

Laboratory of Instrument Technology

Principal goals and activities

- Research, development and design of instruments for medicine and cytometry.
- Development of special types of measuring instruments for various industry technologies (textile, mining industry).

General focus of laboratory

- Design of instruments for specific applications.
- Theoretic and experimental research of dynamic properties of mechanisms and their parts.
- Application of controlled drives and mechatronic components in instrument design.
- Simulation of operating processes with use of mathematical models.
- Investigation of processes using a high-speed camera

Specific instruments and outcomes

- Equipment for rapid and efficient diagnostics of infectious and genetically conditioned human diseases in the Point of care testing mode.
- Instrument for automated isolation of DNA.
- Flow cytometer.
- Reagent cartridge.
- X-met 880 analyser.
- Table cone homogenizer SKK 10.

Offer of technology and expertise

- Development and design of instruments for specific applications.
- Analysis of dynamic and kinematic parameters using contact and contactless methods.
- Analysis of processes using a high-speed camera.
- Balancing of rotors for diagnostics instruments.

