Research Interests

- Energetics, Electrical Engineering
- Information & Communication Technologies, Electronics
- Mechanics, Machine Science, Machine-Building
- Chemical and Environmental Technologies
- Metallurgy, Material Science, Mining Engineering
Branches of NPUA

- Vanadzor branch
- Kapan branch
  - Yerevan branch
  - Gyumri branch
Research and Innovation Center

- Research laboratories
- Grant research projects
- Contract research projects
- International Research Projects
- Patents
- Organization of competitions, conferences, seminars, exhibitions
- Organization of teaching/training of researchers & doctoral students
- Systematization of activities of the professional boards awarding scientific degrees
- Organization of processes of awarding scientific degrees and titles.

Innovation Division
The centers of the NPUA contribute to the reinforcement of university cooperation with leading organizations in a number of spheres and the increase of educational development of the students.
### Research Projects

#### Research Laboratories
- Solar technology
- Air Robotics
- Automation and Electromagnetic Systems
- Electrotechnologies
- Electromechanics and electroradiomaterials
- Material Science and Metallurgy
- Robotics
- Mechanical Engineering Technology
- X-ray research
- Chemical technologies and polymer nanocomposites
- Semiconductor photoelectric devices
- Photoelectronic devices for optical connection systems
- System analysis
- Tribology
- Micro and Nanoelectronics
- Technological measuring
- Hydraulic engineering

#### Grant Projects
- Grant project financed by State Budget
- Applied product acquisition programs
- Dual-purpose projects
- Armenian-Russian joint projects
- Armenian-Belarus joint projects
- Armenian-French joint programs
- Eurasian Association multilateral
- Research Assistance Programs for Young Researchers
- Doctoral Students Research Assistance Programs
- International Grant Projects

#### Contract Projects
- Various organizations (also foreign) ordered projects

polytech.am
The following periodicals are published in NPUA

- The series of technical sciences of RA National Academy of Sciences and SEUA Newsletter
  https://innovative.polytechnic.am/en/publications/7

- five series of Proceedings of NPUA
  https://innovative.polytechnic.am/en/publications/4

- LRABER, Bulletin of scientific papers
  https://innovative.polytechnic.am/en/publications/5
Publications, Scopus categories

- Engineering: 19.6%
- Computer Science: 15.0%
- Materials Science: 15.0%
- Physics and Astronomy: 13.5%
- Mathematics: 6.1%
- Chemistry: 5.7%
- Environmental Science: 5.3%
- Social Sciences: 4.4%
- Earth and Planetary Sciences: 3.2%
- Other: 3.6%
- Energy: 2.8%
PhD Study Program (180 ESTS)

Educational Component (50)
- Mandatory Courses (20)
- Elective Courses (20)
- Intership (10)

Research Component (130)
- Minimum required papers published on the topic of Thesis (30)
- Annual attestations (20)
- Thesis and the positive conclusion of the institution, which approved the subject of the dissertation (80)

