



National Academy of Science of the Republic of Kazakhstan  
under the President of the Republic of Kazakhstan

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APPROVED  
by the Decision of the General Meeting  
of the National Academy of Science  
of the Republic of Kazakhstan  
under the President of the Republic  
of Kazakhstan dated “27” August 2024  
No. 3

**Code of scientific ethics  
of the National Academy of Science  
of the Republic of Kazakhstan  
under the President of the Republic of Kazakhstan**

Almaty, 2024

## Chapter 1. Definitions and Abbreviations

1.1. The following definitions and abbreviations are used in this Code of Scientific Ethics of the National Academy of Science of the Republic of Kazakhstan under the President of the Republic of Kazakhstan:

1) Academy – the National Academy of Science of the Republic of Kazakhstan under the President of the Republic of Kazakhstan.

2) Code – this Code of Scientific Ethics of the National Academy of Science of the Republic of Kazakhstan under the President of the Republic of Kazakhstan.

3) Committee - the Scientific Ethics Committee of the National Academy of Science of the Republic of Kazakhstan under the President of the Republic of Kazakhstan, a collegial expert body created in accordance with this Code in order to ensure compliance with scientific ethics.

4) Violation of scientific ethics - commission by a person specified in paragraph 3.5. of this Code of actions contradicting this Code and (or) specified in Chapter 8, caused damage to the reputation of the Academy and (or) the scientific community of the Republic of Kazakhstan.

5) Scientific honesty - an element of scientific ethics expressed in the prevention by researchers and other personnel involved in scientific activities of improper co-authorship, plagiarism, fabrication and falsification of initial, intermediate data and scientific results;

6) Scientific ethics – a system of norms and principles established in this Code, which are mandatory for implementation in the process of planning, conducting and managing scientific research, using scientific results, as well as speaking on issues of science and scientific activity in the media, at conferences, meetings and other public events;

7) Established procedures – the competence and procedure for interaction and information exchange between bodies and structural divisions, established by the Charter and other internal documents of the Academy.

8) member of the Academy – a Full or Honorary Academician of the National

Academy of Science of the Republic of Kazakhstan under the President of the Republic of Kazakhstan.

1.2 Terms not described in paragraph 1.1. of this Code shall be interpreted in accordance with the definitions specified in the current legislation of the Republic of Kazakhstan, scientific literature or accepted in practice in the relevant areas.

## **Chapter 2. General Provisions**

2.1. The National Academy of Science of the Republic of Kazakhstan under the President of the Republic of Kazakhstan (hereinafter referred to as the Academy) in its activities proceeds from the fact that the Republic of Kazakhstan strives to become an active, trustworthy and authoritative participant in the international scientific community, which makes a feasible contribution to the country development by producing scientific knowledge and results that are not inferior to successful world analogues, based on recognized scientific methods and principles of organizing scientific research.

2.2 The mission, vision and values of the Academy are published on the official website: <https://ru.qazscience.gov.kz/about-us/mission-science-academy/>.

2.3 The Academy recognizes (i) collegiality, (ii) the presence of different ideas and opinions, and (iii) constructive criticism as integral characteristics of the scientific environment and supports professional discussion and the search for optimal solutions to issues that served as the basis for criticism, in accordance with established procedures and within the competence of the Academy's relevant bodies.

Decisions on issues that served as the basis for criticism are made by the Academy depending on the benefits for the scientific community of the Republic of Kazakhstan, if this is consistent with generally recognized ethical standards, by assessing the ratio of expected benefits and risks associated with each of the solution options, based on:

- 1) the definition of scientific ethics provided in paragraph 4.1. of this Code;
- 2) the principles of scientific ethics specified in paragraph 4.2. of this Code;
- 3) all known facts about the content of the issue;
- 4) various, duly substantiated positions on the issue.

2.4 The Academy's main approach to compliance with scientific ethics is preventing situations, statements or actions that could lead to a violation of scientific ethics in the implementation of the types of scientific and scientific expert activities specified in paragraph 3.4. of this Code.

