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Rector of Sumgait State University

_____ assoc.prof. R. E. Azizov

“ _____ ” _____ 2024



SCIENTIFIC RESEARCH STRATEGY

Approved by the decision of the meeting of the Scientific Council of Sumgait State University

dated 23.09.2024 (protocol No. 2)

Sumgait – 2024

SUMGAI STATE UNIVERSITY

SCIENTIFIC RESEARCH STRATEGY

The scientific research strategy (SRS) is part of the "Strategic Development Plan" approved by the decision of the Scientific Council of Sumgait State University on December 27, 2023 (protocol No. 3). SRS was developed in accordance with the Decrees and Orders of the President of the Republic of Azerbaijan, relevant decisions of the Cabinet of Ministers of the Republic of Azerbaijan, existing legislation in the field of scientific research, state programs, orders of the Minister of Science and Education of the Republic of Azerbaijan, international experience and the Charter of the University. The aim of the research strategy is to strengthen the potential of science and innovation. The research process of Sumgait State University consists of 4 parts:

1. Research strategy;
2. Research resources;
3. Scientific research activity;
4. Academic integrity mechanism;

Within the framework of the goals arising from the Strategic Development Plan, the scientific-research strategy of Sumgait State University covering the years 2024-2028 is planned to implement the following goals:

1. Renovation of the existing research infrastructure (laboratory);
2. Organization of joint scientific research of researchers of SSU and foreign universities (publishing of scientific articles and materials in high-index journals and conference collections);
3. Preparation of a mechanism for promoting and rewarding the scientific research activities of SSU professors and teachers and organizing the publication of articles in journals indexed in international scientific-metric databases (SCOPUS and Web of Science);
4. Requirements for scientific research works authored by SSU teacher-student staff, criteria for petitioning, etc. development of reflective mechanisms;
5. Organization of local and international scientific conferences.

Strategic goals have been defined based on the mission of staff training in accordance with international standards, focusing on the integration of scientific research into teaching and the support of innovations. The proposals from both internal and external stakeholders were considered in defining these targets.

With these goals, Sumgait State University aims to:

- Strengthen scientific research activities.
- Produce outputs through scientific research.
- Improve scientific publications and editorial activities.
- Modernize the organization of scientific events.

- Protect the intellectual property and copyrights of faculty members and young researchers.
- Archive scientific publications.
- Increase innovation activity and facilitate technology transfer.
- Organize research and teaching effectively.

Priority Research Areas

The following priority research areas are based on the university's scientific-research activity strategy:

- 1203.01 – Computer science
- 3341.01–Power plants (electrical part) and electric power systems
- 2314.01 – Petrochemicals
- 3303.01 – Chemical technology and engineering
- 2426.01 – Ecology (by scientific fields)
- 5312.01 – Area economy
- 5304.01 – Types of economic activities
- 5408.01 – Physical geography and biogeography, soil geography, geophysics and geochemistry of landscapes

Goal 1: Updating the Research Infrastructure

The relevance of the scientific research topics carried out at SSU is ensured by addressing modern scientific problems, enhancing the efficiency of results, and promoting wide application in local industrial and production enterprises in Sumgait and the surrounding areas. Achieving this goal requires ongoing attention to the infrastructure necessary for scientific research. As the target size indicator, the university aims to renew the existing laboratories at a rate of two units per year.

1.1. Priorities:

1. Renovation of Existing Laboratories
2. Improvement of Scientific Research Activities in Laboratories
3. Integration of Research Activities into Teaching to Ensure Sustainability

Goal 2. Organization of joint scientific research of researchers of SSU and foreign universities (publishing of scientific articles and materials in high-index journals and conference collections)

The organization of scientific activity is not a product of a closed environment. Thus, scientific-research activity is the foundation of development in all fields. For this purpose, it is defined as a goal to direct the researchers of SSU to joint scientific research with their researchers within the framework of cooperation with foreign universities and research centers. Increasing the number of joint research projects by 20% compared to the previous academic year is a measure indicator of the goal.

2.1. Priorities

2.1.1. Expansion of joint scientific research opportunities;

2.1.2. Achieving the publication of scientific research results in high-index journals and collections of scientific events.

Goal 3. Preparation of a mechanism for encouraging and rewarding the scientific research activities of SSU professors and teachers and organizing the publication of articles in journals indexed in SCOPUS and Web of Science in international scientific-metric databases.

The important results of the scientific-research works of professors and young researchers are reflected in scientific journals and conference collections. For the development of the university, it is a requirement of the modern era that this information be recognized and published in scientific publications that are indexed in international databases. The measurement indicators of the goal are the preparation of the mechanism document for the promotion of scientific research activity and the increase of the number of researchers' articles in the journals indexed in SCOPUS and Web of Science by 20% compared to the previous year.

3.1. Priorities

3.1.1. Encouraging professors and young researchers to engage in scientific research;

3.1.2. Formation of an incentive mechanism for improving the quality of scientific research activities;

3.1.3. Targeting researchers specifically to journals indexed in SCOPUS and Web of Science.

Goal 4. Preparation of requirements for scientific research works authored by SSU faculty-student staff, criteria and mechanisms for raising petitions and etc.

With globalization and the development of artificial intelligence, the demand for research skills is also changing. At the same time, this change and development is one of the important tasks of modern research universities to protect the rights of the owners of intellectual property rights, to convey knowledge and information in the mentioned field to the society, and to base this activity on advanced principles and standards related to the regulation of intellectual property rights. With intellectual property rights, artificial intelligence and globalization in general, attitudes towards scientific research activities are also changing rapidly. In SSU, work is being done in the direction of organizing scientific-research activities in accordance with the requirements of the modern era. The preparation of a mechanism document based on international standards that stimulates the scientific activity of professor-teachers and students is defined as a measure indicator of the goal.

4.1. Priorities

4.1.1. Adaptation of the scientific-research activity of the professor-teacher and student staff to international standards within the framework of intellectual property rights;

4.1.2. Designing scientific research works within the framework of global scientific literature and local requirements;

4.1.3. Preparation of mechanisms for the formation of scientific research works.

Goal 5. Organization of local and international scientific conferences

Scientific events held at the university (symposium, conference, congress, etc.) are devoted to current topics. Involvement of local and foreign experts and participation of young researchers in scientific events is of interest. The organization of at least one international and two republican level scientific events in each calendar year is defined as a measurement indicator of this goal.

5.1. Priorities

5.1.1. Formation of the culture of organization of scientific events according to modern challenges;

5.1.2. Ensuring the sustainability of the organization of local and international scientific events;

5.1.3. Organization of joint scientific events with several foreign universities.

References

Official references

1. "State Program on Increasing the International Competitiveness of the Higher Education System in the Republic of Azerbaijan for 2019-2023" Order No. 711 of the President of the Republic of Azerbaijan dated November 16, 2018, <https://e-ganun.az/framework/40711>
2. Regulations on the organization and planning of scientific and research work in higher educational institutions - Resolution No. 242 of the Cabinet of Ministers of the Republic of Azerbaijan dated November 6, 1995, https://frameworks.eganun.az/20/c_f_20842.html
3. "Azerbaijan 2020: a vision of the future" Development Concept - Decree No. 800 of the President of the Republic of Azerbaijan dated December 29, 2012, <https://e-qanun.az/framework/25029>
4. Law of the Republic of Azerbaijan "On Science", dated June 14, 2016 No. 271-VQ <https://e-qanun.az/framework/33488>
5. "Strategic Road Map of the perspective of the national economy of the Republic of Azerbaijan" Decree of the President of the Republic of Azerbaijan No. 1138 dated December 6, 2016, <https://e-qanun.az/framework/34254>
6. Law of the Republic of Azerbaijan on Education, June 19, 2009 No. 833-IIIQ <https://e-ganun.az/framework/18343>

7. State Strategy for the Development of Education in the Republic of Azerbaijan - Decree of the President of the Republic of Azerbaijan dated October 24, 2013, <https://president.az/az/articles/view/9779>
8. "Action Plan on the Implementation of the State Strategy on the Development of Education in the Republic of Azerbaijan", Order No. 995 of the President of the Republic of Azerbaijan dated January 19, 2015, <https://e-qanun.az/framework/29145>
9. "Rules for the establishment of doctoral programs and admission to doctoral programs" - approved by the decision No. 129 of the Cabinet of Ministers of the Republic of Azerbaijan dated July 1, 2010 <https://e-ganun.az/framework/19800>
10. "Regulations on the rules for the preparation, presentation and defense of the master's thesis" - April 20, 1998 <https://edu.gov.az/upload/file/disertasiya-mudafiesi-haqda-esasname.pdf>
11. "Regulations on the content and organization of master's education and the awarding of master's degrees" - approved by the decision of the Cabinet of Ministers of the Republic of Azerbaijan dated May 12, 2010 No. 88 <https://e-qanun.az/framework/19534>
12. Law of the Republic of Azerbaijan "On copyright and related rights". June 5, 1996 No. 115-IQ <https://e-ganun.az/framework/4167>

Informal references

1. Strategic Development Plan of the University of Florida, USA <https://facilities.ufl.edu/campus-planning/strategic-development-plan/>
2. Envisio 3 exceptional examples of strategic planning in higher education <https://facilities.ufl.edu/campus-planning/strategic-development-plan/>
3. Science Strategy Plan of the University of Victoria, Canada <https://www.uvic.ca/science/assets/docs/science-strat-plan-for-web.pdf>
4. European Science Strategy of Science Europe: 2021-2026 https://scienceeurope.org/media/wzufetmc/20210617_se_strategy.pdf
5. Strategic Development Plan of the Middle East Technical University of the Republic of Turkiye https://sp.metu.edu.tr/system/files/SP_2023-27-ENG.pdf