

# DESCRIPTION OF THE MINIMUM QUALIFICATION REQUIREMENTS FOR THE POSITIONS OF RESEARCHERS OF STATE RESEARCH INSTITUTE CENTER FOR PHYSICAL SCIENCES AND TECHNOLOGY

### CHAPTER I GENERAL PROVISIONS

- 1. The Description of the Minimum Qualification Requirements for the Positions of Researchers (hereinafter the Description) of the State Research Institute Center for Physical Sciences and Technology (hereinafter FTMC) is prepared in accordance with the Law of the Republic of Lithuania on Science and Studies, the description of the mandatory competencies of the career stage researchers of science and study institutions, approved by the chairman of the Research Council of Lithuania on 29 June 2023 by the order No. V-352 "On the Approval of the List of Mandatory Competences for the Career Stage Researchers of the Science and Study Institutions" and the statute of the State Research Institute Center for Physical Sciences and Technology, approved by the Government of the Republic of Lithuania on 20 October 2021 by the resolution No. 852 "On the reorganization of the State Research Institute Center for Physical Sciences and Technology, the approval of the statute of the State Research Institute Center for Physical Sciences and Technology, and the investment and transfer of the state property in accordance with the agreement on state property trust".
- 2. The description regulates the mandatory minimum qualification requirements for persons seeking to occupy the position of researcher at FTMC through a public competition and assessing the suitability of the researchers for their current positions during attestation (ordinary and/or extraordinary) and performance evaluation.
  - 3. Terms used in the description:
- 3.1. High-level international scientific journal a periodical, ranked in the first (Q1) or second (Q2) quartile of the corresponding science category in the Clarivate Analytics Web of Science database;
- 3.2. International scientific journal a periodical journal that has a citation index in the "Clarivate Analytics Web of Science" database;
- 3.3. Outstanding Scientific Article an article published in the top 5% of journals in the Clarivate Analytics Web of Science database in a specific discipline or in general journals such as Nature, Science, etc.
- 3.4. Scientific article an article published in peer-reviewed periodical journals and having a citation index (IF) in the "Clarivate Analytics Web of Science" database or (and) having a scientific apparatus common in a specific field of science (footnote or (and) bibliography, or (and) formulas, or (and) drawings, or (and) a description of the methodology, or (and) statistical tables, etc.) and corresponding to the scientific criteria recognized in that field of science.
- 3.5. Scientific monograph a non-periodical and non-continuous publication, in which a single topic (subject) is systematically and/or comprehensively analysed, with clear and significant elements of novelty and scientificity for the field or direction of science; the monograph must have an ISBN.
- 3.6. **Affiliation** the affiliation of the author to the Institution specified in the scientific work.
- 3.7. Evaluation Methodology the methodology approved by the Scientific Board of FTMC, according to which the results of the formal evaluation are calculated.

- 3.8. Participation in the doctoral process guiding or advising doctoral students (only scientific consultants approved by the doctoral committee), reviewing dissertations, participating in the dissertation Defence Panel.
  - 4. Abbreviations:
  - 4.1. CNIPA China National Intellectual Property Administration;
  - 4.2. EPO European Patent Office;
  - 4.3. IF impact factor;
  - 4.4. JPO Japan Patent Office;
  - 4.5. KIPO Korean Intellectual Property Office;
  - 4.6. R&D research and experimental development;
  - 4.7. R&D&I research, experimental development and innovations.
  - 4.8. USPTO United States Patent and Trademark Office;