### **Chapter 3. Scope**

3.1. This Code of scientific ethics of the National Academy of Science of the Republic of Kazakhstan under the President of the Republic of Kazakhstan (hereinafter referred to as the Code) has been developed in accordance with paragraph 105 of the Academy's Charter and defines the standard of ethical conduct in the process of planning, conducting and managing scientific research, using scientific results, speaking on behalf of the Academy on issues of scientific development, scientific and (or) scientific and technical activities in the media, social networks, at conferences, meetings and other public events, as well as the procedure for actions upon establishing facts of violation of scientific ethics.

3.2. Taking into account applicability, when developing the Code, the approaches to scientific ethics set out in the regulatory legal documents of the Republic of Kazakhstan and applied in the scientific systems of states that are technological leaders were taken into account (see List of references, p. 25).

3.3. The objectives of this Code are:

1) Promoting the culture based on internationally recognized norms and principles of scientific ethics in the scientific community of the Republic of Kazakhstan;

2) Maximizing benefits and minimizing risks associated with scientific research;

3) Ensuring the accuracy, reliability and safety of scientific research results;

4) Protecting the rights of scientific research participants to an appropriate professional environment;

5) ensuring a high degree of trust in the scientific community and scientific results of the Republic of Kazakhstan on the part of government agencies, the business sector, professional and public communities, the global scientific community and society as a whole;

6) enhancing the role and recognizing the achievements of the scientific community of the Republic of Kazakhstan in the global scientific community.

3.4. The Code applies to the following types of scientific and scientific-expert activities of the Academy:

1) planning scientific research, including the development of (i) scientific, scientific-technical programs and projects, (ii) projects for the commercialization of the results of scientific, scientific and technical activities and (iii) other events related to scientific research;

2) expertise of scientific, scientific and technical programs and projects, projects for the commercialization of the results of scientific, scientific-technical activities and other scientific research projects, including the participation in state scientific and technical expertise, national scientific councils, and editorial boards of scientific publications;

3) conducting scientific research, managing scientific, scientific and technical projects and programs;

4) search for applications, promotion and use of scientific results;

5) preparation of scientifically based reviews on current issues of economic and social development;

6) election of new members of the Academy, termination of membership in the Academy, approval of programs of Academy members and reports on their implementation;

7) speaking on behalf of the Academy in the media, social networks, at conferences, meetings and other public events;

8) awarding prizes, awards and scholarships for achievements in science;

9) coordinating and/or making decisions on the publication of scientific results in the Academy's publications;

10) preparing and making decisions on career appointments and transfers within the Academy, as well as in areas in which these decisions are made with the participation of the Academy.

3.5. The Code is mandatory for execution by:

- 1) Academy members;
- 2) the management and staff of the Academy;
- 3) research, engineering, technical, and support personnel of subjects of scientific, scientific and technical activities participating in scientific, scientific and technical programs and projects implemented by the Academy;
- 4) members of the Academy's Young Scientists Council;
- 5) members of advisory, consultative, and expert bodies, working groups, and other temporary groups created on the basis of the Academy to resolve individual issues specified in paragraph 3.4. of this Code.

The personnel of the subjects of scientific, scientific and technical activities participating in scientific, scientific and technical programs and projects implemented by the Academy undertakes obligations to comply with this Code, which is subject to reflection in the relevant agreements.

3.6. Subjects of scientific, scientific and technical activities and other organizations not related to the Academy have the right to fully or partially use this Code in their activities, with a reference to the Code in the relevant documents.

#### **Chapter 4. Scientific Ethics**

4.1. The Academy proceeds from the definition of scientific ethics as the performance of actions that:

- 1) are considered correct, based on the system of moral values accepted in society;
- 2) are of a constructive nature and aimed at the development of the economy, society and protection of the environment;
- 3) are aimed at obtaining significant scientific results that entail justified positive changes in the relevant area;
- 4) minimize the risks of negative consequences (harm) as a result of scientific

research;

5) reasonably assume that the positive effect of the results obtained significantly outweighs the risks of possible negative consequences of the actions.

4.2. The main principles of scientific ethics are:

- 1) fairness;
- 2) legality;
- 3) objectivity;
- 4) responsibility;
- 5) openness;
- 6) professionalism.

