

REVIEW

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Internal Member of the Scientific Jury, according to Order No. R-3669/22.07.2025 of
the Vice-Rector for Research and Development at MU-Plovdiv

REGARDING: Competition for the academic position of "Professor" in the scientific specialty "Hygiene" in higher education field 7. Healthcare and Sports, professional direction 7.1. Medicine, announced for the needs of the Department of Hygiene, Faculty of Public Health at MU-Plovdiv, in the State Gazette, issue 41 from 20.05.2025.

The sole candidate in the competition is Assoc. Prof. Dr. Stanislava Harizanova, MD, Associate Professor of Hygiene at the Department of Hygiene, MU-Plovdiv.

I. Analysis of the candidate's career profile

Assoc. Prof. Dr. Harizanova, MD completed her higher education in 2005, earning a Master's degree in Medicine from the Medical University – Plovdiv. In 2014, she defended her PhD thesis in the scientific specialty "Hygiene," with a dissertation entitled: "Burnout Syndrome among Employees in Correctional Facilities."

She holds three officially recognized clinical specialties: Occupational Medicine (2016), General Hygiene (2019), and Nutrition and Dietetics (2023), which demonstrates a consistent and purposeful professional development, as well as a commitment to continuous improvement of knowledge and competencies in accordance with contemporary health challenges. Her accumulated expertise in these key areas of preventive medicine establishes her as a valuable specialist with a broad interdisciplinary approach to the protection and promotion of public health.

Assoc. Prof. Harizanova began her academic career in 2008 as an assistant at the Department of Hygiene, MU-Plovdiv. In 2018, she was habilitated as an Associate Professor of Hygiene, and since 2020, she has served as the Head of the Department. Since 2022, she has also been performing leadership functions at the faculty level as Vice Dean for Educational Affairs at the Faculty of Public Health of the same university.

Assoc. Prof. Harizanova is an active member of numerous national and international professional and scientific organizations, including: the Bulgarian Medical Association, the Bulgarian Public Health Association, the European Public Health Association (EUPHA), the Bulgarian Scientific Society of Public Health, the Union of Scientists in Bulgaria, and the Bulgarian Society of Nutrition and Dietetics.

She is a member of the editorial board of the peer-reviewed scientific journal *Journal of Health and Environmental Research*, as well as a member of the Committee for Organizing and Conducting Internal University Competitions at MU–Plovdiv for two consecutive terms. She also serves as chair of the student competition for the best translation from French.

She has been elected as a member of the Faculty Council of the Faculty of Public Health and of the Academic Council of the Medical University – Plovdiv.

She has excellent command of French, English, and Spanish, which enhances her effectiveness in international scientific and academic communication.

II. Evaluation of the candidate's scientific work and overall academic development

- General description of the materials submitted for the competition

The materials submitted by the candidate fully provide the necessary foundation for both quantitative and qualitative assessment of her overall academic development. The documentation is detailed, clearly structured, and systematically presented through summaries, lists, and supporting evidence. This facilitates tracking the candidate's academic and scientific activity and creates the basis for an objective and well-reasoned evaluation.

- General characteristics of the submitted scientific works

Assoc. Prof. Dr. Stanislava Harizanova, MD presents a body of scientific work that is impressive in both scope and content, fully aligned with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the internal regulations of MU–Plovdiv.

A total of 55 scientific works are subject to review, including: one individual monograph; one co-authored book based on the defended doctoral dissertation; 21 publications in scientific journals that are peer-reviewed and indexed in globally recognized databases (SCOPUS and Web of Science), 11 of which are in journals

with an Impact Factor; 24 publications in non-indexed peer-reviewed journals or edited collective volumes; three textbooks and five teaching aids.

The candidate's publishing activity is evenly distributed over the years, which is evidence of a systematic and consistent research effort and reflects a trajectory of continuous academic growth. The publications appear in prestigious international journals such as *Healthcare*, *Cosmetics*, *Pharmacia*, *Journal of Functional Biomaterials*, *Iranian Journal of Public Health*, *African Health Sciences*, *Work*, *Journal of Environmental Protection and Ecology*, among others. In Bulgaria, her articles are published in specialized journals such as *Folia Medica*, *Management and Education*, *General Medicine*, *Nursing Care*, *Journal of IMAB*, *Acta Medica Bulgarica*, etc. The total Impact Factor of the indexed publications is 22.382.