#### **CHAPTER II**

### MINIMUM QUALIFICATION REQUIREMENTS FOR PERSONS BEING EVALUATED OR ATTESTATED

- 5. During the attestation and/or performance evaluation of researchers, the qualification of researchers is assessed according to the following main criteria, which correspond to the competences of scientists in conducting R&D&I activities, organizing R&D&I, disseminating R&D&I results and predicting their impact, expert assessment of R&D:
  - 5.1. Scientific level and its uniqueness:
  - 5.1.1. Outstanding articles:
- 5.1.2. Scientific articles in international scientific journals and scientific articles in high-level international scientific journals in the first (Q1) or second (Q2) quartile of the relevant publication group at the time of publication;
  - 5.1.3. Registered patents and published patent applications;
- 5.1.4. Non-dissertation-based scientific monographs published by scientific publishing houses;
  - 5.2. Completed R&D and R&D&I works:
- 5.2.1. Preparation of project applications for international and Lithuanian science programs:
- 5.2.2. Participation in international and Lithuanian science programs, projects and funding received for their implementation;
  - 5.3. Cooperation with business:
  - 5.3.1. Business-oriented R&D projects;
  - 5.3.2. Services for business:
  - 5.3.3. Sales of licenses;
  - 5.3.4. Product development and deployment:
- 5.3.5. Development of the researcher *know-how*, sale of patents, licenses (assessed individually according to volume or amount of added value created)
  - 5.3.6. Established companies;
  - 5.4. Another activity:
  - 5.4.1. Training of the highest category specialists;
- 5.4.2. Expert work, science popularization activities and other works important for the development of the country's economy, culture and society.
- 6. The chief researcher is attested for the position if during the cadence he/she has led (leads) an R&D or R&D&I project implemented (ongoing) at the Center or an officially approved R&D/R&D&I topic, or a group of researchers solving important R&D/R&D&I tasks and scored at least 60 points according to the Evaluation Methodology.
- 7. A senior researcher is attested for the position if during the cadence he/she has scored at least 35 points according to the Evaluation Methodology.
  - 8. A researcher is attested for the position if during the cadence he/she has

scored at least 20 points according to the Evaluation Methodology.

- 9. The amount of points specified in Paragraphs 6 8 of the Description may be proportionally reduced in the following cases:
- 9.1. During the cadence the person works part-time at FTMC, regardless of the source of salary funding;
  - 9.2. An extraordinary attestation is being carried out.
- 10. The Attestation and Competition Commission (hereinafter Commission) has the right to reduce the qualification requirements during the cadence, when the attested researcher on the written designation of the FTMC administration has performed important work, which is not provided for in his job description.
- 11. The Commission may make an exception to the formal assessment when evaluating works of particular importance to the FTMC, but the implementation of such works must be pre-arranged with the FTMC administration and approved by the Scientific Board of FTMC.
- 12. In the case when an employee at FTMC works more than the full working time rate during the cadence, the number of points specified in Paragraphs 6 8 of the Description shall not be increased.
- 13. During the attestation only scientific articles, technologies, results of experimental development, patents, published patent applications, submitted project applications, ongoing projects and the training of highly qualified specialists with FTMC affiliation are evaluated. If a person has several affiliations in one scientific article, the part of the article reduced in proportion to the number of affiliations is considered.

## CHAPTER III MINIMUM QUALIFICATION REQUIREMENTS FOR APPLICANTS TO ACQUIRE THE POSITION OF A RESEARCHER THROUGH PUBLIC COMPETITION

- 14. When conducting a competition for the positions of researchers, the qualifications of applicants are assessed according to the following main criteria, which correspond to the competences of scientists in conducting R&D&I activities, organizing R&D&I, disseminating the results of R&D&I and predicting their impact, expert evaluation of R&D&I:
- 14.1. Compliance with the special qualification requirements specified in the public competition conditions;
- 14.2. Scientific articles in international scientific journals and high-level international scientific journals;
  - 14.3. Registered patents;
- 14.4. Non-dissertation-based scientific monographs published by scientific publishing houses;
  - 14.5. Completed R&D or R&D&I works;
  - 14.6. Training of the highest category specialists;
- 14.7. Participation in international and Lithuanian science programs, projects and funding received for their implementation;
- 14.8. Expert work, science popularization activities and other works important for the development of the country's economy, culture and society.
  - 15. To the position of chief researcher can apply only those researchers who:
- 15.1. published at least 15 (fifteen) scientific articles in the international scientific journals;
- 15.2. in the last 5 (five) years has published at least 10 (ten) scientific articles in high-level international scientific journals or 1 (one) exclusive article (up to 5 (five) articles can be replaced by the equivalents specified in the Paragraph 19);
- 15.3. has experience in leading research: has led international or national R&D or R&D&I projects or research programs carried out by institutions;
- 15.4. has experience in training researchers: has supervised a doctoral student or a post-doctoral intern.

