

**WAYS OF PROVIDING ECOLOGICAL EDUCATION THROUGH SOLVING PROBLEMS  
RELATED TO ATMOSPHERIC AIR POLLUTION.**

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**Annotation**

for environmental education and environmental education in Chemistry, some environmental issues should be used appropriately. They serve as an excellent tool in organizing classes for future chemistry teachers.

**Keywords**

environmental knowledge, ecological culture, environmental education, environmental consciousness, science, chemistry, pollution of air.

Nature and man relate to each other based on certain laws. Violation of these laws will lead to irreparable environmental disasters. Especially in the current period of scientific and technological development, any development of production leads to further pollution of the environment. Nature protection, rational use of natural resources is the priority of the future economic and social development of any country. It is calculated from the directions. Because it is necessary to consider the prospects of the development of the country's economy taking into account its impact on the environment, and pay attention to the harmonization of economic and environmental policies. In February, at the meeting of the video selector regarding the urgent tasks of the waste management system and the improvement of the ecological situation, the implementation of the "Green Space" national project: "In the 21st century, when the industry is highly developed on a global scale, the problems related to ecology are on the agenda as a priority issue. in Our descendants must live in a decent natural environment after us. For this, we need to pay attention to nature, think not only about today, but about the near and distant future," they said separately.

In order to deeply understand the ecological danger, it is necessary to form an ecological culture by giving pupils and students a certain level of environmental education and training. It is necessary that the environmental and education given to the students is inextricably linked with the content of the studied educational materials and based on it. Environmental education and education in chemistry classes should be based on the content of the lesson from each chemistry teacher. , using local materials, it is important that it is conducted on the basis of interdisciplinary connection. Solving issues related to environmental content and atmospheric air pollution in chemistry lessons teaches pupils and students to apply the acquired theoretical knowledge in practice, their responsibility towards nature We will give examples of environmental issues below.

Issue 1. According to the given data, 100 million tons of SO<sub>2</sub> are released into the atmosphere every year, how many million tons of H<sub>2</sub>SO<sub>4</sub> can be obtained from it with 85% yield?

Issue 2. 0.07g of water vapor, 0.20g of ash and 2.62g of CO<sub>2</sub> and SO<sub>2</sub> mixture were formed when 1g of coal was burned. What percentage of S was in the coal sample taken for this process. If TES burns 1 million tons of such coal for a year, how much SO<sub>2</sub> will it emit into the air during the year?

Issue 3. Let's assume that 2 tons of coal containing C-84%, H-5%, H<sub>2</sub>O-5%, S-3.5% and non-combustible additives-2.5% by mass are burned in one day. Taking into account that one hectare of forest trees emits 10 kg of O<sub>2</sub> per day, what area (ha) of forest is needed to replace the oxygen used for burning?

When studying the topics of carbon and its compounds in chemistry classes, knowledge is given about the effects of carbon, hydrogen and oxygen compounds on the environment. Air pollution with various man-made wastes is one of the global problems. Among them, CO<sub>2</sub> gas occupies the main place. As a result of man-made pollution, more than 22 million tons of CO<sub>2</sub> gas is released into the atmosphere per year. During the next century, the amount of this gas is expected to increase significantly. As a result of the doubling of CO<sub>2</sub>, it is estimated that the average temperature of the air in the lower layers of the atmosphere will increase by 2-4 0C. Along with providing the above ecological knowledge, it is appropriate to strengthen ecological knowledge by solving the following issue related to this topic.

Issue 4. 8 liters of gasoline contains 50 moles of octane. When the octane content of 20 liters of gasoline is burned, how many (kg) of CO<sub>2</sub> are released into the atmosphere?

Issue 5. Natural gas contains (by volume) 92% methane, 3% ethane, 2% propane and 3% nitrogen. How many m<sup>3</sup> of air is needed to burn 1m<sup>3</sup> of this gas? ( $\omega_{O_2}=0.21$ ). On the basis of solving the above-mentioned ecological issues, the organization of environmental education and training in general secondary schools, vocational colleges, and higher educational institutions will instill in students a sense of responsible attitude towards nature. along with serving to form it, it ensures that relations between nature and society are organized on the basis of high moral standards based on the constant enrichment of the chemical and biological knowledge acquired by them.

In chemistry classes, teaching to systematically solve problems of ecological content, depending on the subject of the lesson, serves as an important factor in forming a responsible attitude of students and pupils to the environment.

#### LIST OF USED LITERATURE:

1. Gulomiddinovna, A. U., & Musayevich, O. S. (2022). Ways of environmental education in the teaching of chemistry in higher education. Asian Journal of Research in Social Sciences and Humanities, 12(5), 341-343.



2. Gulomiddinova, A. U. (2021). IMPLEMENTATION OF ENVIRONMENTAL EDUCATION AND TRAINING IN TEACHING THE COURSE OF INORGANIC CHEMISTRY. *World Bulletin of Social Sciences*, 2, 8-9.
3. Gulomiddinova, A. U., Fozilovich, N. M., & Musayevich, O. S. (2021). Ways of Ecological Education and Training in the Training of Future Chemistry Teachers. *European Scholar Journal*, 2(2), 94-95.
4. Gulomiddinova, A. U., Fozilovich, N. M., & Musaevich, O. S. (2021). Methods of ecological education and ecological education in teaching metals. *ACADEMICIA: AN INTERNATIONAL MULTIDISCIPLINARY RESEARCH JOURNAL*, 11(1), 746-748.
5. Abdullayeva, U. G. (2021). Implementing interdisciplinary links with the natural sciences in the teaching of chemistry. *Экономика и социум*, (4-1), 28-30.
6. Уринова, О. У., Абдуллаева, У. Г., & Матмуродов, У. У. У. (2020). СОВРЕМЕННЫЕ АКТИВНЫЕ И ИНТЕРАКТИВНЫЕ ТЕХНОЛОГИИ ОБУЧЕНИЯ ХИМИИ. *Вестник науки и образования*, (21-2 (99)), 62-64.
7. SH.To‘xtamatova, R.O‘rmonova, S.O‘rmonov, Kimyodan murakkab masalalar va ularni echish usullari. *Farg‘ona davlat universiteti Ilmiy kengashining 2016 yil 26 fevral №6 yig‘ilishda nashrga tavsiya etilgan*. (1-47)
8. F.Ismoilova, O.O‘rinova, S.O‘rmonov, Kimyodan masalalar va ularni echish usullari, *Farg‘ona davlat universiteti ilmiy kengashi yig‘ilishida nashrga tavsiya etilgan*. (2019 yil. 14-may. 9-yig‘ilish). (1-74).