

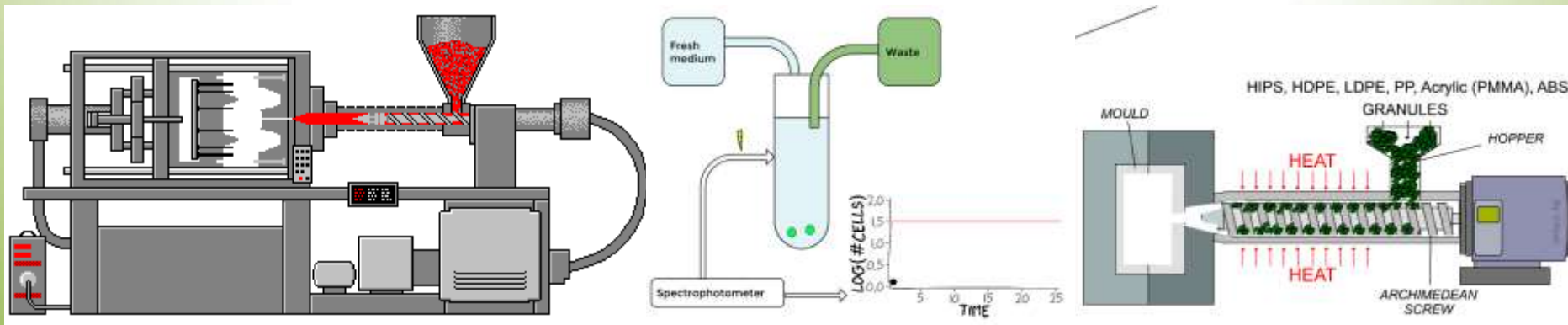
**National technical University “Kharkiv polytechnic institute”
Faculty “Integrated technologies and chemical technique”
Department of “Plastics and biologically
active polymers technology”**



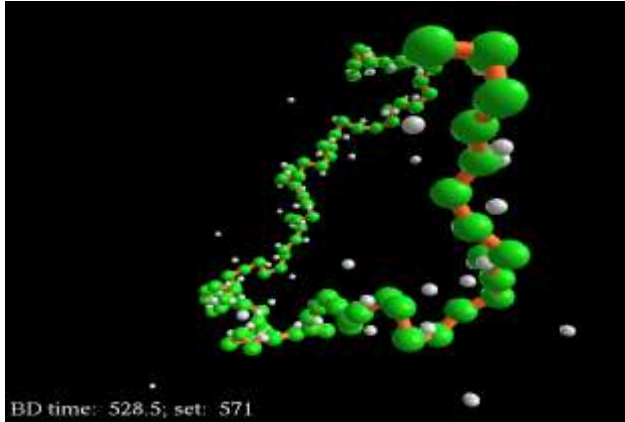
Dept. of plastics and biologically active polymers technology

The department prepares the Bachelors and Masters within the specialty "Chemical technology and engineering" in the following specializations:

1. "Chemical technology of synthetic and natural polymers and elastomers",
2. "Chemical technology of polymer and composite materials"

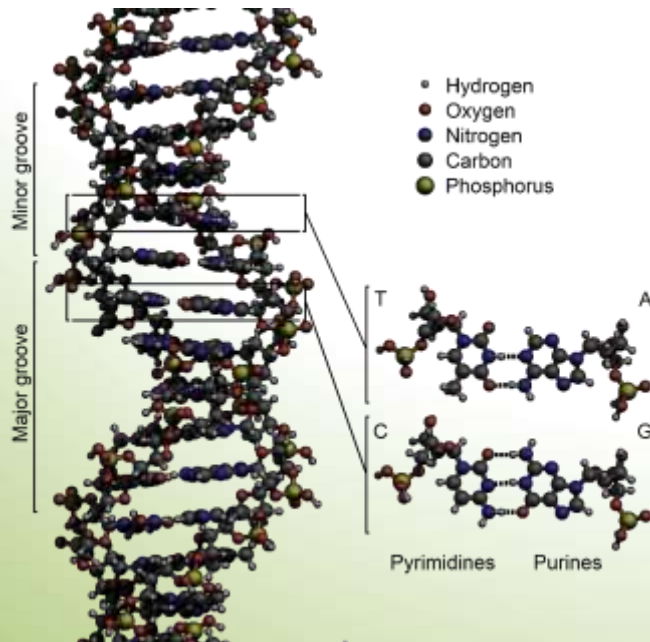


Areas of studying:



