B. I. Stepanov
Institute of Physics
National Academy of Sciences of Belarus

АКСИКОН

Lidars for monitoring of the atmosphere

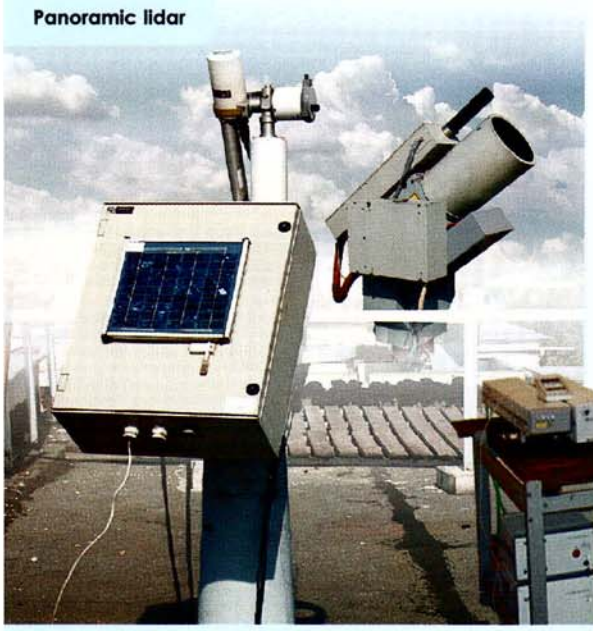
The lidars developed at the Institute of Physics are designed for the use in the National and International (EARLINET and AERONET) monitoring systems for control of the atmospheric spectral transparency, altitude aerosol and ozone profiles, and pollutions in Belarus.

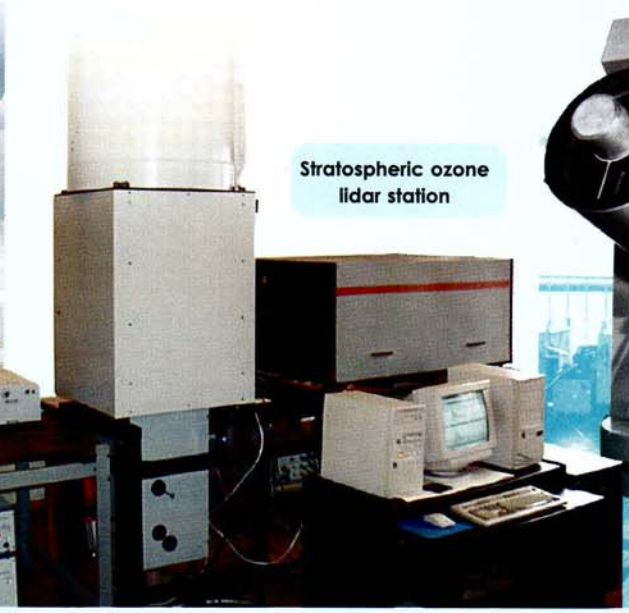
- **The lidars make it possible to measure:**
  - **concentration of the dominant portion of natural and anthropogenic gases and aerosols;**
  - **wind direction and velocity, the air density, and pressure and temperature profiles;**
  - **high spatial resolution in the range of a tens meters;**
  - **atmospheric parameters at the distance up to 35 km.**

- **The World photometric network AERONET**, including the Institute of Physics, is designed for the control of the transborder transfer of the atmospheric pollution.

- **The CIS Lidar Network.** The Institute of Physics plays one of the key roles in the development of the CIS Lidar Network.

The lidar stations are used for realizing the State program "National system for monitoring the environment"


Panoramic lidar


Stratospheric ozone lidar station

Stratospheric aerosol lidar station

Mobile lidar station for monitoring the contamination of the lower atmospheric layer

The lidar station is designed for remote monitoring the aerosol and gas contaminants in the atmosphere and investigating the processes of discharge and transfer of contaminants in the atmosphere of industrial centers and other regions where contaminating discharges can occur. It can be used for monitoring the air near industrial objects in the process of control of the situation in the region of accidents and catastrophes. The controlled components are aerosol particles and contaminating gases (NH_3, C_2H_3, O_3, CO, NO, NO_2, and others).

phone: +375 17 284-17-55, fax: +375 17 284-08-79 ◆ ifanbel@ifanbel.bas-net.by ◆ 68, Nezavisimosti Ave., 220072, Minsk, Republic of Belarus