As a candidate in the competition, she has submitted an objective and accurate summary of her scientific contributions, which I fully accept. The analysis of her scientific output reveals a clear focus on current and significant topics in the fields of hygiene and public health. The main thematic areas can be summarized as follows:

1. Nutrition, Nutrigenetics, and Public Health

The contributions in this area have high applicability in clinical practice and preventive medicine. They focus on:

- ✓ Studying dietary behaviors of various risk groups – students, young people, shift workers;
- ✓ Validating instruments for the assessment of lifestyle and eating habits;
- ✓ Analyzing cultural differences in nutrition;
- ✓ Exploring the relationship between diet and health risks (e.g., BMI, metabolic syndrome);
- ✓ Presenting innovative contributions in nutrigenetics and nutrigenomics, including the development of personalized nutrition strategies based on genetic profiling.

2. Occupational Stress and Burnout

This research direction focuses on the psychosocial aspects of the professional environment, with particular emphasis on the phenomenon of burnout and its associated factors. The studies are in-depth and empirically grounded, targeting high-risk occupational groups for whom chronic stress and professional burnout have

serious consequences for both individual well-being and workplace effectiveness. The candidate has thoroughly examined:

- ✓ Academic burnout among international medical students;
- ✓ Burnout among general practitioners, nurses, and correctional officers;
- ✓ Occupational conflict and distress among public health inspectors;
- ✓ Digital stress among IT professionals;
- ✓ Job satisfaction among academic staff.

A particularly important strength is the interdisciplinary approach, combining epidemiology, psychology, and organizational behavior. The candidate proposes concrete interventions and policies to address occupational stress and improve mental health outcomes.

3. Occupational and Behavioral Health Risks

Assoc. Prof. Harizanova's research covers a broad spectrum of biological, chemical, and behavioral health risks, affecting individuals in both occupational contexts and as a result of personal lifestyle choices, including those related to body modification. What unifies these topics is the focus on the interaction between environment, behavior, and health—in both professional and personal psychosocial contexts.

The first area within this direction emphasizes the assessment of exposure to biological and chemical agents, especially under adverse working conditions. The publications analyze:

- ✓ Occupational hazards in wastewater treatment plants, including in the context of COVID-19;
- ✓ Gaps in protective measures for pharmacists working with cytotoxic drugs, along with proposed improvements in regulation;
- ✓ Psychological consequences of working in high-risk environments—such as fear, anxiety, and mental fatigue.

In the second research area, the candidate examines body modifications (tattoos, piercings, permanent makeup) as both a social and health-related phenomenon. The studies highlight:

- ✓ High prevalence among young people;
- ✓ Lack of effective regulation and standards governing these practices;
- ✓ Links between mental health, identity-seeking behavior, and the tendency toward body modifications.

By integrating the study of risks arising from both occupational conditions and social/individual choices, the candidate demonstrates a distinctly interdisciplinary approach and contributes to the development of public health policies, prevention strategies, and psychosocial support frameworks.

4. Innovative Technologies and Digitalization in Healthcare and Education

In alignment with current trends in the evolution of healthcare and education, the candidate dedicates part of her research and applied work to the exploration of innovative technologies and digitalization as tools for improving patient care, educational effectiveness, and workplace quality.

This research area encompasses both technological innovations—such as 3D bioprinting—and digital solutions related to teaching, professional training, and the psychosocial effects of digital environments.

The studies include analysis of the application of new technologies within the context of the pharmaceutical industry, educational systems, and the mental health of professionals working in increasingly digitalized settings. The approach is interdisciplinary, integrating technical, ethical, and social dimensions, which adds both practical relevance and academic value to the research.

5. Ethical and Legal Aspects of Healthcare

Key issues related to the ethical and legal dimensions of healthcare are examined—an area that requires the integration of medical, social, cultural, and legal perspectives.

At the core of this field are topics of high social sensitivity and relevance, such as surrogate motherhood, the rights and social integration of people with mental disorders, as well as fairness in health policies. The research in this area not only identifies deficiencies in existing regulations and policies but also proposes concrete solutions, with the potential for real-world application in legislation and public practice. This underscores the candidate's commitment to socially significant issues and her contribution to the development of humane, equitable, and accessible healthcare.

● *Scientific Activity*

Assoc. Prof. Dr. Harizanova maintains an active scientific agenda, which enables her to effectively disseminate the results of her research. To date, she has participated in

41 scientific forums, including 24 with international participation, which is a clear indicator of her established presence in the scientific community, both nationally and internationally.