The creating functional polymers and polymer composite materials

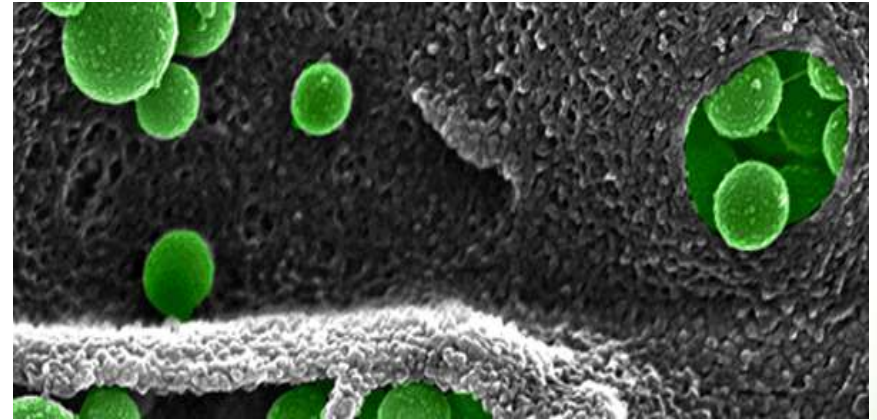
The use of recycling polymers, which are contained in solid waste



The study of biopolymers

Areas of studying:

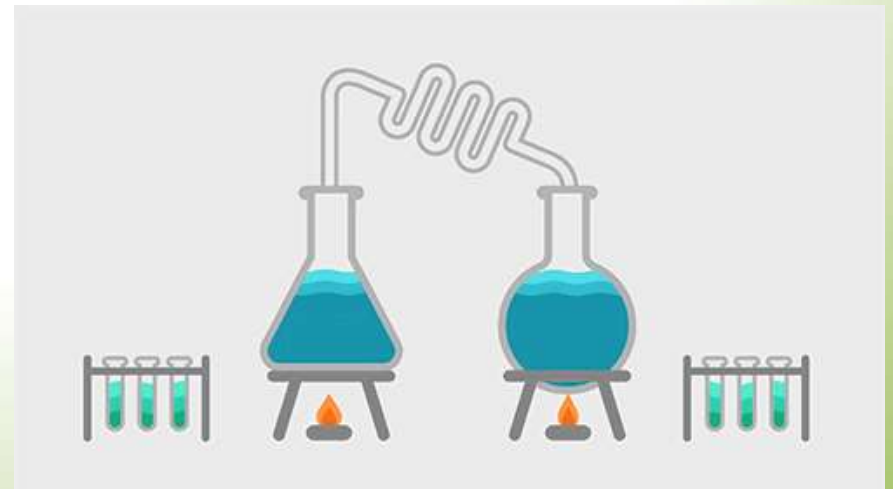
The study of medical and biologically active polymers



The creating of new ecologically-clean polymers and polymer composites

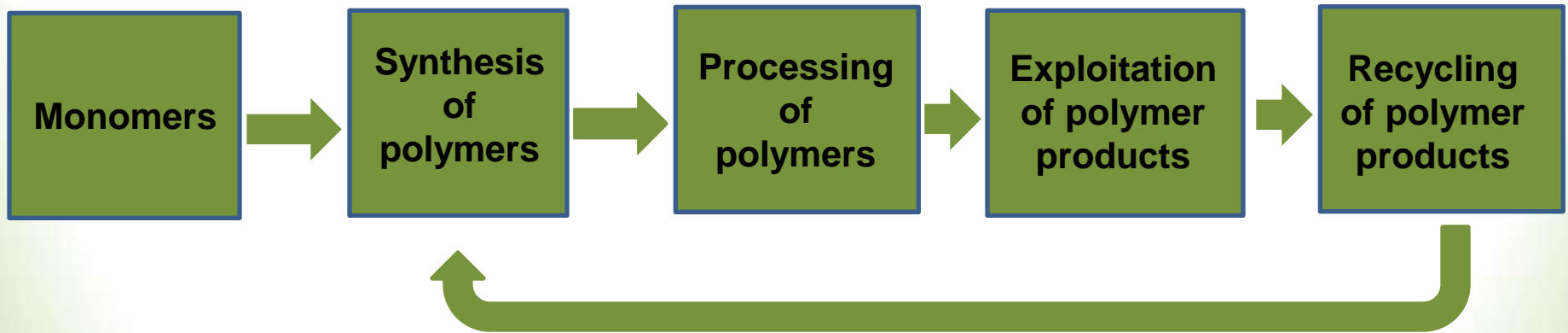


The creating of new biodegradable polymers and polymer composites



Employment perspectives

Employment perspectives are determined by technological cycle



- **Engineering work in the enterprise and in the laboratory**
- **Scientific work in the different areas of industry (medicine, aircraft and motor car construction, building and other)**
- **Investigation and processing of biopolymers as well as products based their**

