Summary

This thesis is divided into three subsections. In the first part, there is described synthesis of seven already known benzalkonium homologues (C_8-C_{20}), which were used as a standard compounds for synthesis and analyzes of amphiphilic substances.

The second part deals with preparation for other series of quartenary detergents having heteroaromatic rings (pyridine, isoquinoline, quinoline, acridine) in their structures. According to the analysis of the newly prepared compounds, we have prepared all pyridinium, quinolinium, isoquinolinium homoloques only. Our future forts will by focus on acridinium salts, which we were not able to prepare. Moreover, further biological activity evaluation was managed and its results will be obtained within several month.

In the third part, the measurement of inhibition activity compared with acetylcholinesterase and critical micellar concentration was realized.