B. I. Stepanov
Institute of Physics
National Academy of Sciences of Belarus

АКСИКОН

Lidars for monitoring of the atmosphere

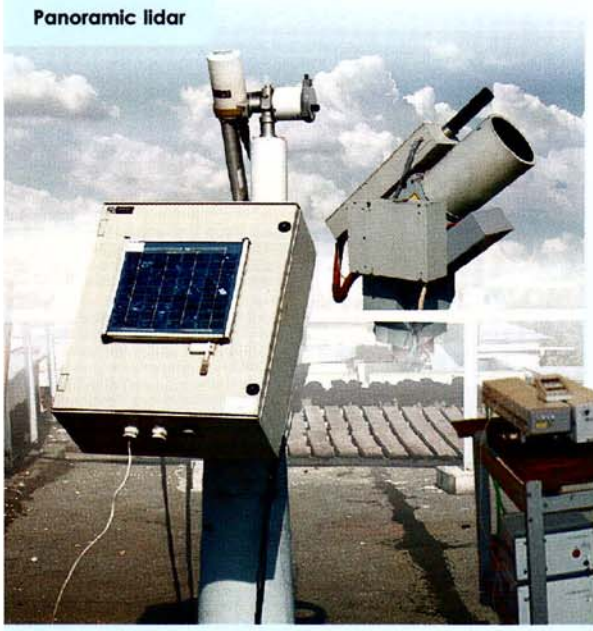
The lidars developed at the Institute of Physics are designed for the use in the National and International (EARLINET and AERONET) monitoring systems for control of the atmospheric spectral transparency, altitude aerosol and ozone profiles, and pollutions in Belarus.

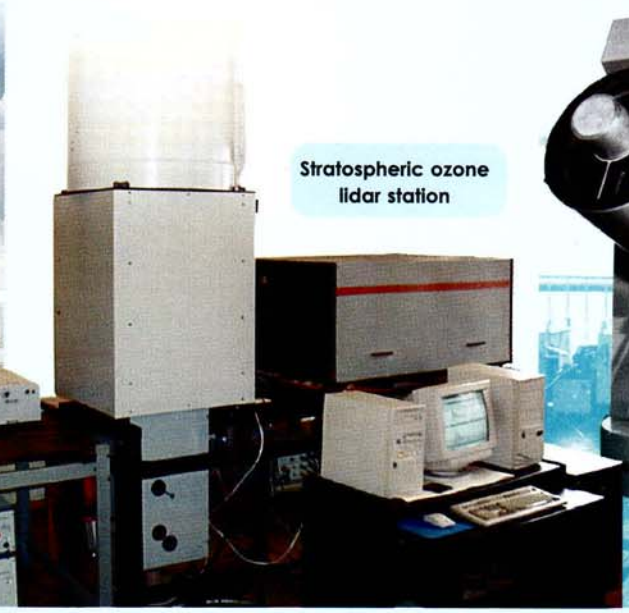
- **The lidars make it possible to measure:**
  - **concentration of the dominant portion of natural and anthropogenic gases and aerosols;**
  - **wind direction and velocity, the air density, and pressure and temperature profiles;**
  - **high spatial resolution in the range of a tens meters;**
  - **atmospheric parameters at the distance up to 35 km.**

- **The World photometric network AERONET**, including the Institute of Physics, is designed for the control of the transborder transfer of the atmospheric pollution.

- **The CIS Lidar Network.** The Institute of Physics plays one of the key roles in the development of the CIS Lidar Network.

The lidar stations are used for realizing the State program "National system for monitoring the environment"


Panoramic lidar


Stratospheric ozone lidar station

Stratospheric aerosol lidar station

Mobile lidar station for monitoring the contamination of the lower atmospheric layer

The lidar station is designed for remote monitoring the aerosol and gas contaminants in the atmosphere and investigating the processes of discharge and transfer of contaminants in the atmosphere of industrial centers and other regions where contaminating discharges can occur. It can be used for monitoring the air near industrial objects in the process of control of the situation in the region of accidents and catastrophes. The controlled components are aerosol particles and contaminating gases (NH_3, C_2H_3, O_3, CO, NO, NO_2, and others).

phone: +375 17 284-17-55, fax: +375 17 284-08-79 ◆ ifanbel@ifanbel.bas-net.by ◆ 68, Nezavisimosti Ave., 220072, Minsk, Republic of Belarus