General academic disciplines for the students of our department (bachelor's level)

- ✓ Introduction to Specialty
- ✓ Chemistry and monomer technology
- ✓ Chemistry and Physics of macromolecular substances
- ✓ Production technology of macromolecular compounds
- ✓ Chemistry of Biopolymers



General academic disciplines for the students of our department (bachelor's level)

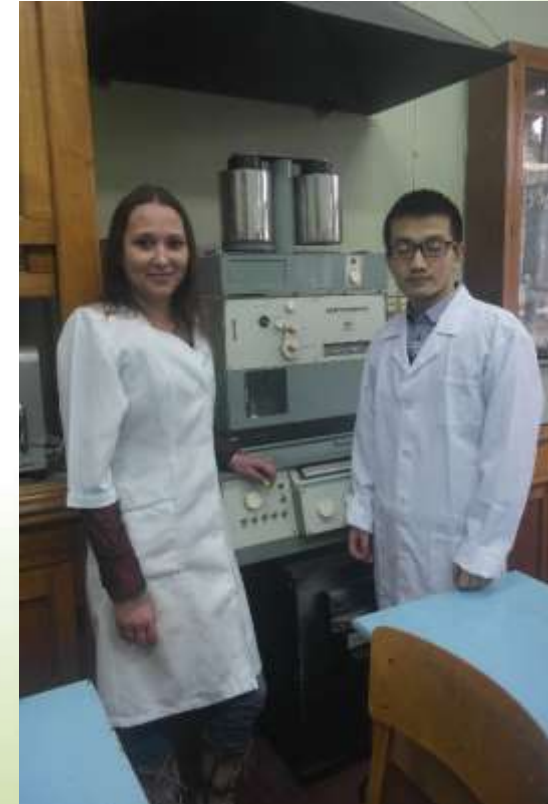


- ✓ **Nanotechnology and resource in the field of polymers**
 - ✓ **Polymer material science**
 - ✓ **Rheology and strength of polymers**
- ✓ **Modern hardware design of technological processes of plastics production**
 - ✓ **Technology and equipment of polymers processing**
 - ✓ **Theoretical basics of polymer processing**



General academic disciplines for the students of our department (master's level)

- ✓ Theory and methods of research and testing of plastics
 - ✓ Medical polymer technology for biomedical purposes
- ✓ Special techniques for studying structure and properties of macromolecular compounds
 - ✓ Physics and chemistry of surface polymers
 - ✓ Technology processing of recycling polymers



General academic disciplines for the students of our department (master's level)

- ✓ Sanitary and chemical properties of plastics
 - ✓ Polymer mixture technology
 - ✓ Technology of inorganic polymers
- ✓ Fundamentals of creating composites of eco-friendly polymer materials
 - ✓ New technology in the production of high molecular compounds



General academic disciplines for the students of our department (master's level)



- ✓ The technology and processing of elastomers
 - ✓ Bonding and sealing technology
- ✓ Use of computer technology in the production and research of macromolecular compounds
- ✓ Technology of production of natural and synthetic adhesives and sealants
- ✓ Technological and operational testing of plastics, adhesives and sealants
 - ✓ Phase processes in heterogeneous polymer systems
 - ✓ Advanced processing technology of polymer composites



Our students participate in ERASMUS+ program



Dept. of plastics and biologically active polymers technology



Head of the dept. **Prof. V AVRAMENKO**
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LECTURERS:

- L. PODGORNAYA**, associate professor, Ph.D (Technology of polymers)
- O. BLIZNYUK**, associate prof., Ph.D (Technology of polymers)
- D. MISHUROV**, associate prof., Ph.D (Chemistry of polymers)
- A. CHERKASHINA**, associate prof., Ph.D (Technology of polymers)
- V. LEBEDEV**, associate prof., Ph.D (Technology of polymers)
- A. RASSOCHA**, Prof., Ph.D (Technology of polymers) and faculty's dean

GRADUATE STUDENTS:

- A.VORONKIN**
- O. KARANDASHOV**

**THANK YOU
FOR ATTENTION !!!**

