

OPINION

by Prof. Dr. Stoyan Angelov Shishkov,

Faculty of biology, Sofia university "St. Kl. Ohridski",

**member of the scientific jury, appointed by order 80 of 16.03.2026 of the Director
of the National center for infectious and parasitic diseases.**

**REGARDING: the materials submitted for participation in a competition for the
academic position of "Professor" in the field of higher education 4. Natural sciences,
mathematics and informatics; professional field 4.3. Biological sciences (Virology), for
the needs of the Virology Department of the National center for infectious and parasitic
diseases, announced in the State Gazette, issue 115/ 30.12.2025**

General presentation of the procedure and the candidate.

The only candidate participating in the announced competition is associate professor Ivaylo Aleksiev Ivanov, D.Sc.. Assoc. prof. Ivaylo Ivanov was born in 1968 in Sofia. In 1993, he graduated as a master in the specialty "Cell Biology and Developmental Biology" at the Faculty of biology of Sofia university "St. Kl. Ohridski". In 2008, he acquired the specialty "Virusology" at the Medical university, Sofia. In 2011, he acquired the the educational and scientific degree "Doctor", scientific specialty "Virusology" at the National center for infectious and parasitic diseases. In 2017 he was elected as an associate professor. In 2025 he acquired the the educational and scientific degree "Doctor of sciences".

Assoc. prof. Alexiev started working in 2003 at National reference confirmatory laboratory of HIV, NCIPD, of which he has been the head since 2016. In 2024 he was appointed head of the "Virusology" department at the NCIPD.

The provided set of materials is in accordance with the requirements of the Law on the development of the academic staff in the republic of Bulgaria (LDACRB), the regulations for the implementation of the LDACRB and the regulations on the terms and procedure for acquiring scientific degrees and for holding academic positions in the NCIPD in professional field 4.3. Biological sciences.

There are no signals of plagiarism. The documentation allows for the assessment of the scientific and applied scientific activity of the candidate, according to the accepted qualitative and quantitative criteria.

For participation in the competition for professor, assoc. prof. Alexiev has submitted 41 scientific articles, which are referenced and indexed in the world scientific databases Scopus and/or Web of Science, with a total IF over 172.9. Another 16 articles with his co-authorship in referenced non-indexed journals are also attached.

As of June 2026, Scopus reflects 70 articles co-authored with assoc.prof. Ivanov with 1133 citations and h-index 18.

The results of the candidate's research activity have been reported at 200 international and national scientific forums submitted for participation in the competition. They reflect his large-scale research activity in the professional field of the competition.

Assoc. prof. Aleksiev has participated in 2 international research projects, as well as in 5 national projects, of which he was the leader of 4.

Overall assessment of the candidate's activity.

1. Assessment of scientific activity.

Scientific works.

The certificate of fulfillment of the minimum national requirements under Art. 2b of the Law on scientific research and development of the Republic of Bulgaria for scientific field 4. Natural sciences, mathematics and informatics; professional field 4.3. Biological sciences shows a set of points as follows:

- Indicators in **group A**: dissertation work - **50 points**.
- Indicators in **group B** "Habilitation work - scientific publications in publications that are referenced and indexed in world-renowned databases of scientific information (Web of Science or Scopus)" include 26 publications with quartiles. **Accordingly, for indicator group B, the points are 572** with a required 100.

- Indicators in **group C** - scientific articles in international referenced and indexed journals include 14 publications with quartiles, as well as 16 articles without IF. **Therefore, publications in this group of indicators carry 418 points** with a required 200 points.
- Indicators in **group D** present a list of 485 citations of articles in scientific publications referenced and indexed in Web of Science/Scopus. **They carry 970 points** with a required 50 points. Therefore, the candidate meets the requirements for this indicator from the minimum national requirements.
- The indicators from **group E** indicate two PhD students who have defended their thesis, 5 participations in national research projects, as well as the attracted financial resources for the two projects led by the candidate. **Therefore, this group of indicators carries another 218 points** with 200 points required.