4.3. The principle of **fairness** requires:

1) a description of the main aspects of the scientific research in formulations that exclude double or incorrect interpretation, indicating all errors and uncertainties known to the author, as well as measures taken to minimize errors;

2) using the methods whose reliability is recognized by the scientific community for the relevant scientific research;

3) independent publication of scientific results prepared without the participation of commercial intermediaries who did not make an intellectual contribution to the original scientific research in peer-reviewed publications with a positive reputation in the relevant fields of science.

4.4. The principle of **legality** implies:

1) the inadmissibility of violating the legislation of the Republic of Kazakhstan in the process of planning, conducting scientific research, contribution and applying the obtained scientific results;

2) informing authorized state bodies on the facts of law violation identified in the process of scientific research, with the exception of situations where the law violation is the object of research authorized in the established manner.

4.5. The principle of **objectivity** presupposes the exclusion of the influence of conflicts of interest, personal interests, cultural, professional and other convictions on the decisions of a person related to:

- 1) planning, conducting scientific research and interpreting the results obtained;
- 2) determining the object and participants of the research;
- 3) issues submitted for scientific and expert review, including the election of new members of the Academy, awarding of prizes, awards and scholarships, review of manuscripts and publications, selection of scientific, scientific and technical programs and projects for funding and other issues.

In addition, objectivity implies the exclusion of any influence not related to scientific tradition (not based on common scientific views, ideas and positions) on scientific research activities and decisions made by a person, including, but not limited to:

- 1) administrative, political, moral and other pressure arising from the power of the person exerting pressure;
- 2) pressure on relatives and close friends of the person;
- 3) threats, blackmail and other illegal actions;
- 4) direct bribery or threats to restrict access to financial resources for scientific research.

The Academy considers any influence not related to scientific tradition on the persons specified in paragraph 3.5. of this Code in the process of their carrying out the activities specified in paragraph 3.4. of this Code to be unacceptable, and takes all available measures to prevent such influence, including (but not limited to) immediately informing law enforcement agencies and (or) publishing the facts that have taken place in the media and social networks.

4.6. The principle of **responsibility** implies:

- 1) an objective assessment of the consequences of scientific research for society, economy and environment, based on all information known to the author, as well as the adoption of informed decisions based on this assessment;



2) person's obligation to explain and justify the work done, conclusions and judgments by providing objective arguments and grounds, in accordance with this Code;

3) compliance with safety precautions in the process of conducting scientific research, as well as taking other reasonable measures to minimize the risk of causing harm to persons participating in the scientific research;

4) comprehensive measures to correct errors identified in one's own publications that can cause harm to other researchers, entities in the relevant field and (or) society as a whole, including by adjusting or retracting the publication;

5) participation in Academy's administrative and socially significant work and scientific initiatives at various levels, including industry associations of scientists, commissions, expert and working groups that involve participation or are interested in the representation of the Academy;

6) participation in the science popularization and promotion of scientific results in relevant areas of application.

4.7. The principle of **openness** implies:

1) complete presentation of all the main aspects of scientific research, allowing other researchers to reproduce and independently evaluate the reliability of the scientific results obtained by the author;

2) honest and accurate description of scientific results, sources, methods of collection, analysis of information and interpretation of the collected data;

3) timely presentation of scientific results in the public domain and in a form accessible to their users;

4) providing to other researchers, upon reasonable request, the primary data that served as the basis for the conclusions of the scientific research or the proposed solution, provided that they properly refer to the original study as the source of data;

5) adequate perception of criticism and alternative points of view on the object of scientific research, expressed in a respectful manner of academic discussion in compliance with generally accepted norms of politeness and morality.

The application of the openness principle specified in subparagraph 3) of this paragraph of the Code does not apply to situations in which access to scientific results or other information about scientific research is limited by the legislation of the Republic of Kazakhstan or the conditions of scientific research.

4.8. The principle of **professionalism** implies:

1) compliance with practices, including standards and norms, accepted as appropriate in the relevant scientific field;

2) making statements exclusively on the merits of issues on which the person's qualifications, experience and knowledge allow making informed judgments based on proven scientific facts; in situations where proven scientific facts are not available, it is permissible for the person to express a position on the merits of the issue posed, with the obligatory indication that (i) the position is an assumption and (ii) the justification on which the assumption is based;

3) inclusiveness, including maintaining a positive business environment, mutual respect and equal treatment of participants in scientific research, with the exclusion of any forms of discrimination based on gender, nationality, cultural and other individual characteristics;

4) activity, expressed in continuous scientific activity at the main place of work, including through regular publication of the results of scientific research in peer-reviewed scientific journals with a positive reputation in the relevant fields of science;

5) awareness of the persons specified in paragraph 3.5. of this Code about the work being carried out, the mission, vision and values of the Academy;

6) objective, reasoned and respectful criticism of ideas and scientific research in a field in which the knowledge, skills and experience of the person allow them to make reasoned judgments, without insulting or humiliating the personal dignity of opponents;

7) fair recognition of the each participant's contribution to the scientific research, including the distribution of co-authorship and other benefits between the participants in the scientific research in proportion to their intellectual contribution to the scientific results obtained.

4.9. In scientific research, the object of which is a human being and (or) other living organisms, the Academy complies with the requirements of the regulatory legal documents of the Republic of Kazakhstan.

4.10. In scientific research, the object of which is a human being, the Academy adheres to the following basic principles:

- 1) respect for persons who are the objects of research, including their right to access information about the scientific research and the confidential use of information obtained from them;
- 2) priority provision of benefits from participation in scientific research for persons who are the object of research, and minimization of potential risks for them from participation in the research.

Research is not permitted in which:

1) the risks of negative consequences for the individuals who are the objects of the research exceed the potential benefits of the research results;

2) the individuals who are the objects of research bear the bulk of the risks, while other persons enjoy the benefits of scientific research.

4.11. Benefits from participation in scientific research for individuals who are the subject of the research may be:

1) financial - in the form of direct payment of remuneration for participation in the scientific research (if there are appropriate resources in the scientific research budget);

2) non-financial - by providing access to the results of the scientific research, increasing self-esteem, solving a problem that is relevant to the individual, and others.

Regardless of the benefit nature, relevant information about the benefits must be communicated to individuals who are the subject of the research before the start of the research in full and in an accessible form.

4.12. In order to comply with the principles specified in paragraph 4.10 of this Code, the fundamental practice of the Academy is:

- 1) **Informed consent.** Before the start of the research, researchers are obliged to

provide the persons who are the subject of the research with clear and comprehensive explanations regarding (i) the nature and purposes of the research, (ii) what exactly the participation of individuals in the research consists of, (iii) what information will be collected and how as well as (iv) how the information collected will be used in the future.

Researchers provide information about the research to individuals who are the subject of the research in a form that is understandable and accessible to them, with the minimum possible use of special terms and concepts unknown to the general public, and answer all related questions from individuals regarding participation in scientific research.

Whenever possible, individuals who are the subject of the research provide written or other documented evidence of their consent to participate in the scientific research. Subjects retain the right to withdraw their consent at any time and to withdraw from the research study without any consequences to them.

2) **Confidentiality.** The Academy assumes that the participation of individuals who are the subject of research in scientific research is anonymous and does not disclose information that allows them to be identified to any degree. Information obtained from individuals who are the subject of the research is included in reports in anonymized and/or aggregated form, and primary data is stored under conditions that minimize the possibility of unauthorized access by third parties.

Ensuring the confidentiality of information obtained from individuals who are the subject of research is the responsibility of the researcher. Researchers conducting scientific research explain to individuals who are the subject of research the measures taken to ensure the confidentiality of the information they provide.

4.13. The confidentiality requirements specified in paragraph 4.12. of this Code shall apply to any personal information concerning the objects of research that has become known to the persons specified in paragraph 3.5. of this Code in the process of participating in the scientific and scientific and expert activities of the Academy.

4.14. The compliance of scientific research, the object of which is a human being, with the requirements of paragraphs 4.10., 4.11. and 4.12. of this Code shall be confirmed by the Scientific Ethics Committee of the Academy (hereinafter referred to as the

Committee) prior to the start of the research.

## Chapter 5. Scientific Integrity

5.1. Scientific integrity is the most important element of scientific ethics and obliges the persons specified in paragraph 3.5. of this Code **to prevent improper scientific practice** (*research misconduct*), namely:

1) fabrication - the creation of fictitious data, scientific results or other conditions related to scientific research, and their presentation as real in order to support or refute the research hypothesis or in other personal interests, as well as the interests of third parties;

2) falsification - manipulation of equipment, materials, data and (or) the research process in personal interests or the interests of third parties, including by changing or concealing information, carelessly reflecting the progress of research in laboratory journals and in other ways;

3) plagiarism - the appropriation by a person of ideas, texts, processes, statements and other results of scientific activity of other authors as his own original work, without indicating the appropriate reference to the original source;

4) inappropriate authorship – inclusion of a person who has not made a significant intellectual contribution to scientific research and the obtained scientific results, among the co-authors of (i) a scientific publication, (ii) a work nominated for a prize or other award in the field of science, (iii) a title of protection for intellectual property objects or (iv) other documented scientific achievements entailing personal and/or professional benefits, as well as among the performers of a scientific, scientific and technical project or program.

5.2. In relation to subparagraph 4) of paragraph 5.1. of this Code, improper co-authorship shall also be deemed to be the exclusion from the number of co-authors or performers of a person who has made a significant contribution to the completed work and the scientific results obtained, except for cases where the exclusion from the number of authors (performers) is made on the basis of a reasoned application by the person in relation to whom the question of exclusion is being considered.

5.3. A technical (unintentional) error made in the course of scientific research shall

not be considered improper scientific practice if the absence of intent is confirmed by the person using credible arguments and supported by the conclusion of the Committee.

## **Chapter 6. Conflict of Interest**

6.1. A conflict of interest is a contradiction between the expectations of the proper performance of the assigned duties by the person specified in paragraph 3.5. of this Code and the personal interest of this person, consisting in the possibility of obtaining a direct benefit for himself or herself or related (affiliated) persons as a result of the performance of the assigned duties, which may entail improper performance of duties by the person, contrary to the principles of scientific ethics.

6.2. For the purposes of paragraph 6.1. of this Code, related (affiliated) persons are:

1) close relatives - parents, children, adoptive parents, adopted children, full and half siblings, grandfather, grandmother, grandchildren;

2) employees of organizations with which the person has labor or other relations that involve receiving financial or other resources from them;

3) co-authors of scientific publications or intellectual property published (received) by the person during the three previous years prior to the date of consideration of the issue of a conflict of interest;

4) a scientific consultant (supervisor) or a doctoral student (master's student) who defended a dissertation under the supervision of the person in relation to whom the issue of a conflict of interest is being considered.

6.3. Concealment of the existence of a conflict of interest by a person, as well as influence in any form on the development and adoption of decisions in which this person has a conflict of interest, is a violation of scientific ethics.

6.4. The Academy proceeds from the fact that each (explicit and implicit) conflict of interest must be identified and duly substantiated. In relation to each conflict of interest, in accordance with the established procedures, comprehensive measures must be taken to prevent a negative impact on the performance of the assigned duties by the person.

When considering a conflict of interest, the Academy proceeds from the need to remove the person with a conflict of interest from the corresponding duties, with the exception of situations where the removal of the person critically affects the quality and consequences of the decision taken.

6.5. A person who suspects a conflict of interest based on all information known to him/her related to the performance of assigned duties must, in a free, written form, declare a conflict of interest to the Scientific Ethics Committee of the Academy (hereinafter referred to as the Committee) and provide grounds for such a suspicion in a volume sufficient to consider the application on the merits.

An appeal to the Committee is not required if the person in respect of whom a conflict of interest is suspected acknowledges the existence of a conflict of interest and refuses to perform duties in relation to the situation in which the conflict of interest arises.

6.6. The Committee shall consider the materials submitted by the person suspecting the existence of a conflict of interest and shall make one of the following decisions:

1) to confirm the existence of an obvious conflict of interest that is incompatible with the proper performance of the person's duties and recommend that the person be removed from the performance of duties in relation to the situation in which the conflict of interest arises;

2) to confirm the existence of an implicit conflict of interest that may become apparent under certain circumstances and cause the person to improperly perform the duties imposed on him/her;

while:

- the nature of the conflict of interest shall be assessed (compatible or incompatible with the performance of the duties imposed on the person);

- recommendations for resolving the conflict of interest shall be provided – (i) remove the person from the performance of duties on issues in which there is a conflict of interest or (ii) allow the person to perform duties, with a recommendation on the conditions that will minimize the impact of the conflict of interest and which the said person

must follow;

3) to confirm the absence of a conflict of interest.