She is actively involved in the development and implementation of research and educational projects. She has taken part in three projects—one international, one national, and one institutional. In two of these, she holds leadership roles—as the coordinator of the international project and principal investigator in the internal university project.

Her scientific competence is highly regarded, as reflected by her participation as chair or member of 18 scientific juries under the provisions of the Law on the Development of Academic Staff in the Republic of Bulgaria. She also takes part in the organizational and scientific committees of three academic conferences and has been invited as a reviewer for three scientific monographs.

III. Evaluation of the Monograph or Equivalent Publications Submitted for the Professor Competition

Assoc. Prof. Harizanova participates in the competition with a sole-authored monograph entitled: "Academic Burnout among Medical Students: Assessment and Approaches to Prevention".

The topic of the monograph is highly relevant, especially in the context of the globalization of higher education and the growing number of international students in Bulgarian medical universities. The syndrome of professional and academic burnout represents a major challenge to the health and academic success of medical students, particularly in a multicultural environment.

The submitted monograph is a scientifically grounded, methodologically sound, and application-oriented work, which meets the requirements for academic quality and originality. The structure of the monograph is clear and organized into four consecutive chapters, covering:

1. Theoretical foundations and models of burnout syndrome;
2. Specific characteristics of international medical students;
3. Original empirical contribution, based on a study conducted at MU – Plovdiv;
4. Recommendations for prevention, interventions, and institutional policies.

The content demonstrates a solid theoretical grasp of the topic, strong empirical substantiation, and a commitment to practical solutions.

Among the main contributions of the monograph are:

- ✓ A study on academic burnout among international students—a topic previously underexplored in Bulgarian scientific literature;
- ✓ An analysis of educational satisfaction, adaptation, and psychosocial risks;
- ✓ Tracking of harmful habits as a response to academic pressure;
- ✓ Concrete recommendations addressed to university administration, teaching staff, and student communities;
- ✓ Policy suggestions and preventive strategies, based on the findings of the study.

The research approach demonstrates good methodological training and an appropriate selection of methods in line with the goals and characteristics of the study group. The socio-demographic profile of the participants and the integrated assessment of satisfaction and coping behaviors are especially valuable.

The monograph fits logically within the thematic scope of Assoc. Prof. Harizanova's research work. I consider that it fully meets the criteria for a habilitation thesis, in accordance with the Law on the Development of Academic Staff in the Republic of Bulgaria and the internal regulations of MU – Plovdiv.

IV. Citation Impact of the Candidate's Publications in National and International Literature (Publication Visibility)

The candidate demonstrates significant scientific recognition and impact, evidenced by a total of 119 citations across 29 publications. Of these:

- ✓ 63 citations are in peer-reviewed and indexed journals in internationally recognized databases such as Scopus and Web of Science;
- ✓ 7 citations are in monographs and edited scientific volumes;
- ✓ 45 citations are in non-indexed but peer-reviewed journals.

It is especially noteworthy that 89% of all citations are by foreign authors, which indicates high international visibility and recognition of her scholarly contributions.

Her Scopus h-index is 4, confirming a sustained publication activity and citation rate.

V. Comprehensive qualitative assessment of teaching and methodological activities, including scientific supervision of students, doctoral candidates, and specialists in training.

Assoc. Prof. Dr. Harizanova is a well-established educator with 17 years of teaching experience in the system of higher medical education. Over the past three academic years, she has maintained an exceptionally high teaching load, averaging 1035 hours per year at the Medical University – Plovdiv.

She serves as the course coordinator for the pre-graduate internship in hygiene for both Bulgarian and international sixth-year medical students. Additionally, she acts as the head of the “Dietetics” program.

She actively participates in expert and examination committees for the state exams of students in the "Medicine" and "Public Health Inspector" programs, as well as for postgraduate specialists in "Occupational Medicine" and "General Hygiene".

She has served as academic supervisor for two PhD students, both of whom have successfully defended their dissertations. Her individual research mentorship of students and doctoral candidates has resulted in 12 co-authored publications in national and international journals and conference proceedings.

She also leads a student interest group in hygiene (in English) and conducts annual hygiene courses in English for Erasmus+ students.

Assoc. Prof. Harizanova has made a significant contribution in the field of health promotion. She is the author and implementer of educational programs targeting at-risk population groups, with a focus on healthy lifestyles, proper nutrition, physical activity, and prevention of harmful habits.

