

## **Requirements**

Types of pollution atmosphere. The sources of emissions of gaseous pollutants into the atmosphere. Methods to prevent the pollution of the atmosphere. Limitation of emissions of gaseous pollutants into the atmosphere.

The processes used for the purification of waste gases. Physical processes: adsorption, absorption, condensation, membrane method. Chemical processes: direct combustion processes, catalytic method: Catalytic oxidation, catalytic reduction, biological methods.

Adsorption physicochemical background. Types of isotherms.

Industrial adsorbents: zeolites, activated carbon, silica gel. Characteristic features.