6.7. The Committee's decision shall be taken in accordance with paragraphs 7.7 and 7.11 of this Code.

## **Chapter 7. Scientific Ethics Committee**

7.1. In order to ensure compliance with scientific ethics, the Academy creates a special consultative and advisory body - the Scientific Ethics Committee (hereinafter referred to as the Committee).

7.2. The Committee's main functions are:

1) consideration of statements of conflict of interest in accordance with Chapter 6 of this Code;

2) consideration of scientific, scientific and technical projects and programs, the implementation of which is planned with the participation of the Academy, for completeness and compliance with the objectives of the study of measures provided for compliance with scientific ethics;

3) consideration of situations in which there is a reasonable suspicion of a violation of scientific ethics in accordance with Chapters 4, 5, 6 and 8 of this Code.

7.3. The composition of the Committee shall be approved by order of the Academy President for one calendar year and shall be subject to re-approval upon expiration of the specified period.

The Committee shall consist of five members, of whom:

1) one full academician of the Academy, elected by the General Meeting of the Academy;

2) one full academician of the Academy, appointed by the Presidium of the Academy;

3) one employee of the Academy apparatus, holding an academic degree, appointed by the Board of the Academy;



4) one member of the Young Scientists Council of the Academy, nominated by the Young Scientists Council of the Academy;

5) one independent member - a scientist who is not a member of the Academy, nominated by the Presidium of the Academy.

The members of the Committee act on a voluntary and unpaid basis. The Chairman of the Committee is elected by the members of the Committee at the first meeting after the election of the composition.

7.4. In order to ensure the Committee's activities, the President of the Academy appoints the Secretary of the Committee from among the employees of the Academy apparatus.

The Secretary is not a member of the Committee, does not have the right to vote at the meetings of the Committee and performs the following functions:

1) independently or with the participation of the initiator of the issue, prepares and submits materials for consideration by the Committee;

2) carries out the office work of the Committee;

3) convenes and takes minutes of the Committee meetings;

4) within three working days following the date of the meeting of the Committee, prepares the minutes of the Committee meeting and, after its signing, ensures its posting on the official website of the Academy.

7.5. When considering the issues specified in subparagraph 2) of paragraph 7.2. of this Code, the Committee shall make one of the following decisions:

1) to approve the participation of the Academy in the proposed scientific research in view of the proper planning of measures to comply with scientific ethics;

2) to approve the participation of the Academy in the proposed scientific research after eliminating the comments regarding the reflection of measures to comply with scientific ethics, indicating the justified comments;

3) to recommend refusing the participation of the Academy in the proposed scientific research due to the high risks of violating scientific ethics in the conduct of

scientific research.

To consider the issues specified in subparagraph 2) of paragraph 7.2. of this Code, the Committee has the right to involve other Academy members who have the necessary qualifications in the field of the planned scientific research.

7.6. The Committee shall consider appeals on situations in which there are reasonable suspicions of violation of scientific ethics by the persons specified in paragraph 3.5. of this Code and, based on the results of the review, shall make one of the following decisions:

1) the absence of violation of scientific ethics, with a justification for the decision taken;

2) a minor violation of scientific ethics, with a justification for the decision taken and notification to the person who committed the minor violation about the inadmissibility of a repeated violation;

3) a significant violation of scientific ethics, with the issue of liability of the person committed the violation being submitted for consideration by:

- the Presidium of the Academy - for persons who are members of the Academy;
- the Board of the Academy - for persons specified in subparagraphs 2), 4) of paragraph 3.5. of this Code;
- the management of the organization of which the person committed the violation is an employee - for persons specified in subparagraphs 3), 5) of paragraph 3.5. of this Code.

7.7. The decisions of the Committee are taken by open voting, by a simple majority of votes, and are recorded in a protocol drawn up by the Secretary of the Committee.