107 PhD Students
<table>
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<tr>
<th>Code</th>
<th>Specialization</th>
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<tbody>
<tr>
<td>E.01.01</td>
<td>Differential Equations</td>
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<tr>
<td>E.02.01</td>
<td>Machine Science</td>
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<tr>
<td>E.02.02</td>
<td>Robotics</td>
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<td>E.02.03</td>
<td>Technologies and Equipment in Machine Building Industry</td>
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<td>E.05.01</td>
<td>Automobiles and Tractors</td>
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<td>E.09.01</td>
<td>Electrical Engineering, Electromechanics and Electrical Technologies</td>
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<tr>
<td>E.11.01</td>
<td>Information–measuring Systems</td>
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<tr>
<td>E.11.17</td>
<td>Medical Application Devices, Systems and Products</td>
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<tr>
<td>E.12.01</td>
<td>Telecommunication Networks, Devices and Systems</td>
</tr>
<tr>
<td>E.12.03</td>
<td>Radio Engineering, Communication Systems and Devices</td>
</tr>
<tr>
<td>E.13.01</td>
<td>Control, Control Systems and their Elements</td>
</tr>
<tr>
<td>E.13.02</td>
<td>Automated Systems</td>
</tr>
<tr>
<td>E.13.03</td>
<td>Computer Systems and Networks, their Elements and Devices</td>
</tr>
<tr>
<td>E.13.04</td>
<td>Mathematical and Software Support for Computers, Computer Systems and Networks</td>
</tr>
<tr>
<td>E.13.05</td>
<td>Mathematical Modelling, numerical methods and Software systems</td>
</tr>
<tr>
<td>E.14.01</td>
<td>Power Systems, Complexes and their Control</td>
</tr>
<tr>
<td>E.14.02</td>
<td>Nuclear Power Engineering</td>
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<tr>
<td>E.14.03</td>
<td>Thermal Power Engineering</td>
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<td>E.14.04</td>
<td>Power installations on the base of renewable energy forms</td>
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<tr>
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<td>Material Science</td>
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<td>E.16.02</td>
<td>Metallurgy</td>
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<td>E.17.01</td>
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<td>E.17.04</td>
<td>Chemical Technology Processes and Apparatus</td>
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<td>E.19.01</td>
<td>Materials and Manufacture Technology of Textile industry</td>
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<td>E.27.01</td>
<td>Electronics, Micro and Nanoelectronics</td>
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<td>Y.00.02</td>
<td>Economics and Management of Economy and Its Branches</td>
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<tr>
<td>ID.04.01</td>
<td>Environmental Protection and rational utilization of natural resources</td>
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<tr>
<td>ID.02.01</td>
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</table>
Thank you for your attention

Hovhannes Chibukhchyan
Head of Innovation services
h.chibukhchyan@polytechnic.am
innovative.polytechnic.am
polytech.am
Russian-Armenian University

- Total campus area, old building (m²) – 24438
- Total campus area, new building (m²) – 12380
- Total research funds (in US Dollars) (average per annum over the last 3 years) - 1359091

School & Colleges

“USMUNK” full-time school with oriented high-level STEM-education
Institutes of RAU

- Biomedicine and Pharmacy
- Engineering and Physics
- Math and Informatics
- Media, advertisement, and cinema
- Economics & Business
- Law and Politics
- Humanities
- Oriental Studies
Num. of RG/labs by each Institute
(Natural/Technical Sc.)

<table>
<thead>
<tr>
<th>Institute name</th>
<th>Num. of labs</th>
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<tbody>
<tr>
<td>Biomedicine and Pharmacy</td>
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<tr>
<td>Engineering and Physics*</td>
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<tr>
<td>Math and Informatics</td>
<td>1</td>
</tr>
</tbody>
</table>

* Shareholder of Horizon-2020 grant until 2024 – Davit Hayrapetyan, fundamental physics, NanoQiqo lab.
Study of medicinal plants’ activity, identifying their active compounds and biochemical mechanisms of action

Laurus nobilis  
Achillea millefolium  
Prunella vulgaris  
Hypericum perforatum  
Rhynchocorys orientalis  
Téucrium polium  
Ocimum araratum

Kazaryan Sh.A., Vardapetyan G.R. et al, X Annual Scientific Conference of RAU, November 30-December 4, 2015, Yerevan
Nanobiomedical research

Extraction → Extracts components detection

In vivo experiments

Histological analysis

Biochemical analysis

Antibacterial properties determination

<table>
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<tr>
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<th>Colony Forming Units (CFU)</th>
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<td>control</td>
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<tr>
<td>AgNPs 0.21mkg/ml</td>
<td></td>
</tr>
<tr>
<td>AgNPs 0.105mkg/ml</td>
<td></td>
</tr>
<tr>
<td>Tet 1 mkM</td>
<td></td>
</tr>
<tr>
<td>Tet (1 mkM)+AgNPs (0.105mkg/ml)</td>
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</tr>
<tr>
<td>Amp (0.5mkM)</td>
<td></td>
</tr>
<tr>
<td>Amp (0.5mkM)+AgNPs (0.105mkg/ml)</td>
<td></td>
</tr>
</tbody>
</table>

Multifunctional NPs


Farsiyan L. et al. 2022, ICNBME https://doi.org/10.1007/978-3-030-92328-0_7
Green biotechnology

Bioinformatic research

Thank you!

