

Synthesis of new water soluble *p*-tert-butylthiacalix[4]arene derivatives containing quaternary ammonium fragments

© Pavel L. Padnya,¹ Elena A. Andreyko,¹ Alisa Z. Harisova,¹
Yury F. Zuev,² and Ivan I. Stoikov^{1,2*,+}

¹ Organic Chemistry Department. A.M. Butlerov Chemical Institute. Kazan (Volga Region) Federal University. Kremlevskaya St., 18. Kazan, 420008. Tatarstan Republic. Russia.

Phone: +7 (843) 233-74-62. E-mail: ivan.stoikov@mail.ru

² Kazan Institute of Biochemistry and Biophysics, Russian Academy of Science. Lobachevskogo St., 2/31. Kazan, 420111. Tatarstan Republic. Russia.

*Supervising author; +Corresponding author

Keywords: *dynamic light scattering, thiacalix[4]arenes, synthesis, synthetic receptors, molecular recognition, supramolecular chemistry.*

Abstract

p-tert-Butylthiacalix[4]arenes tetrasubstituted at the lower rim containing primary amino groups, quaternary ammonium and cyclic amide fragments have been synthesized. It has been shown that the formation of cyclic amide fragments in thiacalix[4]arenes occurs in the case of aliphatic diamines with ethylene bridge fragments.