Al-Farabi Kazakh National University Module 4. Energy Technologies for waste utilization Waste to energy plants and technologies

Main topics 1. Methods for producingenergy gas from waste 2. Energy efficiency of plasma waste processing 3. Ecological and economic efficiency of using plasma waste processing methods

AIM OF COURSE:

- 1. INTRODUCE THE PROBLEMS OF WASTE RECYCLING AND UTILIZATION, COMPARE WITH EXISTING NEW TECHNOLOGIES
- 2. SHOW THE ENERGY AND ECONOMIC EFFICIENCY OF THE CONSIDERED WASTE PROCESSING AND UTILIZATION METHODS
- **3. GIVE CONCEPTS ON WASTE PROCESSING AND DISPOSAL USING PLASMA TECHNOLOGIES**

Plasma-chemical waste processing unit is a furnace with additional auxiliary devices that allow continuous operation.



Additional devices allow you to remove, filter, and afterburn the resulting gases

Currently, about 90% of resources are distilled into waste, and therefore the problem of resource conservation and reduction of the level of environmental pollution is urgent. That is why it is necessary to introduce new technologies for the processing and disposal of waste, which would minimize the risks of destruction of nature.

Feedback Well presented material, from basics to more complex material. It was very interesting to learn about the complex and industrial waste disposal plants The simplest scheme of a plasma plant for waste processing





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