

## PIC GPI RAS

### Physics Instrumentation Centre of Prokhorov General Physics Institute of the Russian Academy of Sciences

Physics Instrumentation Center (PIC) is a branch of Prokhorov General Physics Institute of the Russian Academy of Sciences and was founded in 1964.

PIC specializes in development of laser technique and technologies basing on fundamental researches conducted in the Institute.

Physics Instrumentation Center performs developments in the following research fields:

- excimer and CO<sub>2</sub>-lasers;
- diode-pumped lasers Solid State laser;
- fiber femtosecond lasers;
- medical laser systems for ophthalmology;
- lidar systems for remote sensing of aerosols and water vapour;
- systems for the synthesis of diamond films and plates;
- space magnetometry.

Physics Instrumentation Center is the only Russian enterprise designing medical lasers for refractive surgery, and systems for diamond growth.

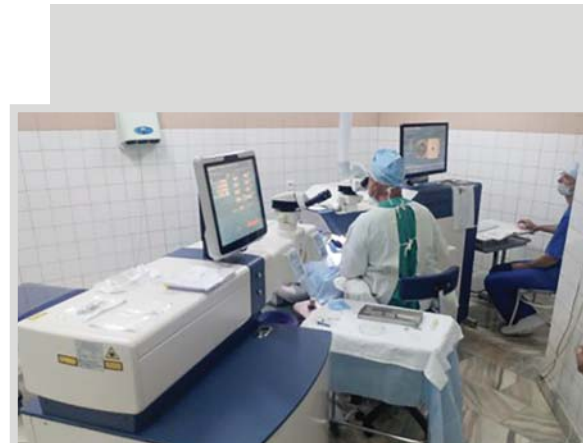
The excimer laser system 'Microscan Visum' and the femtosecond laser system 'Femto Visum' intended for a wide range of eye microsurgery operations is a unique example of realization of national developments on domestic and international medical market. The program of creation of medical lasers, was initiated in the early nineties by academicians A. Prokhorov and S. Fyodorov. Developed medical lasers have been successfully used in Fyodorov 'Eye Microsurgery' Federal State Institute and in many others clinics in Russia and abroad.

Physics Instrumentation Center is one of the world leaders in development the UV-excimer lasers for science and technology, including optical lithography and medicine.

Multiwavelength aerosol lidars developed in PIC are operated in numerous research groups in Russia and abroad to get the particle microphysical properties, essential in climate studies.

The plasma chemical reactor 'Ardis-100' for diamond growing was developed basing on results of fundamental research in the field of microwave plasma performed in GPI RAS.

PIC GPI RAS collaborates with numerous academic institutions and commercial organizations to implement new fundamental ideas in modern devices.



*Офтальмологический комплекс «Визум» в работе. «Фемто Визум» и «Микроскан Визум» программно интегрируются с помощью встроенного локального сервера*



*Установка для синтеза алмазных плёнок*

