

REVIEW

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of the materials submitted for participation in a competition
for the academic position of “Associate Professor”
at Plovdiv University “Paisii Hilendarski”

in: field of higher education 5. Technical Sciences
professional field 5.2. Electronics, Electrical Engineering and Automation
(Theoretical Electrical Engineering)

In the competition for the academic position of “Associate Professor”, announced in the State Gazette, No. 34 of 07.04.2026 and on the website of Plovdiv University “Paisii Hilendarski” for the needs of the Department of Power Engineering and Communications at the Faculty of Physics and Technology, the sole candidate is Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., from Plovdiv University “Paisii Hilendarski”.

1. General presentation of the submitted materials

By Order No. RD-22-1116 dated 05.06.2026 of the Rector of Plovdiv University “Paisii Hilendarski” (PU), I have been appointed as a member of the scientific jury of a competition for the academic position of “Associate Professor” at PU in the field of higher education 5. Technical Sciences, professional field 5.2. Electronics, Electrical Engineering and Automation (Theoretical Electrical Engineering), announced for the needs of the Department of Power Engineering and Communications at the Faculty of Physics and Technology.

Documents for participation in the announced competition have been submitted by a single candidate:

Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., from Plovdiv University “Paisii Hilendarski”.

The set of materials submitted in hard copy by Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., is in accordance with the Regulations for the Development of the Academic Staff of PU and includes the following documents: application form to the Rector for admission to participation in the competition; CV in European format; copy of a higher education diploma with an acquired educational and qualification degree “Master”; copy of a diploma for the educational and scientific degree “Doctor”; list of scientific works; scientific works (copies of publications); certificate of compliance with the minimum national requirements; declaration of originality and authenticity of

the attached documents; annotations of the materials under Art. 76 of the Regulations for the Development of the Academic Staff of PU (in Bulgarian and English); self-assessment of the contributions; list of citations; document certifying employment experience; documents for teaching activity; documents for research activity; documents for participation in research projects; and other documents such as certificates, attestations, etc.

The candidate, Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., has submitted a total of 29 scientific works, 1 monograph, 1 book, 1 co-authored textbook, 1 co-authored teaching aid, and 2 student manuals. Accepted for review are 1 habilitation work – a monograph, 29 scientific works that are outside the dissertation and are taken into account in the final evaluation, 1 textbook, 1 co-authored teaching aid, and 2 student manuals. The following items from the list are not reviewed: the dissertation for acquiring the educational and scientific degree “Doctor” and 5 scientific works related to the dissertation. The distribution of the scientific works by the relevant categories, in Bulgaria and abroad, is as follows: 7 were presented at conferences abroad, 2 were published in a scientific journal with Scopus Q4 quartile, and 20 were published in sources not indexed in Scopus and Web of Science. A list of 30 identified citations is presented, 12 of which are in publications indexed in Scopus.

2. Brief biographical information about the candidate

Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., was born in 1969. She completed her secondary education in 1987. Since 1993, she has held a Master of Engineering degree in “Electronic Engineering and Microelectronics”, with specialization in “Electronic Engineering”, from the Technical University of Sofia – Plovdiv Branch. In 2015, she defended a dissertation entitled “Investigation of the Possibilities for Measuring the Dielectric Loss Tangent of Equipment under Operating Conditions” and acquired the educational and scientific degree “Doctor” in scientific specialty 5.2. Electronics, Electrical Engineering and Automation at the Technical University of Sofia. She began her professional career in 1996 as an Assistant Professor at the Technical College – Smolyan, Plovdiv University “Paisii Hilendarski”.

Since 2017, she has held the academic position of “Chief Assistant Professor” at Plovdiv University “Paisii Hilendarski” in the field of higher education 5. Technical Sciences, professional field 5.2. Electronics, Electrical Engineering and Automation.

The professional biography of Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., gives me reason to conclude that the candidate possesses high educational and professional potential for research and teaching activities.

3. General characteristics of the candidate's activity

During the last four academic years (2021–2025), the candidate has had an average classroom workload of 916 hours, delivering lectures and conducting practical classes in the following disciplines: “Electrical Engineering 1”, “Electrical Engineering 2”, “Electrical Engineering”, “Electrical Engineering and Electronics”, “Electrical Engineering Materials”, “Electrical Measurements / Measurements in Electronics”, “Measurement Technology”, “High Voltage Engineering”, “Power Conversion Engineering”, “Relay Protection”, “Power Converter Devices in Electric Vehicles”, and “Renewable Energy Sources / Technologies and Systems for Renewable Energy Sources” – a total of 12 different academic disciplines.

From the materials submitted for participation in the competition for the academic position of “Associate Professor” by Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., it is evident that she has published one habilitation work – a monograph entitled “Opportunities for Teaching Students through Simulation Studies in Electrical Engineering under Pandemic Conditions”. She is a co-author of one textbook and one teaching aid. She is also the author of two student manuals: 1. “Analysis of Transient Processes in Linear Electrical Circuits” and 2. “Electrical Engineering Manual”.

Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., has provided a report on her work with students, from which it is evident that 8 students under her supervision have successfully defended their diploma theses and that she has prepared 8 reviews of diploma theses. She has 6 publications with student participation.

This is evidence of her indisputable teaching qualifications and high professional qualities.

The distribution of the scientific works by the relevant categories, in Bulgaria and abroad, is as follows: 11 scientific publications in sources that are referenced and indexed in the world-renowned scientific databases Web of Science and Scopus, from group G7.1 to G7.5. In addition, 24 scientific publications in non-refereed peer-reviewed journals or edited collective volumes are presented.

Based on the scientific publications presented by Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., it can reasonably be summarized that the main scientific contributions are:

1. A conceptual model has been developed for integrating simulation studies as an intermediate stage between theoretical instruction and real experimentation in engineering education, applicable to both distance and face-to-face learning.
2. The role of virtual laboratory environments in increasing the effectiveness of electrical engineering education and in developing engineering competencies within a digitalized educational environment has been substantiated.

3. The capabilities and limitations of contemporary simulation environments for modeling and investigating electrical and electronic processes have been analyzed.

4. Teaching methodologies in Electrical Engineering have been developed using virtual laboratories and simulation environments such as NI Multisim, MATLAB/Simulink, and TINA-TI, applicable to contemporary engineering education.

5. Simulation models and algorithms have been created for the analysis of electrical circuits, transient processes, and electronic devices in engineering education.

6. A practical approach has been proposed for conducting laboratory exercises and experimental studies in electrical engineering through virtual environments and computer modeling.

The candidate has presented a list of 30 identified citations. The submitted citation report shows that 12 citations are from works indexed in Scopus. The remaining 18 citations are from works not indexed in Scopus and Web of Science.

There are no self-citations among the stated number of citations, which is a positive indicator.

A comparison between the table “Minimum National Requirements” for opening a procedure for the academic position of “Associate Professor” in professional field 5.2 and the table submitted by the candidate, Chief Assistant Professor Velislava Hristova Raydovska, Ph.D. (8. Certificate of Compliance with the Minimum National Requirements – Appendix 1), shows that the quantitative criteria for holding the academic position of “Associate Professor” have been met for all indicators of the minimum national requirements.

Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., is a member of the Union of Scientists in Bulgaria, Smolyan Branch.

4. Assessment of the candidate’s personal contribution

From the materials submitted for the academic position of “Associate Professor” in scientific specialty 5.2, it is evident that the candidate’s personal contribution is indisputable, as she is the author of the monograph and of the published book based on her dissertation. All remaining scientific works are co-authored, and Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., is the first author of 15 of them.

5. Critical remarks and recommendations

It is noteworthy that all submitted publications indexed in the international databases Scopus and Web of Science (G7.1–G7.5) are co-authored, and the candidate is not the first author of any of them.

I recommend that in the future the candidate continue her active research work with students and doctoral students, and that she publish scientific articles in prestigious scientific journals with a high impact factor, including as a sole author.

6. Personal impressions

I have known Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., for more than 15 years through our joint work as lecturers in various academic disciplines at the Technical College – Smolyan, Plovdiv University “Paisii Hilendarski”, and later as colleagues at the Smolyan campus of the Faculty of Physics and Technology.

My overall impressions from her participation in scientific forums are that she is highly qualified as both a lecturer and a researcher and has strong research potential.

My personal impressions of her work are that she demonstrates exceptional responsibility toward her students and colleagues.

CONCLUSION

The documents and materials submitted by Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., meet all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB), the Regulations for the Implementation of ZRASRB, and the relevant Regulations of Plovdiv University “Paisii Hilendarski”.

The candidate in the competition has submitted a sufficient number of scientific works published after the materials used in the defense of the educational and scientific degree “Doctor” (Ph.D.). The candidate’s works contain original scientific and scientific-applied contributions that have received international recognition. Her theoretical developments have practical applicability, and some of them are directly oriented toward the educational process. The scientific and teaching qualifications of Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., meet the requirements of the competition. After becoming acquainted with the materials and scientific works submitted in the competition, analyzing their significance and the scientific, scientific-applied, and applied contributions contained in them, I find it reasonable to give my positive assessment and recommend that the Scientific Jury prepare a report-proposal to the Faculty Council of the Faculty of Physics and Technology at Plovdiv University “Paisii Hilendarski” for the election of Chief Assistant Professor Velislava Hristova Raydovska, Ph.D., to the academic position of “Associate Professor” at Plovdiv University “Paisii Hilendarski” in the field of higher education 5. Technical Sciences, professional field 5.2. Electronics, Electrical Engineering and Automation (Theoretical Electrical Engineering).

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Reviewer:
(Prof. Dimitar Tokmakov, Ph.D.)