

AL-FARABI KAZAKH NATIONAL UNIVERSITY

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QUESTIONS AND EXERCISES
ON HYDROCHEMISTRY AND
INORGANIC CHEMISTRY

For the group of specialties «Chemistry»,
«Biotechnology», «Hydrology»,
«Ichthyology, industrial fishing and fishery»

Educational manual

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The manual contains questions and exercises in the form of tests on the main sections of hydrochemistry. The manual can be recommended for independent work in preparation for classes, midterm and final control for university students majoring in "Chemistry", "Biotechnology", "Hydrology", "Ichthyology, industrial fishing and fishery", and will also be useful to teachers, students, undergraduates, PhD students of higher educational institutions of chemical and non-chemical specialties.

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FOREWORD

The courses "Hydrochemistry" and "Inorganic Chemistry" are one of the fundamental scientific disciplines of the chemical cycle and a necessary basis for the successful study of both chemical and special disciplines. These disciplines are studied by students of non-chemical specialties, namely: "Biotechnology", "Hydrology", "Fisheries and industrial fish farming".

Hydrochemistry is a science that studies the chemical composition of natural waters and its changes in time and space in a causal relationship with chemical, physical and biological processes occurring both in water and in the environment.

The manual contains questions and exercises on the discipline "Hydrochemistry with the basics of inorganic chemistry" in accordance with the standard curriculum on the following topics: composition, structure and properties of water as a solvent; the chemical composition of natural waters; formation of the chemical composition of natural waters; classification of the composition of natural waters; hydrochemistry of atmospheric precipitation, rivers, lakes, reservoirs; the composition of the water when it is used; fight against pollution of natural waters. The typical program of the discipline "Hydrochemistry" is compiled taking into account modern requirements for its teaching, as one of the fundamental natural disciplines, without studying which it is impossible to train specialists with a wide profile with a university education, as well as on the basis of the requirements of the educational standard in accordance with the modern methodological and scientific content of the course hydrochemistry and inorganic chemistry. At the same time, many years of experience in teaching these disciplines at leading universities in the near and far abroad and the experience of leading teachers of the Department of General and Inorganic Chemistry of the Faculty of Chemistry and Chemical Technology of al-Farabi KazNU.

Educational manual of Romanova S.M., Ponomarenko O.I., Yarovaya Y.Yu. "Questions and exercises on hydrochemistry with the basics of inorganic chemistry" for the group of "Chemistry", "Biotechnology", "Hydrology", "Ichthyology, industrial fishing and fisheries"

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Educational issue

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