- 16. The applicant for the position of chief researcher, if he has not worked in them before, must made a public oral presentation at the FTMC seminar and present the ongoing and planned scientific activities and the results of his research, provide an assessment of the perspective of the scientific field in which he will work. The applicant coordinates the time and place of the seminar with the chairman of the FTMC Scientific Board. Seminars are announced publicly on the FTMC website no later than a week before the seminar.
  - 17. To the position of senior researcher can apply only those researchers who:
- 17.1. published at least 7 (seven) scientific articles in international scientific journals;
- 17.2. has published at least 6 (six) scientific articles in high-level international scientific journals in the last 5 (five) years (up to 3 (three) articles may be replaced by equivalents specified in Paragraph 19);
- 17.3. participated in international or national R&D or R&D&I projects, or supervised a doctoral student or post-doctoral intern.
  - 18. To the position of researcher can apply only those researchers who:
- 18.1. published in total at least 5 (five) scientific articles in international scientific journals, including at least 1 (one) article in a high-level international scientific journal;
- 18.2. in the last 5 (five) years has published at least 3 (three) scientific articles in international scientific journals, of which at least 1 (one) article in a high-level international scientific journal (up to 2 (two) articles can be replaced by the equivalents specified in Paragraph 19).
- 19. Articles specified in Paragraphs 15.2, 17.2 and 18.2 may be replaced based on the following equivalents:
- 19.1. a patent registered in the EPO, USPTO, JPO, KIPO or CNIPA is equivalent to one scientific article in a high-level international scientific journal;
- 19.2. a chapter of a peer-reviewed scientific monograph published in an internationally recognized scientific publishing house is equated to a scientific article in a high-level international scientific journal;
- 19.3. a peer-reviewed scientific monograph published in an internationally recognized scientific publishing house is equivalent to three scientific articles in a high-level international scientific journal;
- 20. The requirements for the number of scientific publications may be reduced, considering the number and scope of R&D or R&D&I projects carried out by the applicant, as well as the applicant's personal contribution to them (position in the projects, limits of responsibility). The evaluation is carried out by the Commission, considering the information provided by the applicant.

### **CHAPTER IV**

## MINIMUM QUALIFICATION REQUIREMENTS FOR PERSONS SEEKING TO ACQUIRE THE POSITION OF JUNIOR RESEARCHER

- 21. Persons with a master's degree or equivalent higher education and carrying out research who meet the following requirements can apply for the position of junior researcher:
- 21.1. published at least 1 scientific article in peer-reviewed scientific journal or are co-authors of equivalents specified in Paragraph 19.

## CHAPTER V FINAL PROVISIONS

- 22. The Commission evaluates the significance of scientific works and experimental development and innovations and the applicant's personal contribution.
  - 23. For researchers who were granted pregnancy and childbirth, paternity or

childcare leave and/or a certificate of incapacity for work of more than 3 months during the cadence, the period during which the requirements specified for the position of researcher must be met is extended by the duration of the leave/incapacity.

24. The description of the minimum qualification requirements for the positions of researchers shall come into force in 1 January 2024. The Description is applied when hiring of researchers to positions through a public competition and their attestation. To the researchers admitted to the position until 1 January 2024 the provisions of this Description are applied with their consent.