## LACTOFERRIN: ANALYSIS OF THE STRUCTURE PROFILE

## Lilia Anghel

Institute of Chemistry of the Academy of Science of Moldova, 3, Academiei str., Chisinau MD-2028, Republic of Moldova e-mail: anghel.lilia@gmail.com

**Abstract.** The multitude of physiological processes in which the binding of iron ions takes part makes its mechanism worth investigating. The multiple sequence alignment method was applied to investigate the structure similarities of five lactoferrin X-ray crystallographic structures and outline the differences and similarities between lactoferrin and serum transferrin. The results of this study provide useful insights into the mechanism of iron-binding of lactoferrin protein molecule.

Keywords: iron, protein, lactoferrin, transferrin, multiple sequence alignment.