Through organized visits to kindergartens and schools in the city of Plovdiv, she conducts interactive educational sessions involving medical students as a form of practical application of academic knowledge.

In the scope of her expert activity, she has been selected as a representative of the Medical University – Plovdiv in various working groups on key educational and strategic issues, including:

- ✓ Updating of the Unified State Requirements (USR) for the “Nurse” specialty;
- ✓ Development of a Strategy for the Advancement of Health Care Professions, particularly in the area concerning the profession of “Physician Assistant”;
- ✓ Participation in initiatives to optimize the procedures and conditions for acquiring medical specialties within the national healthcare system.

VI. General Evaluation of the Candidate’s Compliance with the Mandatory Requirements and Scientometric Indicators

The materials submitted by the candidate fully meet and significantly exceed the minimum national requirements, as well as those set by the Medical University – Plovdiv for the academic position of Professor (see Table 1).

Table 1. Comparative Overview of the Results Achieved by Assoc. Prof. Dr. St. Harizanova, PhD, and the Minimum Required Points for the Academic Position of "Professor" According to Indicator Groups

Indicators	Academic position of "Professor" MU-Plovdiv	Assoc. Prof. St. Harizanova, MD, PhD
Indicator A	50	50
Indicator B	-	-
Indicator B	100	100
(B) 3. Habilitation work - monograph	-	100
Indicator Г	300	593,7 т.
(Г) 6. Published book based on a defended dissertation for awarding the educational and scientific degree "Doctor" or for awarding the scientific degree "Doctor of Sciences."		40
(Г) 7. Publications and reports published in scientific journals, refereed and indexed in internationally recognized databases of scientific information.	-	321,9
(Г) 8. Publications and reports published in non-refereed journals with scientific peer review or published in edited collective volumes.	-	231,8
Indicator Д	400	1155 т.
(Д) 10. Citations or reviews in scientific publications referenced and indexed in world-renowned databases of scientific information or in monographs and collective volumes	-	1005
(Д) 11. Citations in monographs and peer-reviewed collective volumes.	-	70
(Д) 12. Citations or reviews in non-refereed peer-reviewed scientific publications		80
Indicator E	150	392,4т.
(E) 14.Guidance of a successfully defended doctoral		80

student		
(E) 15. Acquired medical specialty		120
(E) 16. Participation in national scientific and educational projects	-	30
(E) 19. Leadership of an international scientific or educational project		40
(E) 20. Published university textbook or textbook that is used in the school network		15
(E) 21. Published university textbook or textbook that is used on the school network		17,4
(E) 22. Training of interns, specialists and doctoral students		90
Indicator Ж	500	2984 т.
Teaching workload (lectures and exercises):		2284
Academic position:		700

VII. Conclusion

Assoc. Prof. Dr. Stanislava Harizanova, PhD is a recognized specialist with a well-defined scientific profile, distinguished by an interdisciplinary approach, topical research focus, and high social relevance. Her scholarly activity centers on key areas such as hygiene, nutrition, public health, occupational health, mental health, and bioethics.

She stands out with in-depth empirical research published in prestigious scientific journals, as well as with active participation in national and international scientific forums. Her contributions are both theoretical and applied, with a direct impact on educational practices, health prevention, occupational risk management, and the development of recommendations for health and educational institutions.

Her work demonstrates a high level of innovation—including the introduction of modern approaches such as nutrigenetics, digital technologies in healthcare, and analysis of psychosocial workplace factors.

Her teaching activity is equally impressive, marked by professionalism, dedication to students, and the skillful integration of scientific achievements into the educational process. Her active involvement in the education of both Bulgarian and international students, in the training of postgraduate specialists and doctoral students, and in the

promotion of health culture among young people, further underscores her public engagement.

Taking into account her published works, project participation, teaching experience, scientific supervision, and her overall contribution to the advancement of modern health education and practice, I believe that Assoc. Prof. Dr. Stanislava Harizanova, PhD fully meets the requirements for appointment to the academic position of Professor in the relevant scientific field.

Based on all of the above, I confidently cast my positive vote and recommend that the esteemed Academic Committee appoint Assoc. Prof. Dr. Stanislava Harizanova, PhD to the academic position of "Professor" in the scientific specialty of Hygiene, at the Department of Hygiene, Faculty of Public Health, Medical University – Plovdiv.

Заличено на основание
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Reviewer.....

/ Prof. M. Semerdjieva, MD,PhD /