

2<sup>nd</sup> International Conference on

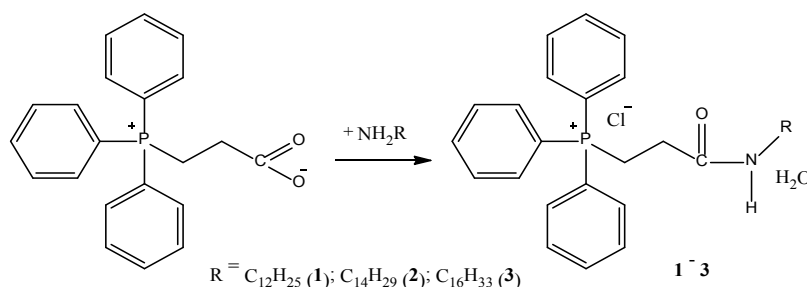
## PHARMACEUTICAL CHEMISTRY

October 02-04, 2017 Barcelona, Spain

## Synthesis and biological investigation of phosphobetaine derivatives

I Galkina<sup>1</sup>, D Bakhtiyarov<sup>1</sup>, Y Bakhtiyarova<sup>1</sup>, M Shulaeva<sup>2</sup>, O Pozdeev<sup>2</sup>, S Egorova<sup>3</sup> and V Galkin<sup>1</sup><sup>1</sup>Kazan Federal University, Russia<sup>2</sup>Kazan State Medical Academy, Russia<sup>3</sup>Kazan State Medical University, Russia

The search for novel agents to combat resistant bacteria has become one of the most important areas of antibacterial research today. Organic and pharmaceutical chemists are trying to synthesize new drugs with better pharmacokinetic and dynamic properties. In this study we prepared triphenyl-substituted phosphonium salts (amidated phosphobetaines) (1-3) on the basis of reaction of carboxylate phosphobetaine 3-(triphenylphosphonio)propanoate with amines, containing alkyl chains of various lengths. The synthesis of such compounds is very difficult in comparison with ammonium analogs. In the past years, our group carried out regular research on the synthesis, structure, and reactivity of phosphobetaines on the basis of tertiary phosphines and unsaturated carboxylic acids. Microbiological results indicate that the synthesized alkyl-(3-(triphenylphosphonio)propanoyl) amides 1-3 possess a broad spectrum of activity against the wide spectrum of tested pathogenic microorganisms.



## Biography

Irina Galkina - Professor of Pharmacy of A.M. Butlerov Chemical Institute of Kazan University has completed her Candidate of Sciences (PhD) at the age of 33 years and Doctor of Sciences at - 56 from Kazan University. She has published more than 250 papers in reputed journals. Taught disciplines: Chemistry of biologically active compounds and Pharmaceutical chemistry.

vig54@mail.ru

## Notes: