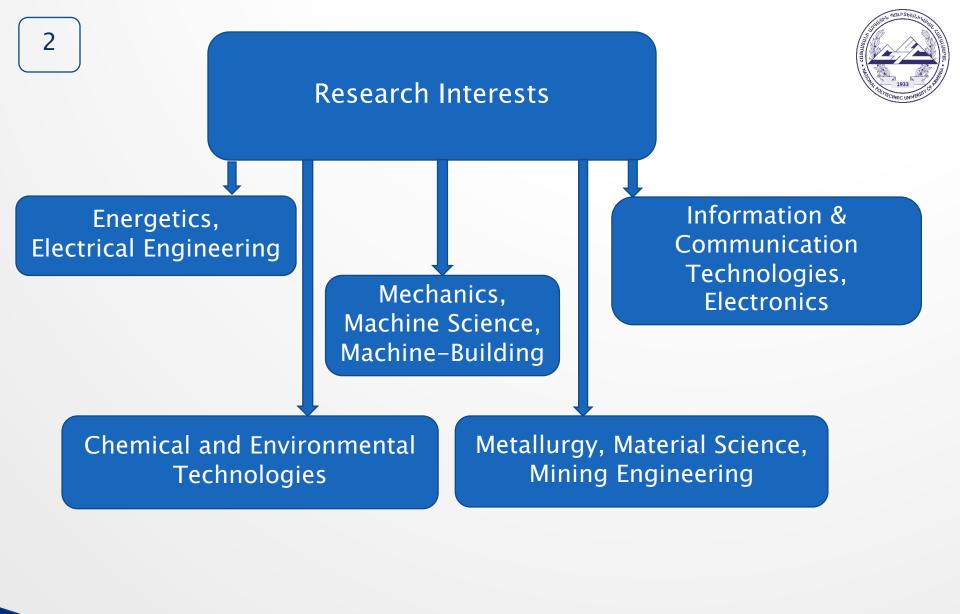
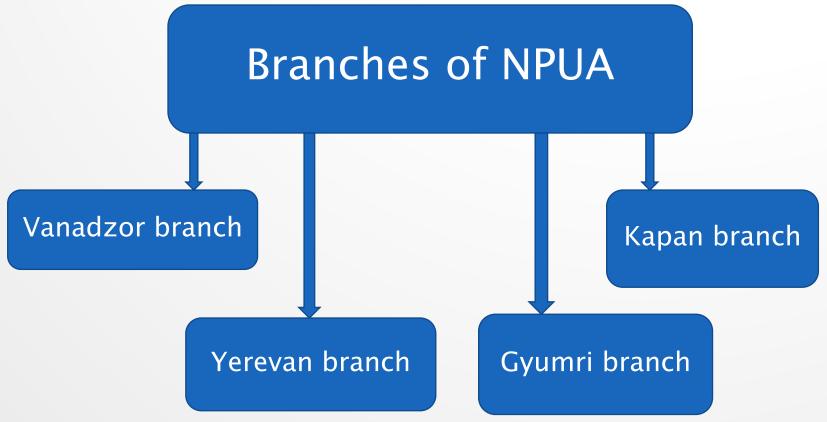


## National Polytechnic University of Armenia

YEREVAN 2023









#### Research and Innovation Center

Research laboratories

Grant research projects

Contract research projects

International Research Projects

**Patents** 

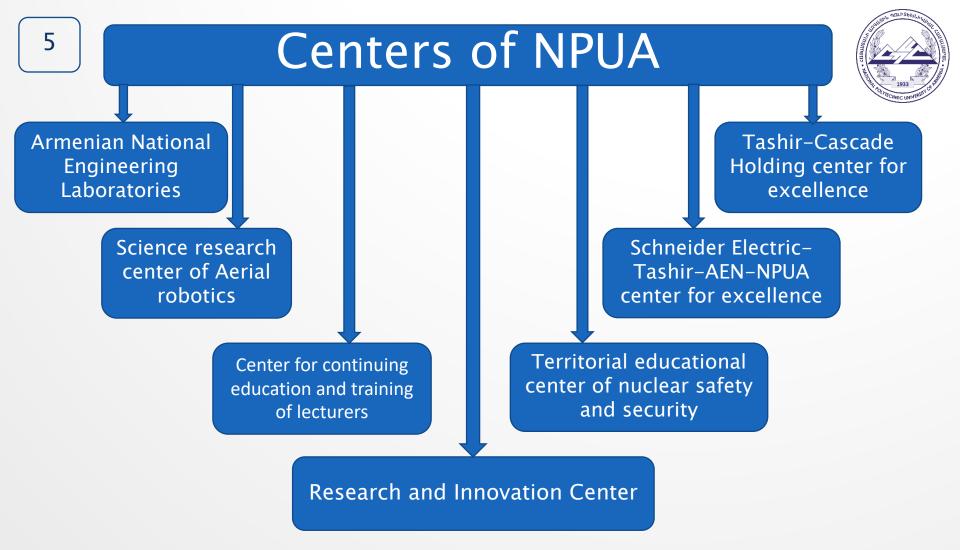
Organization of competitions, conferences, seminars, exhibitions

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

#### Scientific Periodicals



#### 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 

Scrossref

- five series of Proceedings of NPUA

https://innovative.polytechnic.am/en/publications/4

РОССИЙСКИЙ ИНДЕКС НАУЧНОГО ЦИТИРОВАНИЯ



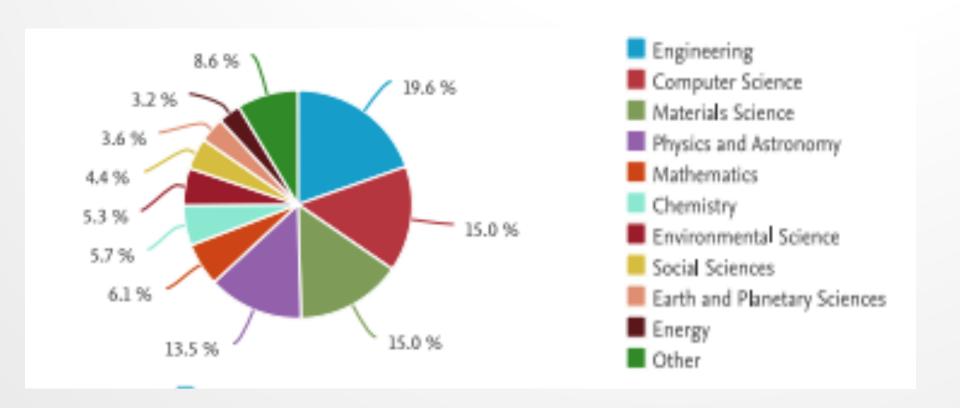
- LRABER, Bulletin of scientific papers

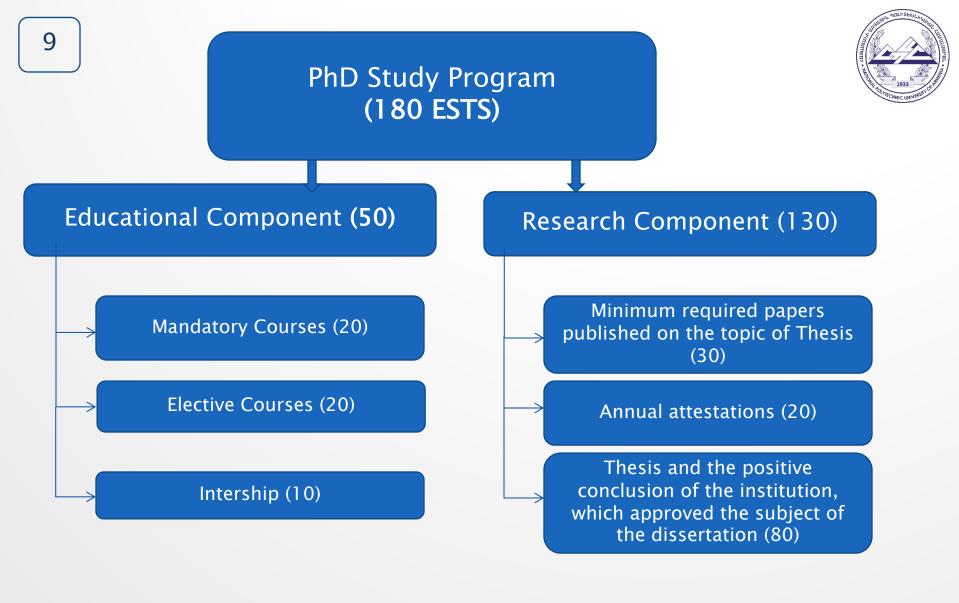
https://innovative.polytechnic.am/en/publications/5



#### Publications, Scopus categories





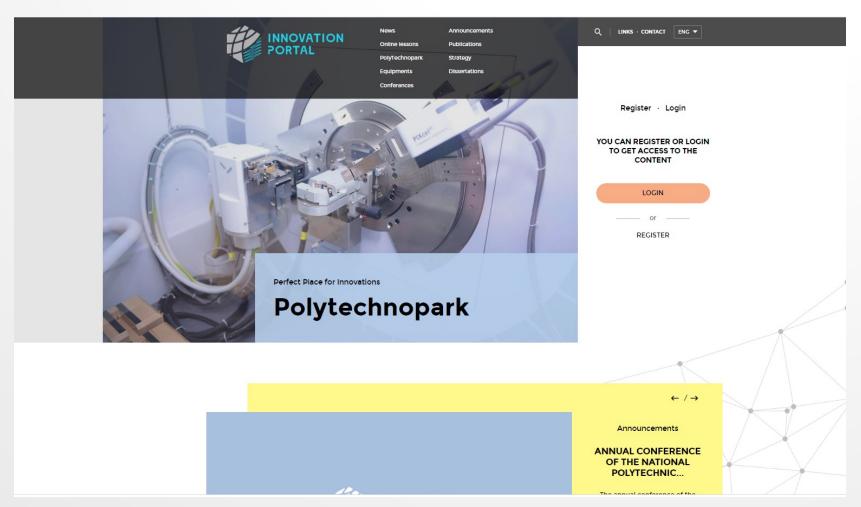


107 PhD Students



	Specializations
E.01.01	Differential Equations
E.02.01	Machine Science
E.02.02	Robotics
E.02.03	Technologies and Equipment in Machine Building Industry
E.05.01	Automobiles and Tractors
E.09.01	Electrical Engineering, Electromechanics and Electrical Technologies
E.11.01	Information-measuring Systems
E.11.17	Medical Application Devices, Systems and Products
E.12.01	Telecommunication Networks, Devices and Systems
E.12.03	Radio Engineering, Communication Systems and Devices
E.13.01	Control, Control Systems and their Elements
E.13.02	Automated Systems
E.13.03	Computer Systems and Networks, their Elements and Devices
E.13.04	Mathematical and Software Support for Computers, Computer Systems and Networks
E.13.05	Mathematical Modelling, numerical methods and Software systems
E.14.01	Power Systems, Complexes and their Control
E.14.02	Nuclear Power Engineering
E.14.03	Thermal Power Engineering
E.14.04	Power installations on the base of renewable energy forms
E.16.01	Material Science
E.16.02	Metallurgy
E.17.01	Organic Material Synthesis Technology
E.17.04	Chemical Technology Processes and Apparatus
E.19.01	Materials and Manufacture Technology of Textile industry
E.27.01	Electronics, Micro and Nanoelectronics
Y.00.02	Economics and Management of Economy and Its Branches
ID.04.01	Environmental Protection and rational utilization of natural resources
ID.02.01	

#### https://innovative.polytechnic.am/en



### Thank you for you attention

Hovhannes Chibukhchyan

Head of Innovation services

h.chibukhchyan@polytechnic.am innovative.polytechnic.am polytech.am

## Russian-Armenian (Slavonic) University Department of Medical Biochemistry and Biotechnology Laboratory of Analytical Biochemistry and Biotechnology





#### **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**

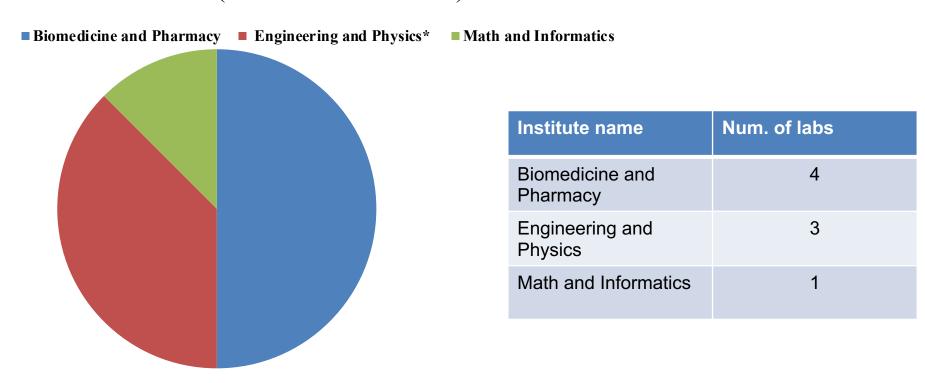
- Biomedicine and Pharmacy
- Engineering and Physics
- Math and Informatics
- Media, advertisement., and cinema
- Economics & Business
- Law and Politics
- Humanities
- Oriental Studies





#### Science in RAU

Num. of RG/labs by each Institute (Natural/Technical Sc.)



<sup>\*-</sup> 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



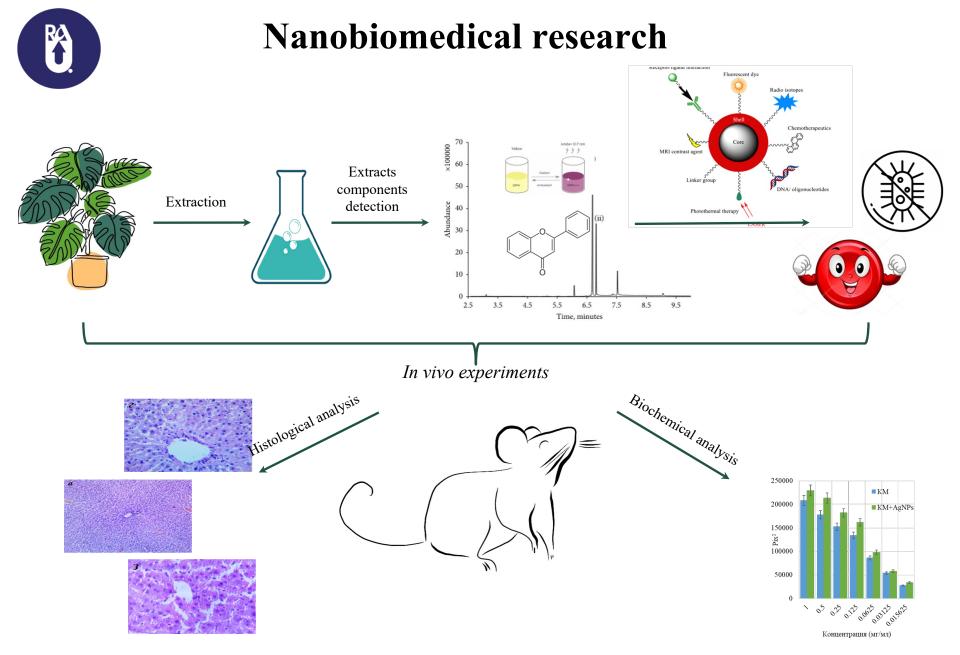
Rhynchocorys orientalis



Téucrium polium



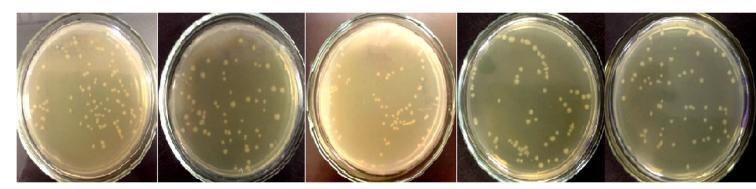
Ocimum araratum

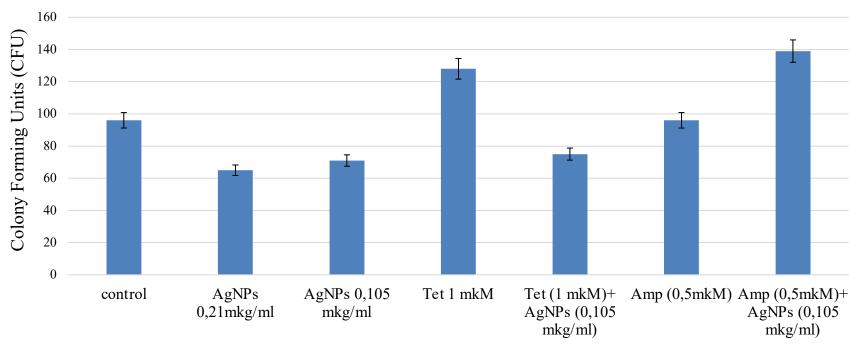


Kazaryan Sh., Farsiyan L., Tumoyan J., Kirakosyan G., Ayvazyan N., Gasparyan H., Buloyan S., Arshakyan L., Kirakosyan A., Hovhannisyan A.. 2022. Oxidative Stress and Histopathological Changes in Several Organs of Mice Under the Influence of Biogenic Silver Nanoparticles. Nanomedicine, and Biotechnology. 50.doi:10.1080/21691401.2022.2149931.



#### Antibacterial properties determination

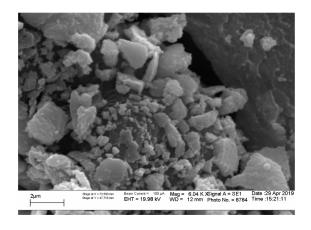




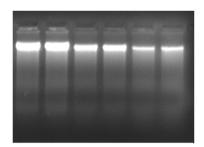
Khachatryan A., Kazaryan Sh., Tiratsuyan S, Hovhannisyan A. "Antibacterial effect of silver and iron oxide nanoparticles combined with antibiotics on E. coli K12", Microbiology and Biotechnology, 9:587-596, 2019, DOI 10.1007/s12668-019-00640-0.



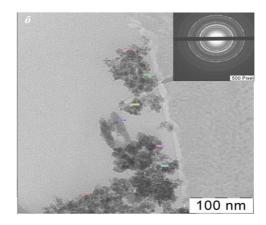
#### **Multifunctional NPs**



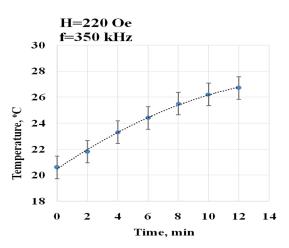




Petrosyan et al. (2020) Testing Green Silver Nanoparticles for Genotoxicity, Antioxidant and Anticancer Activity. ICNBME IFMBE Proceedings, Springer, Cham. https://doi.org/10.1007/978-3-030-31866-6\_101



Hovhannisyan et al. 2019, https://doi.org/10.1111/jam.14214



Farsiyan L. et al. 2022, ICNBME <a href="https://doi.org/10.1007/978-3-030-92328-0">https://doi.org/10.1007/978-3-030-92328-0</a> 7



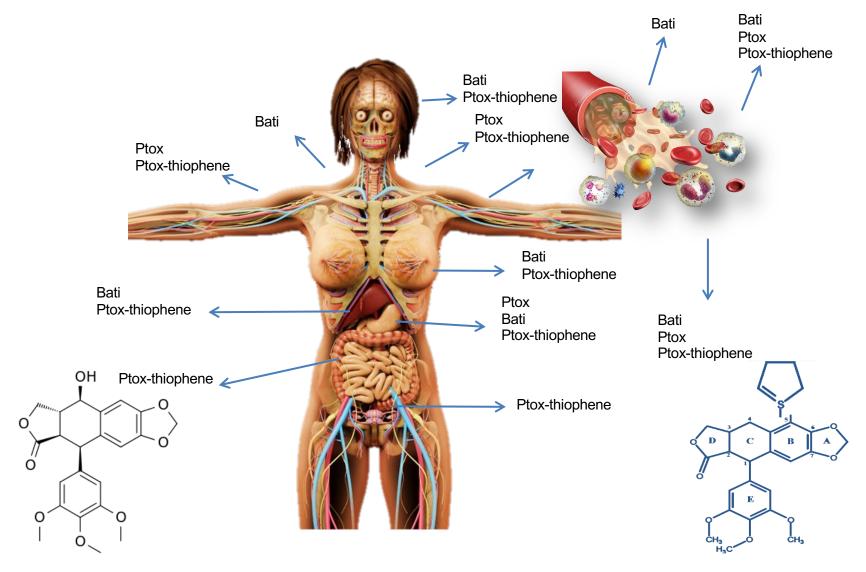
#### **Green biotechnology**



A.A. Hovhannisyan, A.A. Arutyunyan, A.J. Ohanyan, G.V. Chilingaryan, Investigation of the action of silver nanoparticles on the biosynthesis of podophyllotoxins of L. austriacum suspension cultures, Toxicon, <a href="https://doi.org/10.1016/j.toxicon.2018.11.401">https://doi.org/10.1016/j.toxicon.2018.11.401</a>.



#### Bioinformatic research



Ginosyan S., Chilingaryan G., Grabski H., Ghulikyan L., Ayvazyan N., Tiratsuyan S.. 2020. Mode of Artemisinin's Action on Oxidative Stress, Genomic and G-Quadruplex DNA. 4th International IFMBE Proceedings. 77, 543–548.

























A.N.S.E.F.















## Thank you!



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# ARMENIAN STATE UNIVERSITY OF ECONOMICS

LUSINE DANIELYAN
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



200

#### **Cooperation with International Organizations**

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.

- Visegrad Fund
  - •



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

70 Researches 300 Involved Experts

#### AMBERD RESEARCH CENTER

"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.

## 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 Government** 

- **RA President**
- Prime Minister's Office
  - RA Security Council
- RA Ministry of Finance
- RA Ministry of Economy
- RA Ministry of Education, Science, Culture and Sports
- Ministry of Labor and Social Affairs
- RA Urban Development Committee

RA National Assembly (Standing Committees)

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