OPINION

by Assoc. Prof. Stanka Ivanova Hadzhikoleva, PhD, PU "P. Hilendarski"

on the materials submitted for participation in the competition
for the academic position "associate professor"
at Plovdiv University "Paisii Hilendarski"
in: Area of Higher Education 4. Natural sciences, Mathematics and Informatics,
Professional Field 4.6 Informatics and Computer Sciences
(Information Technology on the Internet)

In the competition for "associate professor" announced in the State Gazette, issue 39 of 05.05.2023 and on the website of Plovdiv University "P. Hilendarski" for the needs of the Software Technologies department at the Faculty of Mathematics and Informatics, the only applicant participating is Hristo Toshkov Hristov from Plovdiv University "P. Hilendarski".

1. General presentation of the procedure and the applicant

By order № RD-21-1599 of 31.07.2023 of the Rector of Plovdiv University "P. Hilendarski" (PU) I have been appointed as a member of the scientific jury of a competition for the academic position of "associate professor" at the PU in the area of higher education 4. Natural sciences, Mathematics and Informatics, professional field 4.6. Informatics and Computer science (Information Technology on the Internet), announced for the needs of the Software Technologies Department at the Faculty of Mathematics and Informatics.

Only one applicant submitted documents for participation in the announced competition – Assistant Professor Hristo Toshkov Hristov, PhD, from PU "P. Hilendarski".

This opinion paper has been prepared in accordance with the requirements of the Act for the Development of the Academic Staff in the Republic of Bulgaria (ADASRB), the Regulations for the Implementation of the ADASRB (RIADASRB) and the Regulations for Development of the Academic Staff of Plovdiv University "Paisii Hilendarski" (RDASPU).

The set of materials presented by Hr. Hristov, PhD, on paper is in accordance with the Regulations for Academic Staff Development at the PU, and includes the following documents:

- Application for participation in the competition;
- European style CV;
- Diplomas for completed higher education – for "bachelor's degree", series VTU-2003, No 006737, registration number 41741 / 2003, issued by VTU "St. Cyril and St. Methodius" – V. Tarnovo; "master's degree", series VTU-2008, No 046878, registration number 60103 / 2008, issued by VTU "St. Cyril and St. Methodius" – V. Tarnovo and "PhD degree", № 1000209/27.06.2016, issued by PU "Paisii Hilendarski" on 27.06.2016, city of Plovdiv;
- Complete list of the scientific works;
- List of the scientific papers for participation in the competition;
- Scientific papers for participation in the competition (copies of the publications);
- List of citations;
- Certificate of compliance with the minimum national requirements;
- Certificate of compliance with the additional requirements of the FMI;
- Annotations of the materials (in Bulgarian and foreign language) for participation in the competition with a habilitation extended reference for scientific contributions;

- Papers for academic work;
- Papers for research activities;
- Certificate of work experience with Ref. No RD-38-146/18.07.2023;
- Declaration of originality and authenticity of the attached documents.

Hr. Hristov, PhD, obtained a master's degree at VTU "St. Cyril and St. Methodius", and in 2016 he defended his doctorate at the PU. In the period 2003 – 2008 he worked as a teacher in V. Tarnovo and Dimitrovgrad, teaching Informatics and preparing students for participation in national competitions and Olympiads. Since 2008, he has been teaching at the FMI of the PU as a part-time lecturer. In 2013, he was appointed to a main employment contract as an assistant at the "Software Technologies" department at PU "P. Hilendarski", and since 2016 he holds the position of "assistant professor".

2. General characteristics of the applicant's activity

Hr. Hristov, PhD, leads basic courses in "Web Design", "Introduction to Programming" and "Information Technologies on the Internet" in Bachelor's programs and "Web Technologies" in Master's programs at FMI at PU. In the period 2008-2020, he also conducted courses in "Object Oriented Programming", "Data Structures and Programming", "Introduction to Object Oriented Programming with Java", "Designing, Styling and Building Web Pages", "Analysis, Design and Programming of Software Applications", etc. He is the author of 1 teaching aid for students and 1 textbook that is currently in print.

He is the supervisor of more than 20 graduates from FMI who successfully defended their diploma theses. He attracts prominent students in his research work, as evidenced by 10 scientific publications co-authored with 4 students and 7 PhD students.

Hr. Hristov, PhD, has submitted a reference for participation in 9 research and educational projects related to conducting research in the field of Computer Technologies, Mathematics and Teaching Pedagogy. One of the projects is international, there are also 6 national and 2 university ones. The participation in 6 of the projects is certified by an official note issued by the "Scientific and Applied Activity" Deprtment at the PU.

