

## **ABSTRACT**

The teaching experiment has an indispensable role in teaching. The object of investigation of this thesis is to study the interaction of nitric acid with proteins. The course of the reaction is motivating and inspiring for pupils and students due to the observable changes that occur. The course of the reaction involves asking several questions. In order to answer them, the student must explain the nature of the reactions. A bioorganic model based on simple reactions carried out on a dot-plate is sufficient to explain the reaction process. The main motivation for this activity was to enrich the existing range of simple teaching experiments in organic chemistry and biochemistry with an experiment using exploratory methods in the context of bioorganic models.

## **KEYWORDS**

nitric acid, proteins, xanthoprotein reaction, school experiment