Thematic Section: Study of Reactivity. **Full Paper**
Subsection: Colloidal Chemistry. *Registration Code of Publication:* 14-39-10-121
Publication is available for discussion in the framework of the on-line Internet conference "*Butlerov readings*".
http://butlerov.com/readings/ *(English Preprint)*
Contributed: November 23, 2014.

Supramolecular complexes of squalene in electrophilic addition

© **Antonida V. Kalistratova**,[1] **Andrey T. Teleshev**,[2] and **Evgeny N. Ofitserov**[1]*[+]
[1] *D.I. Mendeleyev Russian University of Chemical Technology. Miusskaya Sq., 9. Moscow, 125047. Russia. Phone: +7 (495) 978-87-33. E-mail: ofitser@mail.ru*
[2] *Institute of Biology and Chemistry. Moscow State Pedagogical University. Nesvizhsky Lane., 3. Moscow, 119021. Russia. E-mail: chemdept@mail.ru*

*Supervising author; [+]Corresponding author

Keywords: squalene, electrophilic addition, supramolecular structures, vesicles, mechanism of electrophilic addition.

Abstract

There were obtained supramolecular formations of squalene, tetrahydrofuran in the presence of hydrogen halides, which as well as natural vesicles have a membrane that protects the contents from the external environment. On this basis, we can assume that many of the details of natural behavior of vesicles can be modeled using supramolecular complexes obtained by us on the basis of a new type of squalene and polar solvent molecules On the other hand, the scheduled path finding new supramolecular structures based on squalene and polar molecules of low molecular weight for use in the manufacture of a new generation medicinal products lacking drawbacks phosphatidylcholine based vesicles.