

04.06.01 Chemical Sciences

Physical Chemistry

Program objective

training of highly qualified specialists with deep knowledge of chemical, physical, biological and pharmaceutical properties of substances, as well as natural sources of biologically active substances for development new pharmaceuticals and radiopharmaceuticals.

Competitive advantage

- "dual" training system: a combination of studies at a university with an internship at a pharmacy, a pharmaceutical company, a research institute or a clinic
- modern "dual" technological and analytical equipment for advanced practical training

Key research and professional activities

- nanobiomaterials, polymers and biosystems, including materials for the diagnosis and treatment of oncological diseases
- semiconductor nanocrystals for diagnostics and monitoring of treatment results
- magnetic materials for hyperthermia
- information, marketing and legal framework for research and production of pharmaceuticals
- medical and radiopharmaceutical chemistry

Practical training and future employment opportunities

- State Atomic Energy Corporation "Rosatom" companies
- Leipunskiy Institute of Physics and Power Engineering
- Karpov Institute of Physical Chemistry
- Tsyba Federal Research Medical Center "Radiology Research Center" of the Ministry of Health of Russia
- Corporations of Kaluga pharmaceutical cluster (AstraZeneca PLC, Obninsk chemical and pharmaceutical company, Hemofarm Ltd., Bion Company, Berahim LLC, Kalugapharmacy, SLL "CHEMFARMKOMPLEKT", Berlin-Chemie AG/Menarini Group, PHARM-SYNTHESIS, Nearmedic Pharma, PharmVILAR)