**Scientific and technical progress**

The basis of scientific and technical progress of today is new informational technology which is very different from all the previous technologies. Thanks to up-to-date software and robots new informational technologies can make many processes much faster and transmit information more quickly. It is important today because the quantity of information grows rapidly.

New informational society has its peculiarities. Firstly, more and more employees work in the sphere of service and information. Secondly, more and more huge databases appear to collect and store the information. And finally, information and IT become goods and start playing important part in the country's economy. These processes affect social structures and values. It becomes important to learn to get new knowledge quickly and sometimes to change your qualification. IT can first lead to unemployment, but later create even more workplaces especially for highly qualified professionals. While the hardest work can be performed by robots and routine calculations by computers, in the future people with the most creative mind and numerous fresh ideas will get better career chances.

On one hand technology development gives more access to professional and cultural information and leads to new forms of individual enterprises, but on the other hand there is a danger of *total control of private life* unless special laws are enforced by the government. Another danger is «*intellectual terrorism*» when computer viruses block important programs.

There are other directions of technical and scientific progress of today. One of them is the development of new ecologically clean sources of energy using sun, gravitation, winds or rain. New kind of transports and new agricultural methods that do not harm our nature are being developed today. Breakthroughs in science have led to creation of artificial viruses for new medicines and products, body organs for transplantation and productive soils for growing vegetables and crops. Many new materials and technologies are being used in our everyday life. All these innovations may have influence on our life, social relations and globally on our Earth. The influence can be very different: from psychological and health problems of children who spend too much time online to an opportunity to prevent genetic diseases for future generations.

But the most difficult problems the humanity faces are global ones. The first and foremost is ecological problem: pollution of air, water and soil, exhaustion of natural resources. Renewable natural resources such as oxygen, forests, flora and fauna do not have enough time to regenerate. This leads to different changes in climate and nature such as depletion of ozone layer and other things that has not been properly studied by scientists yet. Other crucial problems include wars, epidemics, and demographic problems. The only way to solve them is to work globally and in cooperation with other countries. And here the humanity should find a way to use new technologies for the common good. The solution of these problems cannot be postponed because otherwise people will have fewer chances to survive on this planet.