

Interactions of New bis-Ammonium Thiacalix[4]arene Derivatives in 1,3-Alternate Stereoisomeric Form with Bovine Serum Albumin

Burilov V., Mironova D., Ibragimova R., Solovieva S., Antipin I.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2016, Springer Science+Business Media New York. New bis-ammonium thiacalix[4]arene derivatives with different lipophilicity were synthesized using copper(I)-catalyzed azide-alkyne cycloaddition in good yields. Binding of a new thiacalix[4]arene derivatives with bovine serum albumin (BSA) was investigated in detail using fluorescence spectroscopy method. Quenching mechanism, the binding constants, and number of binding sites were determined.

<http://dx.doi.org/10.1007/s12668-016-0255-4>

Keywords

Ammonium compounds, BSA, Luminescence, Quenching of luminescence, Thiacalix[4]arene, Triazoles