



THEORETICAL AND PRACTICAL TRAINING METHODS IN SOIL CHEMISTRY AND ENVIRONMENTAL PROTECTION

Corina Leah

Moldova State University, Moldova

The environmental protection actions are conducted through information and education, which can take place using the press, publications, television, as well as organized and specialized environmental education. One of the current issues that advances and affect us directly is soil degradation through dehumification (loss of organic substance). The basic characteristic of soil is fertility: the property to ensure growth, development and fruiting of vegetation. Human activity can manage soil fertility, raising its ecological balance moving it to reasonable limits, but it may also cause a reduction in natural resources leading to reduced soil fertility and transforming fertile lands to deserts.

For carrying out of these problems, a special role belongs to chemistry course, as only this course we can gain knowledge about chemistry influence on nature, using chemical methods to purify the planet's ecological environment. This role is reflected in the fact that the chemistry is studying the laws of nature; knowing chemical elements and their compounds can widen significantly conceptions of abiotic factors. Modern education teaches that "active" is that student who thinks and reacts by his own, that puts personal reflection effort, interior and abstract, which has the opportunity to learn, by understanding, storing and applying in personally researching and rediscovering and not mechanically reproducing the material taught by the teacher. To ensure the success in learning, there are proposed the following:

- *methods*: conversation, discovery learning, problem solving, algorithmic, observation, laboratory experiment, brainstorming, projects, reports, field observations.
- *means*: books of chemistry, biology, physics, guide of laboratory activities in chemistry and biology, chemicals, laboratory utensils, plants, samples of water and soil, visiting treatment plants industrial water and drinking water, visiting research institutes and other profile institutions.

In order to develop practical skills and abilities, to stimulate interest in the study of specialized modules, with practical application for determination of environmental degradation from various parts of the country will enter perform hours of practice. This will include a series of soil analyzes which can determine both the physical properties (soil texture, bulk density, porosity, permeability for water, thermal properties of soil (temperature, heat capacity, thermal conductivity), and chemical properties of the soil sample (capacity of adsorption and ion exchange, soil acidity, buffering capacity, content of plant nutrients), degradation level thereof, following that theory classes to establish a series of measures to prevent and combat pollution applicable in each individual, but also society as a whole. There is a need of expansion of "environmental areas" by teaching chemistry, which aims to form a conception of the environment. Meanwhile, current chemistry courses have certain premises in the approach to environmental protection.