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Title:	Imidazolyl-substituted silatranes derived from triethanolamine and tris(isopropanol)amine: Syntheses and structural characterization
Authors:	Khullar, S. (/jspui/browse?type=author&value=Khullar%2C+S.) Mandal, S.K. (/jspui/browse?type=author&value=Mandal%2C+S.K.)
Keywords:	silatranes Imidazolyl-substituted silatranes triethanolamine and tris(isopropanol)amine syntheses
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Abstract:	The syntheses of seven new silatranes, N-[3-(3,7,10-trimethylsilatranyl)propyl]imidazole (7), N-(3-silatranylpropyl)-4-methylimidazole (8), N-[3-(3,7,10-trimethylsilatranyl)propyl]-4-methylimidazole (9), N-(3-silatranylpropyl)-2-methylimidazole (10), N-[3-(3,7,10-trimethylsilatranyl)propyl]-2-methylimidazole (11), N-(3-silatranylpropyl)-2-imidazoline (12), and N-[3-(3,7,10-trimethylsilatranyl)propyl]-2-imidazoline (13), are reported. These silatranes were prepared by transesterification of triethoxysilanes, N-(3-triethoxysilylpropyl)imidazole (3), N-(3-triethoxysilylpropyl)-4-methylimidazole (4), N-(3-triethoxysilylpropyl)-2-methylimidazole (5) and N-(3-triethoxysilylpropyl)-2-imidazoline (6) with triethanolamine (1), and tris(isopropanol)amine (2). The structures of five silatranes (7, 8, 9, 10, and 12) were confirmed by X-ray crystallography. The compounds were investigated by elemental analysis, IR, <sup>1</sup> H, <sup>13</sup> C NMR spectroscopy, thermogravimetric analysis, and mass spectrometry.
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