

## MODERN TRENDS IN TEACHING ANALYTICAL CHEMISTRY

Kyzym O. H., Petukhova I. Iu.,

Scientific supervisor: prof. Kaidalova L. H.

National University of Pharmacy, Kharkiv, Ukraine

irinapetukhova@ukr.net

**Introduction.** Training of competent professionals in the specialty "Pharmacy" starts with disciplines required for the cycle of natural sciences. Among other subjects it includes such normative academic discipline as "Analytical chemistry".

**Aim.** To optimize the educational process at the Department of Analytical Chemistry of the NUPh for the specialty "Pharmacy" taking into account the modern trends in teaching analytical chemistry.

**Materials and methods.** The work was conducted in studying the curricula in "Analytical chemistry" of the leading European universities, which train specialists in the specialty "Pharmacy". In particular, teaching of analytical chemistry was analyzed in 4 universities of Germany in Tübingen, Marburg, Dusseldorf, Heidelberg, and in 5 universities of Poland in Warsaw, Poznan, Lublin, Wrocław and Jagiellonian University (Krakow).

**Results.** Analysis of the curricula showed a great similarity in teaching of analytical chemistry in the universities mentioned. Modern approaches consider new trends in education associated with improvement of the content of disciplines and introduction of new learning technologies. Therefore, when developing the syllabi the possibility of varying the content of the course was used within the standard program in the amount of 15%. The time for in-class study of qualitative chemical analysis was reduced, and the course of physical-chemical methods of analysis with the new trends of quality control of medicines was extended according to the SPhU. With the purpose of the modern assessment of the quality of analysis concerning the course of analytical chemistry the basic concepts of chemical metrology in qualitative and quantitative analysis were introduced according to the SPhU and the European Pharmacopoeia. The use of videos of practical work in the educational process was also introduced. They provide a deeper individualization of learning, as well as create the conditions for self-study of the learning material and effective implementation of modern methodical and didactic approaches.

**Conclusions.** The innovations proposed allow improving the success in learning by the students and preparing for the licensing examination "KROK-1". Introduction of these trends coincide with implementation of the Law of Ukraine "On higher education" No.1556-VII dated 01.07.2014 and meet the requirements of QMS.