In order to ensure transparency in the work of the Committee, all Committee decisions, recorded in the form of a protocol, are subject to publication on the official website of the Academy.

7.8. If necessary, the Committee has the right to invite to the meeting to provide explanations:

1) persons suspecting the existence of a conflict of interest - when considering the issues specified in subparagraph 1) of paragraph 7.2. of this Code;

2) authors, manager and (or) responsible executors of a scientific, scientific and technical program or project - when considering the issues specified in subparagraph 2) of paragraph 7.2. of this Code;

3) persons suspected of violating scientific ethics - when considering the issues specified in subparagraph 3) of paragraph 7.2. of this Code.

7.9. A minor violation of scientific ethics is a violation committed for the first time and which did not result in significant reputational or other damage to the Academy and (or) the scientific community of the Republic of Kazakhstan.

A significant violation of scientific ethics is:

1) improper scientific practice;

2) concealment by a person of a conflict of interest;

3) participation by a person in the development and adoption of a decision on an issue in which the person has a conflict of interest, if the Committee has recognized this conflict of interest as incompatible with the performance of the duties assigned to the person;

4) violation of scientific ethics that resulted in significant reputational or other damage to the Academy and (or) the scientific community of the Republic of Kazakhstan;

5) repeated violation of scientific ethics by a person who has previously committed a minor violation established by the Committee.

Based on the results of the reviewing a significant violation of scientific ethics, the Presidium of the Academy may decide to submit to the General Meeting of the Academy the issue of terminating the membership in the Academy of the person committed the violation.

If a significant violation of scientific ethics is identified in the awarding of prizes, awards and scholarships, the distribution of which is carried out by the Academy, the Committee recommends rejecting the application in which significant violations are

identified.

7.10. For persons who have committed a violation of scientific ethics and who are not members of the Academy, the Presidium of the Academy shall send a notice to the person's main place of work. The Academy's cooperation with these persons shall be terminated.

7.11. The basis for submitting an issue for consideration by the Committee is a written appeal to the Committee from a person who reasonably assumes that the circumstances specified in paragraph 7.2 of this Code have occurred.

The appeal, together with the necessary supporting materials, is submitted by the person initiating the appeal to the Secretary of the Committee and is subject to mandatory registration.

For consideration by the Committee, the Secretary of the Committee shall submit the following materials:

- 1) a certificate outlining the essence of the issue submitted for consideration;
- 2) copies of documents related to the essence of the issue submitted for consideration by the Committee.

The materials shall be submitted to the members of the Committee on paper or by sending electronic copies to e-mail addresses no less than five working days before the date of the planned meeting of the Committee.

7.12. The Committee meeting may be held in the following formats:

- 1) in person - synchronously, through the physical presence of the Committee members at the meeting or using the Zoom, Microsoft Teams and other telecommunication platforms used by the Academy;
- 2) in absentia - asynchronously, by sending materials to the Committee members and collecting their position on the merits of the issues submitted for consideration.

The format and date of the meeting are determined by the Chairman of the Committee, taking into account the possibility of participation of other Committee members.

7.13. Based on appeals from government agencies or subjects of scientific, scientific and technical activity, the Committee may consider materials on suspicion of violating scientific ethics that are not related to the activities of persons specified in paragraph 3.5. of this Code. In these situations, the initiators of the appeal prepare materials for consideration by the Committee, and the Committee's decision is formulated as a reasoned recommendation.

### **Chapter 8. Violation of scientific ethics**

8.1. Examples of violations of scientific ethics by persons specified in paragraph 3.5. of this Code are:

1) Pressure on persons participating in decision-making on issues in which the person exerting pressure has a conflict of interest, personal or professional interest that goes beyond the scope of traditional scientific discussion, including through the use of official position or other privileges;

2) Restriction of fair competition in science by creating conditions and applying administrative or other measures that are not related to the quality of scientific research (design, methods, scientific novelty and other characteristics of scientific research);

3) Improper scientific practice (Chapter 5 of this Code);

4) Concealment of an obvious conflict of interest by a person participating in decision-making but having a conflict of interest when considering the relevant issues (Chapter 6 of this Code);

5) A public speech on behalf of the Academy by a person specified in paragraph 3.5. of this Code on an issue on which this person is not authorized to speak in accordance with established procedures, as well as the voicing on behalf of the Academy of a position that contradicts an official decision of the Academy taken in accordance with established procedures.

