

Microwave-assisted synthesis of the first thiacalixcrown-clathrochelate conjugate

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Abstract

The First representatives of the new class of compounds, namely, conjugates of mercaptoalkoxy-thiacalix[4]crown in *1,3-alternate* stereoisomeric form synthesized from ω -bromo- and thioaceto thiacalix[4]arenes, and clathrochelate, which represent nanosized molecules with macrocyclic cavities, were synthesized under the conditions of microwave synthesis and conventional heating. It was shown that reaction proceeds much faster under microwave irradiation and conversion of starting thiol is higher. Structure of the conjugate synthesized was characterized with the use of a series of homo- and heterocorrelation NMR experiments.