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# Synthesis of polysilsesquioxanes utilizing organosilicon derivatives of *p-tert*-butyl thiacalix[4]arene in cone conformation using base catalyst

© **Ludmila S. Yakimova**,[1] **Ramilya V. Ziatdinova**,[1] **Vladimir V. Gorbachuk**,[1] **Alena A. Vavilova**,[1] and **Ivan I. Stoikov**[1,2]*[+]

[1] *Department of Organic Chemistry. A.M. Butlerov Chemical Institute. Kazan Federal University. Kremlevskaya St., 18. Kazan, 420008. Russia. Phone: +7 (843) 233-74-62. E-mail: ivan.stoikov@mail.ru*
[2] *Kazan Institute of Biochemistry and Biophysics of Kazan Scientific Center of RAS. Lobachevsky St., 2/31. Kazan, 420111. Russia.*

*Supervising author; [+]Corresponding author

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## Abstract

Using base-catalysis, colloidal particles on the basis of tetrasubstituted organosilicon derivatives of *p-tert*-butyl thiacalix[4]arene in *cone* conformation were synthesized. Colloid systems were characterized by $^1$H NMR, IR spectroscopy and dynamic light scattering method. The particles with hydrodynamic diameter of about 2.2 μm were obtained. IR-spectrometry was used for characterization of polycondensation products. It is shown that the obtained product exists in the ladder structure containing more than five cyclotetrasiloxane fragments.