

Voronezh State University (FSFEI HE VSU)



**NETWORKING BETWEEN
VSU
AND THE BUSINESS COMMUNITY**

D. A. Endovitsky

Vice-President of the Russian Rectors' Union,
Chairman of the Council of Rectors of the Voronezh Region,
Rector of VSU

INFRASTRUCTURE OF EDUCATIONAL ACTIVITIES

FACULTY OF LAW  FACULTY OF JOURNALISM 

FACULTY OF HISTORY  FACULTY OF GEOLOGY 



FACULTY OF BIOMEDICAL SCIENCES  FACULTY OF GEOGRAPHY, GEOECOLOGY, AND TOURISM 

FACULTY OF INTERNATIONAL RELATIONS  FACULTY OF APPLIED MATHEMATICS, INFORMATICS, AND MECHANICS 

FACULTY OF ROMANCE AND GERMANIC PHILOLOGY  FACULTY OF COMPUTER SCIENCES 

FACULTY OF PHARMACEUTICS  FACULTY OF ECONOMICS 

FACULTY OF PHILOLOGY  FACULTY OF MATHEMATICS 

FACULTY OF PHILOSOPHY AND PSYCHOLOGY  FACULTY OF PHYSICS 

FACULTY OF CHEMISTRY  MILITARY TRAINING CENTRE 



17 FACULTIES
 BORISOGLEBSK
 BRANCH
 MILITARY
 TRAINING
 CENTRE
 INTERNATIONAL
 EDUCATION
 INSTITUTE
>600
 ACADEMIC PROGRAMMES

PROJECTS WITHIN DECREE 218 OF THE GOVERNMENT OF THE RUSSIAN FEDERATION



Developing a hi-tech fibre-optic grain sorting machine

Grant - 80 million

Total financing - 160 million



Carrying out research and developing a technology for electro dialysis with continuous-flow demineralisation of lactose-containing products

In collaboration with FSAEI HE North-Caucasus Federal University

Total financing - 8 million



Developing a hi-tech industry for plant oil and fibre processing and transformation into non-food products

Grant - 180 million Total financing - 360.8 million



Implementation of a series of calculations necessary for the design of standard liquid ends for trunk petroleum pumps by means of multi-criteria optimization methods

In collaboration with FSBEI HE Voronezh Technical University

Total financing - 2.4 million

PROJECTS WITHIN THE FTP “RESEARCH AND DEVELOPMENT”

Development of technological solutions for the formation of nanostructured hybrid membranes and the creation of potentiometric multisensor systems based on them for the reagentless express monitoring of water processing media



OOO Flux and
Magnesian
Materials Plant
OOO Tsitrin

A new technology and equipment for synthesizing nano-scale magnesian powders from recycled waste of enriched amorphous magnesite production

Grant – 43.5 million, total financing – 73.5 million

Grant – 43.5 million, total financing – 88.5 million

Development of a technique for the post-operation monitoring of the growth of metastatic tumours based on the analysis of freely circulating blood DNA



Development of a programming and computing suite for the computer modelling of structural, sorption, and electronic properties of fullerenes and carbon nanotubes, and adsorption processes

Grant – 15.96 million, total financing – 20.06 million

Grant – 10 million, total financing – 12 million

Development of biomolecular methods for the quality control of milk and fat-and-oil production by means of high-performance DNA analysis



Development of energy-saving technologies used in the process of production of emulsifiers and emulsifying systems for food and non-food industries based on raw materials and their derivative products

Grant – 34 million, total financing – 68 million

Grant – 30 million, total financing – 60 million



Development and enhancement of nuclear physical and X-ray methods for the diagnostics of nanomaterials

Grant – 15.43 million, total financing – 20.83 million

CORPORATE MASTER'S DEGREE PROGRAMMES

FINANCIAL ANALYST: INVESTMENT, CREDIT STANDING, RISKS

PROJECT AND SERVICE MANAGEMENT IN INFORMATION TECHNOLOGIES

BANKING SUPPORT OF CONSTRUCTS

SAP SYSTEMS MANAGEMENT

INTERNATIONAL AUDIT

APPLIED ARTIFICIAL INTELLIGENCE SYSTEMS

MANAGEMENT CONSULTING

PHOTONICS AND OPTICAL INFORMATICS

POWER ELECTRONICS + NOVOVORONEZH NUCLEAR POWER STATIONS

ORGANIC CHEMISTRY

ACCOUNTING, ANALYSIS, AUDIT



ACADEMIC PROGRAMMES BY ROSNANO



The design, manufacture, and application of nano- and microelectromechanic systems for radioelectronic and navigating devices
Duration of the project – 2013-2014, total financing - 8,452.0 thousand roubles



