, Sulfur and silicon". I have five years of research experience and six years of teaching experience. Presently I am teaching in a Govt. Engineering College "CCET, Chandigarh College of Engineering and Technology", sector 26, Chandigarh.

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