The complete list of scientific works of Hr. Hristov, PhD, includes 43 works, 35 of which being scientific publications, 1 textbook, 1 teaching aid, 2 book chapters, 1 dissertation, 1 abstract and 2 requests for utility models. 19 of the works are indexed in the world-famous databases Web of Science, SCOPUS and/or IEEE Xplore.

A total of 14 scientific publications, 1 book chapter, 1 teaching aid and 2 applications for the registration of utility models to the Patent Office of the Republic of Bulgaria were submitted for participation in the competition. 9 of the scientific publications are indexed in Web of Science; 9 are indexed in SCOPUS, 6 of them are with SJR. 12 of the publications are in English, and 2 are in Bulgarian. 11 of the papers are published in journals, and 3 – in proceedings of international conferences. The scientific works for participation in the competition are co-authored, which shows advanced teamwork skills.

I believe that the 2 submitted requests for registration of utility models to the Patent Office are outside the field of the competition, so I do not accept them for review.

10 citations of 6 publications are presented, which were not presented in the procedure for acquiring the "PhD degree" or for occupying the academic position "assistant professor". All citing papers are indexed in Web of Sciences and/or SCOPUS.

The materials, presented by Hr. Hristov, PhD, for participation in the competition exceed the minimum national requirements, as well as the specific requirements of the FMI at PU, as follows:

- *Minimum national requirements* – indicator A – 50 proven points with a minimum requirement of 50 points; indicator B – 108 proven points with a minimum requirement of 100 points; indicator C – 231 proven points with a minimum requirement of 200 points; indicator D – 80 proven points with a minimum requirement of 50 points. Total number of proven points - 469, with a minimum requirement of 400 points.

- *Specific requirements of the FMI at the PU* – 14 publications are submitted, which were not submitted for the acquisition of the "PhD degree" or for occupying the academic position "assistant professor", with a minimum requirement of 10 publications; of the submitted publications, 11 are in journals, with a minimum requirement of 5 in journals; 1 teaching aid presented with a minimum requirement of at least 1 textbook or teaching aid; evidence submitted for 10 citations, with a minimum of 5 citations required.

The applicant's scientific works can be classified into 4 areas:

- Models and methods for designing and implementing software systems on the Internet;

- Design, modeling and inspection of accessible web content on the Internet;

- Management, automation and models of technologies for application in local networks and the Internet;

- Analyses, classifications and applications of technologies and tools for online learning.

I accept the works' results and contributions formulated in the author's habilitation report of the applicant, with which Hr. Hristov, PhD, participated in the competition. The results have a scientific and applied nature and can be defined as enriching the existing scientific field with new knowledge.

Hr. Hristov, PhD, is the first co-author in 10 of the publications, second co-author in 3 publications and third – in 1 publication. Although no independent publications have been presented, I have no doubt about the applicant's substantial personal contribution to the achievement of the results indicated by him.

In the world's scientific databases, Hr. Hristov, PhD, is presented as follows: Web of Sciences – 11 indexed documents, 6 citations, H-index-1; SCOPUS – 9 indexed documents, 6 citations, H-ined-2; Google Scholar – 36 indexed documents, 25 citations, H-index-2.

I accept the Declaration of Originality and Authenticity presented by the applicant, and I accept that in the scientific works with which he participates in the current competition, there is no plagiarism proven in accordance with the law.

3. Critical remarks and recommendations

I would recommend Hr. Hristov, PhD, to focus on more topical research areas that are of interest to modern science, and to continue to publish the results of his research in renowned journals, incl. through independent publications.

CONCLUSION

The documents and materials presented by Hr. Hristov, PhD, meet all the requirements of ADASRB, RIADASRB and RDASPU. He has presented a sufficient number of scientific works published later than the materials used in the defense of the "PhD" educational and scientific degree and later than the date when he was appointed to the academic position "assistant professor".

The results achieved by Hr. Hristov, PhD, in his educational and research activities fully correspond to the minimum national and additional requirements of FMI, accepted in connection with the Regulations of the PU for the application of ADASRB.

After familiarizing myself with the materials and scientific works presented for the competition, I find it reasonable and justified to give my positive assessment and to recommend the Scientific Jury to prepare a report-proposal to the FMI Faculty Council for the selection of assistant professor Hristo Toshkov Hristov, PhD, at the academic position of "associate professor" at PU "Paisii Hilendarski" in: area of higher education 4. Natural Sciences, Mathematics and Informatics, professional field 4.6. Informatics and Computer Science (Information Technologies on the Internet).

25.09.2023   **Opinion Paper prepared by**: ....

Assoc. Prof. Stanka Hadzikoleva, PhD