

## **Specific Features of Teaching a Newly Introduced Subject “Fundamentals of Radiochemistry” in Uzhhorod National University**

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A new subject, Fundamentals of Radichemistry, was introduced for teaching in Uzhgorod National University for the students specializing in Ecology at the Faculty of Chemistry. The importance of this subject being introduced is related with the following reasons:

(1) Radiochemistry is an important field of chemical sciences. It is closely related to the contemporary environmental problems, including utilizing nuclear power plant waste. Another reality now is a danger of radioactive pollution due to terrorist attacks or use of nuclear weapons.

(2) Previously, radiochemistry had not been included into the curricula of Uzhgorod National University; meanwhile, the facilities available at the university provide sufficient equipment for carrying out laboratory studies.

The authors analyze the experience of teaching radiochemistry in Ukrainian universities and propose a series of innovations. They include, in particular, the teachers' emphasis on the basic differences of radiochemical processes from purely chemical, correct formulation of the vision of relationship of nuclear physics, radiochemistry, chemistry, and environmental science and safety of work and natural resource management.

The innovations also include a series of new laboratory works devoted to the processes of isotope exchange, water radiolysis under ionizing radiation as well as co-precipitation processes which will enable the students to become specialists in this field and face the possible challenges of today and the future.