



REVIEW

regarding a competition for the academic position of "Associate Professor" in the scientific specialty "Horse Breeding and Other Equine Sciences," announced in the State Newspaper, Issue No. 41 of May 5, 2026, with the candidate Chief Assistant Professor Maya Georgieva Popova PhD from the Agricultural University – Plovdiv, Faculty of Agronomy, Department of Animal Science.

Reviewer: Prof. Radoslav Ivanov Slavov, DSc, Faculty of Agriculture at Trakia University – Stara Zagora - retired, higher education field "Agricultural Sciences and Veterinary Medicine," professional field "Livestock breeding," and scientific specialty "Breeding of Farm Animals, Biology and Biotechnology of Reproduction", appointed as a member of the Scientific Jury by Order No. RD-16-811/29.06.2026 of the Rector of the Agricultural University.

1. General information regarding the candidate's career and thematic development

Chief Assistant Professor Maya Georgieva Popova PhD was born on November 27, 1985, in the city of Shumen. In 2008, she graduated with the specialty "Livestock breeding" from the Faculty of Agronomy at the Agricultural University of Plovdiv, obtaining a Bachelor's degree and the professional qualification of "Livestock engineer". In 2010, she completed a Master's degree program in "Equestrian Sport" at the Faculty of Agriculture of Trakia University in Stara Zagora, obtaining a Master's degree and a professional qualification in "Equestrian Sport". In 2013, after a competition, she was appointed to the academic position of Assistant Professor in the Department of Animal Science at the Faculty of Agronomy, Agricultural University – Plovdiv. In March 2017, she defended a dissertation titled "Status, Dynamics and Development Trends of the Breeding and Productive Status of Purebred Arabian and Shagya Horses," for which she was awarded the educational and scientific degree "PhD" in the scientific specialty "Breeding of Farm Animals, Biology and Biotechnology of Reproduction". In 2017, she was elected and appointed to the academic position of Chief Assistant Professor. From March 2006 to March 2008, she

attended and completed a training for a professional qualification in Economics and foreign trade with agricultural production at the Center for Additional Education of the Agricultural University – Plovdiv. From November 2009 to March 2010, she worked as a livestock engineer specializing in animal breeding at the Horse Breeding Department of the "Kabiyuk" State Enterprise in Shumen. From March 2010 to January 2013, she worked as a Junior Expert in Horse Breeding Control and Coordination at the "KKRD" General Directorate of the Executive Agency for Selection and Reproduction in Animal Breeding (IASRZH). She has been a member of the Management Board since March 2014, and since May 2022 and up to the present is a chairman of the breeding organization "East Bulgarian Horse Association" in Shumen. From November 2024 to November 2025, she underwent training at the Centre for Additional Education at the Agricultural University - Plovdiv, obtaining the professional qualification of "Vocational Training Teacher."

As an educator, researcher and experimenter, Chief Assistant Professor Maya Popova PhD works diligently to acquire knowledge and skills in teaching, research, and expert activities, and to master new methodologies for teaching and conducting scientific experiments and research, application of modern methods for processing the obtained results using specialized computer software, participation in research projects and scientific forums, training of students, postgraduate trainees, and farmers, supervision of summer student internships, as well as the publication of research papers and the development of curricula.

2. General description of the submitted materials

The scientific production with which Chief Assistant Professor Maya Popova PhD is participating in the competition (excluding the dissertation for PhD degree, the publications regarding the dissertation, and the publications used to meet the requirements for the academic position of Chief Assistant Professor) consists of 22 scientific works which are subject to analysis. Of these, 10 are equivalent to the habilitation monograph, and 12 have been published in scientific journals refereed and indexed in internationally renowned scientific databases. 7 (31.81%) were published in foreign publications, and 10 (45.45%) in Bulgarian peer-reviewed scientific journals in English. 17 (77.27%) of the scientific works were published in English, and 5 (22.72%) in Bulgarian. 7 of the presented scientific papers have been published in journals with IF and SJR rankings ranging from Q1 to Q4. The overall IF is 1.805, and

the overall SJR is 1.313. In 16 of the research papers (72.73%), the candidate is the sole or leading author; in 4 papers (18.18%), she is the second author; and in 2 papers (9.09%), she is the third or subsequent author. 4 citations (of four articles) in scientific publications refereed and indexed in world-renowned scientific databases were presented. All citations are in journals with an SJR, with a total SJR of 1.375.

Chief Assistant Professor Maya Popova PhD has presented 5 research papers and posters at 3 international scientific conferences and 13 research papers and posters at 11 national conferences with international participation. The candidate has participated in the development and implementation of six research projects: three funded by the Agricultural University and three with external funding (from the Scientific Research Fund and the Ministry of Education and Science). She is the leader of two of the university projects and a team member on the other four. 13 curricula have also been presented.