The design, manufacture, and application of nanostructural materials for dentistry
Duration of the project – 2013-2014, total financing - 8,496.0 thousand roubles



Modern methods for the analysis of surface characteristics in the manufacture of nanostructured coatings
Duration of the project – 2015-2016, total financing - 8,496.0 thousand roubles




Biotechnologies, biochemistry, and genetic engineering for the creation of a producer strain of enzymes used in the food industry
Duration of the project – 2017-2018, total financing - 8,496.0 thousand roubles

CORPORATE TRAINING CENTRES



Microsoft®
IT Academy



 AT Consulting



Atos

T-Systems

 DSR



 Ростелеком

 СБЕРБАНК
Всегда рядом



 Netcracker
An NEC Company

 РЕЛЭКС

@ mail.ru
group

PERSONAL (CORPORATE) SCHOLARSHIPS

SCHOLARSHIP OF THE VLADIMIR POTANIN CHARITABLE FOUNDATION



A CONTEST OF STUDENT PROJECTS ORGANISED BY GK DEPOSIT INSURANCE AGENCY

PWC CORPORATE SCHOLARSHIP



INFORMSVYAZ SCHOLARSHIP

OXFORD RUSSIA FUND SCHOLARSHIP



TELE2 CORPORATE SCHOLARSHIP

PAO LUKOIL SCHOLARSHIP



PAO NLMK SCHOLARSHIP

A. GORDEEV SCHOLARSHIP FOR ECONOMICS STUDENTS



SCHOLARSHIP FOR HUMANITIES STUDENTS

PARTNERSHIP WITH THE STATE ATOMIC ENERGY CORPORATION ROSATOM



A Rosatom flagship university



National Research Nuclear University (MEPhI)



VSU



Novovoronezh nuclear power station

Professional training for Rosatom and collaboration with the
Novovoronezh resource centre

PARTNERSHIP WITH THE BIONORICA SE PHARMACEUTICAL COMPANY

RESULTS OF THE PARTNERHIP

- ✓ Partnership agreement
- ✓ Corporate master's degree programme "Industrial Pharmacy"
- ✓ Internship at a Bionorica SE plant in Germany
- ✓ Research laboratory



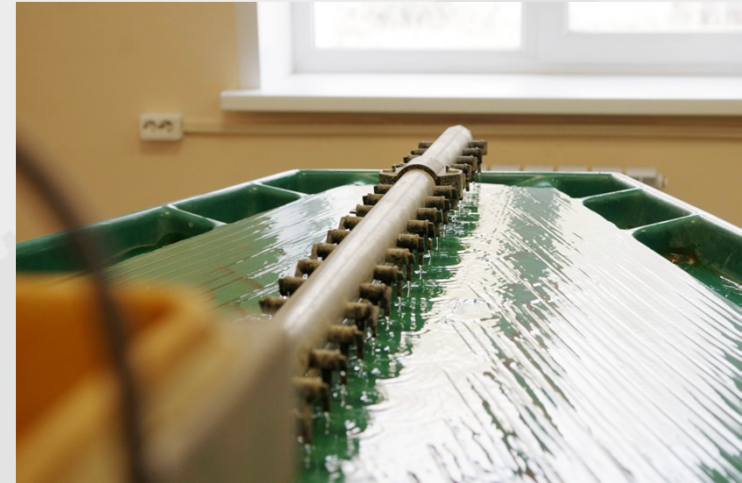
VSU'S ENGINEERING CENTRE "I-TECHNOLOGY"

OBJECTIVE

To create an engineering centre within the region's industrial sector which would encourage and intensify the modernisation of industrial enterprises

VALUE

- ✓ Development of import-substituting production that will allow reducing the amount of raw materials imported from Ukraine, South Africa, and Australia.
- ✓ Social relevance of the mining industry for the region.
- ✓ Wider range of services offered by VSU to the enterprises of the real sector of the economy.



LABORATORY OF ECOLOGICAL MONITORING

RESEARCH AREA

Ecological monitoring of the environmental situation.

RESEARCH METHODS

- ✓ Spectrophotometric and photocolorimetric research methods
- ✓ Voltammetric method of analysis
- ✓ Potentiometric and ionometric methods of analysis

OBJECTIVES

- ✓ Assessment of the environmental condition of natural surface and subterranean waters, analysis of the composition of wastewater, including the identification of oil, petroleum, fat, synthetic surfactant, and heavy metal pollution.
- ✓ Specification of the chemical composition of air.
- ✓ Assessment of the environmental condition of soil, including the identification of oil, petroleum, and heavy metal pollution.
- ✓ Specification of the chemical composition of plants.

