

## Institute of Applied Physics

Institute of Applied Physics (IFA) was founded in 1964 after physics laboratories of the Institute of Physics and Mathematics and technical laboratories of Institute of Energy and Automation joined. Since 2018, the Institute of Applied Physics has had a new founder, switching from the jurisdiction of the Academy of Sciences of Moldova to the Ministry of Education, Culture and Research of the Republic of Moldova. For over 40 years, IFA is the only scientific institution in Moldova in the field of physics, which contributed significantly to the development of science and culture in the Republic of Moldova.

Main directions of IFA scientific research:

- Theoretical and experimental research in the field of physics and physico-chemistry of condensed matter: crystalline, non-crystalline and nanostructured materials, atoms and nuclei; electronics and quantum optics, development of advanced technologies and multifunctional electronic, optoelectronic and photonic devices.
- Theoretical and experimental research for the application of electricity in order to intensify the processes of heat and mass transfer, cavitation, electroflotation and electroplasmolysis; modification of material surfaces by electrophysical and electrochemical methods; creation of advanced technologies and techniques.
- Theoretical study of quantum technologies in artificial or real atom systems and opto/nanomechanical systems, study of quantum coherence or interference, quantum inseparability and control of quantum dissipation.