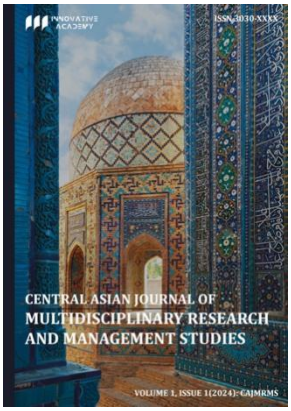

CHEMICAL RESEARCH ON THE ECOLOGICAL IMPACT OF THE CHEMICAL INDUSTRY AND ENVIRONMENTAL POLLUTION

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ABSTRACT

The chemical industry, as an integral part of modern technological development, helps to ensure economic stability, but its environmental impacts are also of great importance. This article analyzes the impact of the chemical industry on environmental pollution and their chemical analysis. The article discusses the negative impact of industrial activities on the environment, in particular, the emission of waste, the release of harmful gases into the air and the pollution of water resources. It also presents a scientific analysis of chemical reactions and their impact on the atmosphere, chemicals released in industrial processes and methods for reducing their impact on the environment. The chemical industry in Uzbekistan and its environmental problems are also studied, including research on pollution prevention using modern technologies and methods. The article presents new approaches to reducing environmental pollution and developing sustainable industry.

The chemical industry is one of the main sectors of the modern economy, playing an important role in ensuring production processes in various fields. However, the environmental impact of the industry, especially pollution issues, is attracting the attention of the world community. Environmental problems arise as a result of the release of various chemicals from the raw materials used in the production of the chemical industry and the processing of its products. These problems include harmful gases that pollute the air, water and soil pollution, as well as issues related to waste management. Chemistry industry ecological impact mainly working release in the process issued chemical substances with related to the industry negative ecological the impact reduce for modern technologies and new approaches working issued are , they are ecological pollution reduce and stable development to provide service This will do . in the article chemistry industry ecological

impact , pollution analysis to do and this to issues solution in finding applicable methodologies , that is including chemical analysis methods to study is dedicated .

Also in the article chemical reactions and their ecological problems with related analysis , chemical substances and their to the environment negative the impact reduce regarding done increased also see research will be released . Uzbekistan chemistry industry ecological to pollution impact and him/her in reduction scientific approaches also have their own on the contrary Chemistry industry ecological the impact assessment and pollution level determination modern scientific in literature wide being studied current from issues In particular , international on a scale take visited research chemistry in the industry appearance to be waste , gases and liquid of substances to the environment negative impact about important information presented For example , by J. Jones and S. Smith take visited in research chemistry from industry outgoing nitrogen oxides , sulfur dioxide and pilot organic of compounds air quality and human to your health negative impact analysis made [1].

Another one important source — Y. Chen and L. Zhao in a study industry of enterprises water to resources impact , particularly severe with metals (e.g. mercury , lead , cadmium) pollution level analysis They are scientific works industry waste water basins ecosystems negative the impact deep analysis does [2].

Uzbekistan scientists also regarding one row research take In particular , academician M. Yusupov in their work Navoi in the province chemistry industry of objects ecological impact studied is , then to the atmosphere being released harmful gases and they with related of diseases geographical distribution scientific basically analysis [3] Also , Professor S. Karimov by chemistry industry waste again work and them disposal to do modern technologies according to take visited research ecological security in providing important role plays [4].

global literature ecological stability provide for " green" The concept of " green chemistry" previously pushed is , this approach ecological danger non-productive , efficient , waste-free and again workable technologies to develop in mind holds . P. Anastas and J. Warner this of the concept founders as ecological clean working release technologies main principles working those who came out [5].

From this except for chemical pollution in determining spectroscopy , chromatography , electrochemical analysis such as modern analytical methods wide These technologies are being used . about in detail information by E. Martinez and R. Patel statement done are , they are industry waste different components high in accuracy analysis to do opportunity gives [6].

Chemistry industry humanity development important from networks one is economic growth , innovation technologies and daily in life amenities with closely is related . However this industry ecological security with related problems year after year more relevant color is taking . Globally take visited research this shows that chemistry in the industry harvest happening pollutant substances , especially carbonate anhydride , nitrogen and sulfur oxides , volatile organic compounds , and heavy metals land , water and of the air pollution reason is happening [2].

Discussion to be necessary was important from aspects one this is chemical pollution to health impact and ecological to systems indicating complex Chemical hazards . waste soil structure and fertility impact As a result , the village farm of products quality and security indicators is decreasing . Water in the basins heavy metal ions and biological accumulation processes through human to the body enter go , chronic diseases brought [3].

With this together , science and of technologies development industry pollution prevent to take or to reduce aimed at solutions offer [4]. “ Green " Principles of Chemistry " based on working issued technologies , especially zero - waste working extraction , biocatalysts , recycling work systems and energy saver reactors this regarding important innovations to the point [5]. For example , the environment damage inadequate solvents (green solvents), selective catalysts and biological decomposable reagents using pollutant substances amount noticeable at the level is being reduced . Uzbekistan even in this situation about measures is

being strengthened . In particular , in the " Uzkimyosanoat " system environmental monitoring and waste control to do system is being improved . Local of scientists research , especially on the basis of natural minerals working outgoing sorbents , adsorbents and ion-exchange materials through industry waste cleaning efficiency For example , F. Komilov and D. Juraev by take visited in research Fergana valley industry in the zones waste sorption in a way cleaning economic and ecological advantages showing passed [6].

From the above come out , chemistry industry ecological safety is not only state at the level solution to be done strategic issue, maybe international cooperation , scientific and technological integration and society ecological literacy increase through solution to be found is a problem .

CONCLUSION

Chemistry industry development with one in line his/her to the environment was negative impact on a global scale serious problem as is being viewed . This in the article take visited analyses this shows that chemistry industry pollution main sources — poisonous gases , heavy metal ions , toxic waste and organic pollutant are compounds . This of substances biosphere negative impact on environmental components (air , water , soil) impact ecological balance from the trail releases and human to your health threat [2].

However scientific approach and technological innovations based on chemistry in the industry ecological to problems end to give opportunities available [3]. " Green "to the principles of chemistry " based technologies , especially zero - waste working release , biocatalysis , selective reaction systems , re renewable from resources use through industry processes ecological safe to the situation to bring possible [4].

This is also the case in Uzbekistan . about scientific research and industry practice increasingly is developing . Local raw materials based on working outgoing new sorbents , ion exchangers and natural mineral modifications industry waste in neutralization promising from directions one become remains [5]. This is ecological clean technologies in creation national scientific potential shows .

Final conclusion as this highlight possible : in the future chemistry in the industry ecological security provide for not only modern technologies , but strict regulatory and legal system , ecological monitoring improvement and population ecological mind increase necessary . Only complex approach through chemistry industry and environment between balance storage possible will be .

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