

## NANOROBOTS

Olena Grytsyna, gr. FE-91

S.V. Mikhno -EL Advisor

Nanorobot is defined as a nanotechnological robot nanomachine, also called a nanite, which is a mechanical or electromechanical device whose dimensions are measured in nanometers (millionths of a millimeter, or units of  $10^{-9}$  meter). They would get their energy by eating molecules from their environment and also be able to not only do things but also make more of themselves.

Nanorobots are nanodevices that will be used for the purpose of maintaining and protecting the human body against pathogens and to cure the human body of its various ills. Such devices have been designed in recent years, but no working model has been build so far.

As far as the fields of their possible application concerns, a cream containing nanorobots may be used to cure skin diseases. This cream could be a smart material with smooth-on and pill-of convenience. Medical nanodevices could augment the immune system by finding and disabling unwanted bacteria and viruses. Also, devices working in the bloodstream could nibble away arteriosclerotic deposits. Cell herding devices could restore artery walls and artery linings to health, by ensuring that the right cells and supporting structures are in the right places. It would prevent most heart attacks.

Nanotechnology can also be used to treat cancer. Nanorobots can use special kinds of light to heat only the cancer cells up and not the healthy tissue around it. Most of this stuff is still experimental but progress is being made.

So, as a conclusion it can be said that nanorobots represent medicine of the future and they will change our lives. Don't expect to see nanorobots curing disease anytime soon, but it is fun to think about the possibilities.