In addition to her designated area of specialization, Chief Assistant Professor Maya Popova PhD presented 4 co-authored works: a book titled "The Danube Horse Breed: Past, Present, and Prospects"; two breeding programs—"Breeding Program for the Conservation and Breeding of the East Bulgarian Horse Breed" and "Breeding and Conservation Program for the Karakachan Breed (2020–2030)"; and a reference guide titled "Handbook on the Application of Reproductive Biotechnologies in Equines".

Fulfilment of the requirements for holding the academic position, in accordance with the Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria at the Agricultural University:

Under group of indicators "A"

- Defence of a dissertation for the Educational and Scientific Degree "PhD" – 50 points.

Under indicator group "C"

- 10 scientific publications were presented—equivalent to and serving as a substitute for a habilitation work, peer-reviewed and indexed in internationally renowned scientific databases, forming 180 points with a minimum requirement of 100 points.

Under indicator group "D"

- 12 articles and reports published in scientific journals - indexed and refereed in internationally renowned scientific databases - were presented, totalling **207.5 points** with a minimum requirement of **200 points**.

Under group of indicators "E"

- 4 citations (of four scientific articles) in scientific publications refereed and indexed in world-renowned scientific databases were presented, forming **60 points** with a minimum requirement of **50 points**.

Based on an analysis of the information presented by Chief Assistant Professor Maya Popova PhD regarding her publication, project, and teaching activities, as well as citations of her scientific works, I conclude that she exceeds the minimum national scientometric requirements set by the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB) and the requirements of the Regulations for its implementation at the Agricultural University (PPZRASRB), having achieved a total of **497.5 points** with a minimum requirement of **400 points**.

3. Main areas of the candidate's research work. Demonstrated skills or aptitude for leading scientific research – project leadership, secured external funding.

Based on an analysis of the scientific output presented by Chief Assistant Professor Maya Popova PhD, I will mark the following main areas of her research activity:

- Genetic structure, pedigree organization and selection characteristics of horse breeds.
- Study of the exterior, body indices, growth and development of horses of Bulgarian breeds.
- Study of physiological, hematological and biochemical indicators in horses of Bulgarian breeds.
- Genetic parameters, selection traits and population structure in horses.
- Reproductive characteristics and factors influencing reproduction in horses.

- Studying the possibilities of using modern technologies for tracking and monitoring of free-range horses.

The presented scientific production with which the candidate participates in the competition covers a wide range of research in the above-mentioned scientific fields. The relevance and depth of her scientific research are impressive. Modern research methodologies, equipment, and methods for processing the obtained results have been applied. The interpretations and conclusions made demonstrate her skills in conducting and managing scientific research. I give a high overall assessment of the choice of the main areas of research work of Chief Assistant Professor Maya Popova PhD, as well as her skills in leading and conducting scientific research, managing and implementing scientific projects, including those with external funding.

4. Assessment of the candidate's pedagogical training and activities. Her role in the training of young scientists.

Fulfilling and exceeding the standards for academic employment at the Faculty of Agronomy at the Agricultural University, Chief Assistant Professor Maya Popova PhD conducts lectures and practical classes with students in the Bachelor's Degree Program in the disciplines: "Biological Foundations of Horse Breeding", "Equestrian Technology", "Equestrian Breeding", "Ethology", "Equestrian Tourism, Amateur and Therapeutic Riding". In the Master's Degree Program, the candidate in the competition conducts lectures, seminars and practical classes in the disciplines: "Fundamentals of Horse Breeding", "Breeding Programs in Horse Breeding", "Management of Genetic Resources in Horse Breeding" and "Biotechnologies of Reproduction in Horse Breeding".

Every year, Dr. Popova leads summer internships for students from the Agricultural University. Under her methodological and scientific guidance, 25 students have successfully defended their theses – 19 in the Bachelor's and 6 in the Master's degree programs.

All of the above mentioned is indicative of the candidate's high level of teaching qualifications, skills, professional expertise and commitment to the educational process, as well as the significant role and contribution she has to the training of young scientific staff at the Agricultural University. The feedback from students and lecturers about her work is positive. Based on all this, as well as on my personal impressions, I

give a highly positive assessment of the teaching activities of Chief Assistant Professor Maya Popova PhD.

5. Significance of the results obtained, proven by citations, publications in prestigious journals, awards, membership in international and national scientific bodies, etc.

The results of the candidate's research have high theoretical, scientific and practical significance. I base this conclusion on her scientific publications in prestigious scientific journals and the citation rate of her scientific output. The latter is indicative of her recognition in scientific circles in our country and abroad. I give a high overall assessment of the significance of the results obtained and the quality of the scientific works of Chief Assistant Professor Maya Popova PhD.

