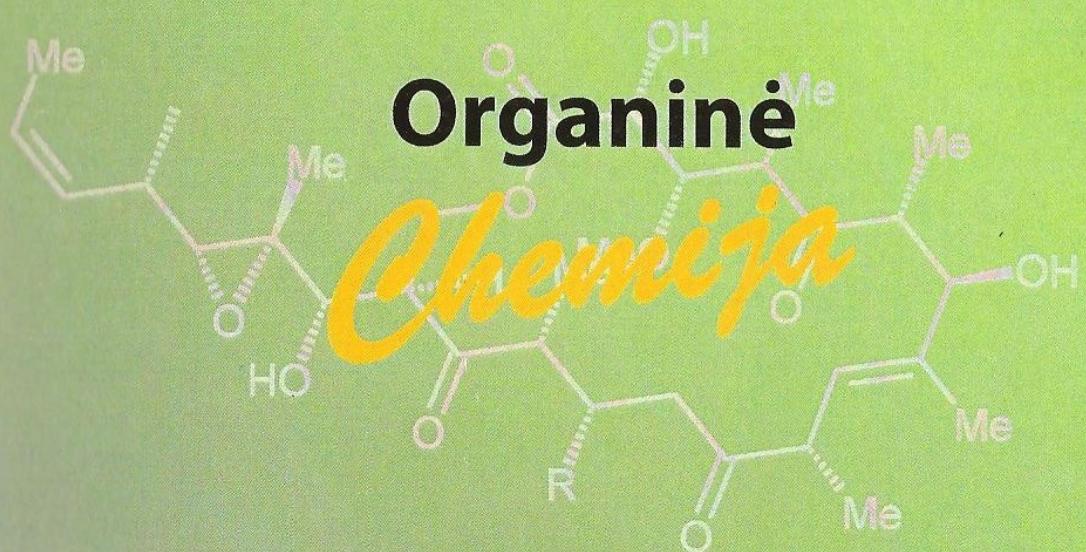


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SYNTHESIS AND APPLICATIONS OF (-)-(S)-3-AMINOQUINUCLIDINE DERIVATIVES

E. Rolava, U. Peipiņš, M. Turks

*Faculty of Material Science and Applied Chemistry, Riga Technical University, 14/24 Āzenes Str., Riga, LV-1007, Latvia
maris_turks@ktf.rtu.lv*

Various molecular scaffolds have proved themselves as effective bidentate hydrogen bond donors. In this context thiourea-derived catalysts are useful for many enantioselective transformations [1]. This fact attracted our attention to synthesize bis-aryl(thio)urea organocatalyst (**2**) using (-)-(S)-3-aminoquinuclidine dihydrochloride (Fig. 1) [2]. On the other hand, the pharmacological activity demonstrated by some quinuclidine derivatives [3] has been sufficient to promote our interest towards synthesis of quinuclidine-triazole conjugates **3** via “click” chemistry. To explore the scope and applicability of our vision, a combinatorial library of novel quinuclidine-triazole derivatives will be created.

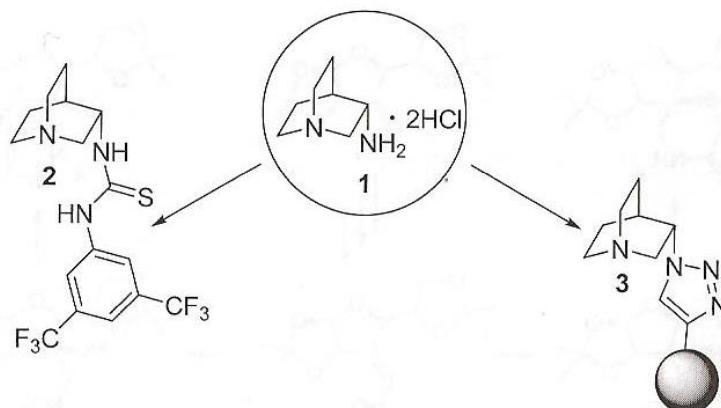


Figure 1. Synthesis of (-)-(S)-3-aminoquinuclidine derivatives **2** and **3**

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