Full Paper _____ *Thematic Section:* Physico-chemical Studies.
Registration Code of Publication: 12-32-13-26 *Subsection:* Organomrtalic Chemistry.
Publication is available for discussion in the framework of the on-line Internet conference "*Butlerov readings*".
http://butlerov.com/readings/
Contributed: December 1, 2012.

The features of the aliphatic mono-, diamines and aminoalcohols axial coordination on the zinc porphyrinates

© **Galina M. Mamardashvili**,[+] **Olga S. Shishkina**, and **Ockar I. Koifman***
G.A. Krestov Institute of Solution Chemistry. Russian Academy of Sciences. Academicheskaya St., 1. Ivanovo, 153045. Russia. Phone: +7 (4932) 33-69-90. E-mail: gmm@isc-ras.ru

*Supervising author; [+]Corresponding author

Keywords: *Zn-tetraphenylporphyrin, amines, aminoalcohols, axial coordination, supramolecular dimers.*

Abstract

By the method of spectrophotometric titration we studied the processes of axial coordination of propylamine, propylenediamine, 3-amino-1-propanol and 2-amino-1-propanol on the Zn-5,10,15,20-tetra-phenylporpyrin and Zn-5,10,15,20-tetra(4-chlorophenyl) porphyrin in toluene. It has been found out that if the zinc-tetraphenylporphyrin forms with ligands only 1:1 complexes, the interaction of Zn-tetrachloro-phenylporphyrin with the diamines and aminoalcohols, depending on the molar ratio of the reagents, it leads to the formation of several types of the complexes. The stability constants of the corresponding complexes and concentration intervals of their formation were determined.