6. Significance of contributions to science and practice. A motivated answer to the question of the extent to which the candidate has a clearly outlined profile of scientific research work

Based on her overall scientific output, the candidate in the competition presented a report on the contributions. Original, methodological, scientific, as well as scientific-applied contributions have been formulated. I express my agreement with the report presented in this way. I would like to emphasize some of the results achieved in the candidate's scientific developments, which have special contributions in the field of this competition:

- The genealogical structure, population status and selection features of the Danube and East Bulgarian horse breeds have been studied. The results are important for the development of selection programs and for the preservation of the genetic diversity of the two breeds (C6, C2, C5). **Original scientific contribution.**

- Research has been conducted to study the exterior, body indices, growth and development of horses of the Karakachan and East Bulgarian breeds, as well as on the inheritance of some sports qualities. The results obtained contribute to a better understanding of the morphological features, growth patterns and genetic parameters of traits related to the sports productivity of horses. (C3, C4, C10, C1). **Scientific and applied contribution.**

- The influence of breed and age on hematological and biochemical parameters in mares of purebred Arabian and East Bulgarian breed was studied. It was found that breed is a statistically significant source of variation in lactate dehydrogenase (LDH) activity. Age has a significant influence on the content of monocytes in the blood, and the interaction between breed and age group affects calcium concentration and platelet distribution width (PDW) (C7). **Original scientific contribution**

- Monitoring of the development of the genealogical lines of Purebred English stallions in the East Bulgarian horse breed for the period 2000–2018 (D4). **Scientific and applied contribution.**

- The sources of specific variance and the genetic parameters of the type and exterior traits, movement qualities, the relationship between live weight and movement qualities in 2-year-old horses of the East Bulgarian breed were studied. The results obtained show that at an early age morphological indicators can influence the manifestation of movement qualities in horses (D1, D2, D12). **Scientific contribution.**

- Studies have been conducted on the reproductive performance of mares of the East Bulgarian and Haflinger breeds. The results obtained contribute to a better understanding of the reproductive characteristics of the studied breeds and are important for optimizing breeding and reproductive activities in horse breeding (D3, D7, D5). **Methodological contribution**

- The morphological features, behavioral reactions and ecological role of autochthonous horse breeds were studied, as well as the possibilities for using modern technological tools for monitoring free-range horses (D8, D11, D10, D6). **Original scientific contribution.**

- Basic behavioral reactions in year-round free-range horses of the Karakachan breed (D11) were studied and analyzed. Original data were obtained on the basic ethological reactions and behavioral activity of Karakachan horses in free-range conditions, and the influence of seasonal and climatic factors on their behavior was established. **Original scientific contribution.**

I believe that the candidate has a clearly defined profile in her research work. The reasons for this conclusion are related to the above-mentioned areas of her research activity, the volume and depth of the research, as well as the quality of the scientific

works. The contributions that the candidate makes through her research and publication activities have a high degree of significance for science and practice.

7. Critical notes and recommendations

I would like to make a recommendation to the candidate in the competition. I believe that based on the teaching and research experience gained, the high level of expertise and practical experience in the field of horse breeding, it would be appropriate for Chief Assistant Professor Maya Popova PhD to develop her own, or co-author, new teaching aids - manuals and textbooks in the disciplines she teaches, which she could include in her future teaching work.

8. Personal impressions and opinion of the reviewer

I have excellent impressions of the overall teaching, research, publishing and expert activities of Chief Assistant Professor Maya Popova PhD. She is a well-established teacher, scientist, and expert in the field of horse breeding. The large number of disciplines taught, participation in scientific forums in the country and abroad, the numerous publications and citations in refereed and indexed scientific publications, the printed books, two breeding programs and a reference book, the specializations and qualification courses conducted in the country and abroad, the feedback from students, teachers, colleagues from practice, as well as personal observations, are the basis for the formation of these impressions of mine. In addition to all this, I cannot fail to note the long-term work of Dr. Popova in the East Bulgarian Horse Association, of which she is currently the Chairman. In my opinion, she has achieved a very high level of combining teaching, research, expert and applied activities.

CONCLUSION

Based on the analysis of the candidate's pedagogical, scientific and applied scientific activities, I believe that Chief Assistant Professor Maya Georgieva Popova PhD meets the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria, and the Regulations in the Agricultural University for its implementation.

Chief Assistant Professor Maya Popova PhD possesses skills in teaching, planning, coordinating and implementing research activities, excellent communication, analytical skills, teamwork, decision-making and responsibility-

taking skills. She is a well-established lecturer, authoritative scientist, experimenter and propagandist of horse breeding science and practice, whose scientific achievements and expertise fully correspond to the requirements for holding the academic position of "Associate Professor".

All this gives me reason to evaluate her overall activity **POSITIVELY**. I would like to propose that the esteemed Scientific Jury also vote positively, and that the Faculty Council of the Faculty of Agronomy at the Agricultural University - Plovdiv elect Chief Asst. Prof. Maya Georgieva Popova PhD to the academic position of "Associate Professor" in the field of higher education "Agricultural Sciences and Veterinary Medicine", professional field "Livestock Breeding" and the scientific specialty "Horse Breeding and Other Equine Sciences"

Date: 28.08.2026
Plovdiv

Reviewer:
(Prof. R. Slavov DSc)