A violation of scientific ethics shall not include a person's statement of a position that differs from the official position of the Academy on the relevant issue, if the person directly indicates that the position they state is their personal opinion and does not reflect the official position of the Academy;

6) The use in the research process of methods recognized by the scientific community as unreliable;

7) The involvement of intermediaries not involved in the scientific research for remuneration to write or edit a publication based on the materials of the scientific research, as well as the publication of the research results in publications pursuing commercial interests (“predatory” publications).

A violation of scientific ethics shall not include payment for the placement of a publication directly to a publication, without the involvement of intermediaries, in accordance with the tariff established by this publication;

8) Public critical statements regarding issues of scientific, scientific-technical and other activities of the Academy in the field of science, expressed without submitting these issues for consideration by the authorized bodies of the Academy and making a decision on them in accordance with established procedures..

It is considered ethical to submit issues that are grounds for criticism for consideration by the relevant bodies of the Academy in accordance with established procedures, while avoiding public statements and (or) actions that could damage the reputation of the Academy and (or) the scientific community of the Republic of Kazakhstan;

9) Presentation of previously completed research as new for the purposes of publication, obtaining funding or other personal or professional benefits.

10) Presentation of scientific research for the preparation of which generative artificial intelligence (GenAI) was used, without indicating which software, how exactly, in what part and in what volume was used.

11) Unjustified self-citation (*citation manipulation*) and other methods of artificially increasing scientometric indicators that are not related to obtaining new, reliable scientific results and improving the quality of scientific research;

12) Violation of the requirements established by regulatory legal documents of the Republic of Kazakhstan and regulating documents of Academy for conducting scientific research, the object of which is a person and (or) other living organisms;

13) Misleading persons who are the objects of research about the goals, expected results and risks of scientific research, intentionally concealing the said information from them, as well as failure to comply with paragraphs 4.10., 4.11. and 4.12. of this Code;

14) Unauthorized disclosure of information that became known to a person in the course of conducting scientific research, including failure to take reasonable measures to ensure the safety of this information, which resulted in its disclosure;

15) The use by one or more authors of scientific results or intellectual property objects obtained by a group of authors, without the duly executed consent of the other authors;

16) Duplication of publications – the publication by authors of the same work or significant parts of it in several journals or other sources, including in different languages, without proper reference to the previous publication and without indicating the differences between them.

8.2. The examples given in paragraph 8.1 of this Code are not exhaustive and are **subject to updating** as practice in applying the Code is developed.

A decision on each situation in which there are reasonable suspicions of a violation of scientific ethics is made by the Committee individually, based on an examination of the materials on the merits, taking into account the provisions of Chapters 4, 5 and 6 of this Code.

## **Chapter 9. Final Provisions**

9.1. This Code shall be approved by the General Meeting of the Academy and shall be published in the public domain on the official website of the Academy.

9.2. Familiarization with the contents of the Code of the persons specified in paragraph 3.5. shall be made officially (by signature) upon the emergence of labor or other relations with the Academy, including the election of a person as a member of the Academy.

9.3. Subjects of scientific, scientific and technical activities who are co-executors of scientific, scientific and technical projects or programs implemented by the Academy

shall confirm the fact of familiarization with this Code upon conclusion of contracts, with a corresponding reflection in the contract.

9.4. Amendments and additions to this Code are made by means of regular revision for relevance, carried out as necessary, but not less than once every two years, based on relevant requests containing comments and suggestions.

The decision to make amendments and additions is made by the General Meeting of the Academy after the Committee and the Board of the Academy have discussed the relevant proposals.

9.5. The Secretary of the Committee makes amendments and additions to the Code after the relevant decision has been made.

The updated version of the Code is subject to publication on the official website of the Academy no later than three working days from the date of approval of the amendments and additions.



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Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated September 25, 2023 No. 487 “On approval of the list and regulations on national scientific councils” **<https://adilet.zan.kz/rus/docs/V2300033466>**