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ashkhen.hovhannisyan@rau.am
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ARMENIAN STATE UNIVERSITY OF ECONOMICS

LUSINE DANIELEYAN
DIRECTOR OF EXTERNAL RELATIONS DEPARTMENT
Key facts about ASUE

- The only state economic university
- The second biggest university in Armenia
- 56 Specializations, 6 Faculties, 20 Chairs, 2 branches
- HR Excellence in Research award by the EU Commission
FACULTIES

1. MANAGEMENT
2. REGULATION OF ECONOMY AND INTERNATIONAL ECONOMIC RELATIONS
3. FINANCE
4. MARKETING AND BUSINESS MANAGEMENT
5. COMPUTER SCIENCE AND STATISTICS
6. ACCOUNTING AND AUDITING
International Rankings

QS Rankings by Region (EECA)

THE Times Impact Rankings

UI GreenMetric World University Rankings 2021

Top 94 University Affiliated Think Tanks in the World

Round University Ranking

Clarivate Analytics Ranking
Partners around the world

Sustainable Development Solutions Network
CIS University Network
The Black Sea and the Eastern Mediterranean Academic Network (BSEMAN)
Association of Economic Universities of South and Eastern Europe and the Black Sea Region (ASECU)
The Euroasian Universities Association (EUA)
Initiatives for Development of Armenia Charity Foundation (IDeA)
United Nations Department of Public Information in Armenia
Enhancing Students Participation in Quality Assurance in Armenian Higher Education (ESPAQ)
Armenian International Interprofessional Group
Copernicus Berlin e. V.
Association for the support of Scientific Research
Erasmus+ Capacity Building in the frames of Higher Education KA2

- MINERVA: contribute to the Strengthening of Research Management and Open Science capacities of HEIs in Moldova and Armenia.

"Widening opportunities for research collaborations"

Overall aim of the project:
To establish regulatory and operational framework for enhancement and effective management of research internationalization.
International Visegrad Fund

“Transferring V4 expertise in knowledge/technology transfer”

- Aim - promote the culture of enterprise-research infrastructure cooperation in Armenia and Georgia, based on the successful experience of the Visegrad partner countries.
- Partner countries – Czech Republic, Poland, Slovakia, Georgia, Armenia
- Main activities
  1. raise awareness of SMEs and research institutes in Armenia and Georgia on the benefits of joint research activities
  2. enhance the knowledge and skills of the staff responsible for knowledge and technology transfer in the target countries of the Eastern Partnership
  3. develop a concept of cooperation between SMEs and research infrastructures in the target countries of the Eastern Partnership.
AMBERD RESEARCH CENTER

AMBERD Research Center is one of the leading think tanks of Armenia conducting researches, analyses and scientific developments.

"Amberd" research center has been included in “Global Go To Think Tank Index Report” published by the University of Pennsylvania since 2016.
Since 2018 "Amberd" was annually ranked in the top 100 best university affiliated think tanks of the world and in top 50 of the Central Asia.

70 Researches
300 Involved Experts
Activity

Collaboration with state bodies and international partners

Providing opinions on draft laws

Preparation and publishing of researches, reports and digests

Collaboration with Mass media

"Messenger of ASUE" and "Amberd Bulletin"
COOPERATION WITH STATE BODIES

- RA National Assembly (Standing Committees)
- RA Government
- Prime Minister's Office
- RA Ministry of Finance
- RA Ministry of Education, Science, Culture and Sports
- RA Security Council
- RA Ministry of Economy
- RA Ministry of Labor and Social Affairs
- RA Urban Development Committee

Annual working plan of the RA Statistics Committee
Annual working plan of the RA Competition Protection Commission
Thank you!

Lusine Danielyan
Director of External Affairs

lusine.danielyan.asue@gmail.com