

Trimetaphosphate and imidazole—Possible reagents in prebiotic peptide synthesis

Serov N., Shtyrlin V., Khayarov K.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2016 Taylor & Francis Group, LLC. To develop the prebiotic peptide synthesis problem the oligopeptides formation kinetics in the glycine - sodium trimetaphosphate - imidazole system in water has been investigated in flow and batch conditions at different temperatures and pH values. The presence of sodium trimetaphosphate and alkaline conditions are necessary for oligoglycines formation. Imidazole increases yields of oligopeptides. The system investigated may be used as a good model for peptide synthesis in prebiotic conditions.

<http://dx.doi.org/10.1080/10426507.2016.1213258>

Keywords

imidazole, Peptide synthesis, trimetaphosphate