Registration Code of Publication: 14-39-10-43 Publication is available for discussion in the framework of the on-line Internet conference "Butlerov readings". http://butlerov.com/readings/ (English Preprint) Contributed: December 04, 2014.

Nucleophylic substitution of the allilic amino group in double aminomethylated chlorophyl a derivates

© Irina S. Tarabukina,¹⁺ Olga M. Startseva,¹ Ivan V. Gruzdev,² and Dmitry V. Belykh¹*⁺

¹Institute of Chemistry. Komi Scientific Center, Ural Division, Russian Academy of Sciences. Pervomaiskaya St., 48. Syktyvkar, 167982. Russia. E-mail: TarabukinaIS@mail.ru, belykh-dv@mail.ru ² Institute of Biology. Komi Scientific Center, Ural Division, Russian Academy of Sciences. Kommunisticheskaya St., 28. Syktyvkar, 167982. Russia.

*Supervising author; ⁺Corresponding author

Keywords: Methylpheophorbide-a, chlorin e₆, nucleophylic substitution, aminomethylated chlorophyll *a* derivatives, 3(1),3(2)-bis-(N,N-dimethylaminomethyl)-chlorin e₆ 13(1)-N-methyl amide-15(2),17(3)-dimethyl ester.

Abstract

Nucleophylic substitution reaction of 3(1),3(2)-bis-(N,N-dimethylaminomethyl)-chlorin e₆ 13(1)-Nmethyl amide-15(2),17(3)-dimethyl ester as a substrate with a series of alcohols, phenol and some amines as a nucleophiles using different ways of carbcatione from allilic dimethylamino groups formation were studied. Nucleophylic substitution was realized in case of Zn(OAc)₂ and some *O*-nucleophyles.