Thematic Section: Physicochemical Research. **Full Paper**
Subsection: Biochemistry. *Registration Code of Publication:* 14-39-10-83
Publication is available for discussion in the framework of the on-line Internet conference "*Chemical basis for the rational use of renewable natural resources*". http://butlerov.com/natural_resources/ *(English Preprint)*
Contributed: December 12, 2014.

Application of the method of thermal analysis for the study of eggs

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Keywords: thermal analysis, egg, chemical composition, protein yolk.

Abstract

The chemical composition of proteins and yolk of eggs from 10 regions of Russia was studied by thermal analysis. According to the experiments for three years studies have shown that using the developed techniques in protein and egg yolks can determine the content of water, ash and up to 4 organic macro-components in 1 hour, with the account of time for sample preparation. Macro components can be characterized by the temperature of exothermic or endothermic effect, it is recommended to use this indicator in the identification of eggs to their areas of origin, as well as the quality of feeding chickens. Calculated according to the thermal analysis of the activation energy for each of the components in the composition of albumen and yolk, and this figure can also be used to characterize the individual components of eggs from different manufacturers from different regions and assessing their energy and nutritional value.