The total number of points of assoc. prof. Aleksiev on the indicators is remarkable - 2403 points with 600 points required to satisfy the minimum national requirements.

The candidate's indicators also satisfy the Regulations on the terms and conditions for acquiring scientific degrees and for occupying academic positions at the National center for infectious and parasitic diseases.

2. Analysis of scientific contributions.

The scientific works are in the field of the announced competition and relate to several thematic areas: molecular epidemiology and antiretroviral resistance of HIV-1, co-infections in people infected with HIV, genomic epidemiology of respiratory viruses, including SARS-CoV-2 and molecular diagnostics of viral infections and other pathogens.

The main scientific and applied scientific contributions that I highlight are:

1. The establishment of high genetic diversity of HIV-1 in Bulgaria.
2. Conducting a critical analysis of the entry and subsequent spread of HIV-1 in Bulgaria.
3. Conducting the first systematic national analysis of antiretroviral drug resistance.
4. Outlining the molecular epidemiology of HCV infection in risk communities through the analysis of cases of HIV/HCV coinfection.
5. Analyzing post-vaccination infections with SARS-CoV-2 in healthcare workers immunized with Pfizer-BioNTech in the presence of documented IgG antibodies.

6. Systematic analysis of reinfections with SARS-CoV-2 in Bulgaria for the period March 2020 - December 2021.

7. Identified T-lymphocyte phenotypic and mitochondrial parameters as markers of incomplete immune recovery in people living with HIV on long-term cART.

3. Assessment of the candidate's personal contribution.

The presented scientific works and accompanying documentation prove the leadership, personal contribution to the experimental development, analysis, interpretation and publication of the scientific results of assoc. prof. Aleksiev. The author's reference for the research work and scientific contributions present in detail the professional achievements of the candidate and I accept them without reservation. The significant successes achieved outline the candidate as a fully developed researcher and skilled experimenter of the highest level and with creative opportunities for development in the field of virology.

2. Other activities.

The academic work of assoc. prof. I. Aleksiev outlines him as an excellent teacher and scientific supervisor. The average annual classroom workload is 177.4 hours. This also includes the classes in the discipline "Evolution of viruses, phylogenetic analysis and molecular epidemiology" for students in the master's program "Virusology" at Sofia university "St. K. Ohridski", which was introduced by him. He is the supervisor of 2 successfully defended diplomas. He is also the scientific supervisor of 2 doctoral students who have defended their doctoral dissertations.

Critical remarks and recommendations.

The submitted evidentiary materials and documentation are proper, reliable and comprehensive, therefore I have no remarks or recommendations.

Conclusion.

The scientific works and documents submitted by the candidate assoc. prof. Ivaylo Alexiev for participation in the competition for the academic position of "Professor" meet all the requirements of the Act on the development of the academic Staff in the Republic of Bulgaria, the Regulations for the implementation of the act and the Regulations on the

terms and procedure for acquiring scientific degrees and for occupying academic positions at the NCIPD in professional field 4.3. Biological Sciences. The candidate has submitted a sufficient number of scientific works to participate in the competition. They contain original scientific and applied scientific contributions and have received recognition from the international scientific community. The candidate's research activity is at a very high professional level and cannot be questioned.

The materials provided to me show that candidate associate professor Ivaylo Aleksiev Ivanov, D.Sc. unequivocally outlines him as an excellent creative researcher in the field of molecular and epidemiological virology. I believe that the facts presented are sufficient grounds for his election as professor of virology in the field of higher education 4. Natural sciences, mathematics and informatics, professional direction 4.3. Biological sciences, scientific specialty "Virusology" at the Department "Virusology" of the National center for infectious and parasitic diseases. I give a positive assessment.

29.05.2026

Prepared the opinion:

Prof., Dr. Stoyan Shishkov