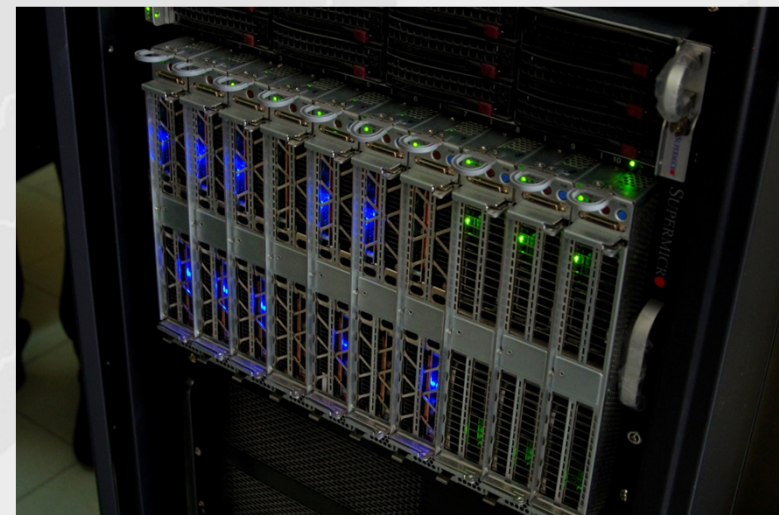


VSU's SUPERCOMPUTER CENTRE



Capacity - 39 Tflop/s

Maximum capacity of up to 250 Tflop/s



VSU ALUMNI WORKING FOR IT COMPANIES IN VORONEZH



Atos



80 %



83 %



78 %



82 %



76 %



90 %



78 %



68 %



84 %



83 %



> 9000
graduates



+15% every year

CENTRE FOR THE DEVELOPMENT OF ARTIFICIAL INTELLIGENCE TECHNOLOGIES

**Opened in collaboration with AO Concern
Sozvezdie**

Unique laboratory equipment of AO Research and
production centre “ELVIS”

MASTER'S DEGREE PROGRAMMES

Artificial Applied Intelligence Systems

- ✓ Development of methods and technologies for machine learning and applied artificial intelligence
- ✓ Promising information technologies
- ✓ Methods for studying and the modelling of information processes and technologies
- ✓ Systems engineering



LABORATORY OF TELECOMMUNICATION SYSTEMS AND ELECTRONIC WARFARE



**Opened in collaboration with AO
Concern Sozvezdie**

R&D works and laboratory training conducted using RF measurement equipment

MASTER'S DEGREE PROGRAMME (specialisation
“Radiophysics”)

RESEARCH AREA

Development of modern communication systems and solving the problems of electromagnetic compatibility

EQUIPMENT

Vectorscopes, spectrum analysers, super high frequency oscillographs, 3D printers, a display room, etc.

LABORATORY OF MECHATRONICS AND ROBOTICS INTECHROS

RESEARCH AREA

Designing control systems for small UAV, robot manipulators, and similar robotic systems.

OBJECTIVES

- ✓ Implementation of education programmes at the Faculty of Applied Mathematics, Informatics, and Mechanics, namely “Applied Mathematics and Informatics” and “Mechanics and Mathematical Modelling”.
- ✓ Designing simulators for robotic systems.



MACHINE LEARNING AND DATA ANALYSIS LABORATORY IN COLLABORATION WITH NOVOLIPETSK STEEL (NLMK GROUP)

RESEARCH AREA

Machine learning and artificial intelligence

ADVANCED TRAINING IN THE FOLLOWING AREAS:

- ✓ Machine learning
- ✓ Neural network technologies
- ✓ Artificial intelligence technologies
- ✓ Computer vision
- ✓ Natural language processing
- ✓ Machine learning as the basis of the digital economy

R&D projects, which involve

- ✓ computer vision
- ✓ natural language processing
- ✓ developing systems for medical diagnostics
- ✓ automated analysis of customers reviews, receipt and label recognition, voice-activated chatbots, etc.



LABORATORY OF ARTIFICIAL INTELLECT AND BIG DATA ANALYSIS OPENED IN COLLABORATION WITH PAO SBERBANK



СБЕРБАНК

Всегда рядом



SAMSUNG CLASSROOM



SAMSUNG

EQUIPMENT

- ✓ 16 high-performance workstations
- ✓ 16 tablets

RELEX CLASSROOM

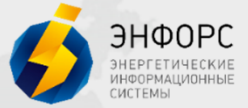




TELE2



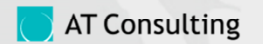
Atos



Яндекс



T-Systems



ИТСК

