

OPINION

for a procedure for the academic position Associate Professor, announced in SG no. 57/26.06.2020 procedure for the academic position Associate Professor in: field of higher education 4. Natural sciences, mathematics and informatics; professional field 4.6. Informatics and Computer Science (Informatics) with a candidate Dr. Silvia Nikolaeva Gaftandzhieva.

Applicant of the procedure:

University of Plovdiv „Paisii Hilendarski“,
Department of Computer Science, Faculty of Mathematics and Informatics

Member of the Scientific Panel:

Assoc. Prof. Slavcho Shtrakov, Department of Informatics, SWU “N. Rilski”- Blagoevgrad, appointed by Order № P33 – 4109/25.09.2020 of the Rector of the University of Plovdiv “Paisii Hilendarski”

1. Brief bibliography.

- PhD – thesis title: Model and system for dynamic quality evaluation in higher education, 2017.
- Chief Assistant, University of Plovdiv, 2017.
- Master, Business informatics with English, University of Plovdiv, 2013
- Bachelor in Informatics, University of Plovdiv, 2012.

2. General description of the presented materials.

Dr. Silvia Nikolaeva Gaftandzhieva has submitted the following mandatory documents: Professional CV, full list of scientific works with their impact factor and number of citations, as well as those with which she participates in the procedure, detailed author's report for scientific contributions to this procedure, scientific works for participation in the procedure, a list of citations, diplomas for educational and scientific degree Doctor and Master, a list of research projects in which she has participated.

3. General characteristics of the research, teaching and scientific applied activities.

Dr. Silvia Gaftandzhieva participates in the procedure with 30 publications and 2 monographs, which are not presented for the awarding the educational and scientific degree PhD and for occupying the academic position Chief Assistant. Here, publications are scientific papers or reports on conferences, 12 of which are in peer-reviewed journals, and 10 are indexed in world-renowned databases with scientific information Web of Science and/or SCOPUS. 8 of the publications indexed in SCOPUS have an impact rank. 18 publications have been published in peer-reviewed conference proceedings, 3 of which in proceedings of international conferences and 5 in proceedings of national conferences. More than 10 citations have been noted in referenced scientific publications.

Along with her scientific activity, Dr. Silvia Gaftandzhieva also develops active teaching at the University of Plovdiv “P. Hilendarski”. She has participated in 12 research and educational projects in the field of information and communication technologies, e-learning and distance learning, including 5 international, 2 national and 5 university projects.

4. Analysis of scientific and scientific applied contributions.

Dr. S. Gaftandzhieva presents a detailed author's report, which describes and substantiates the author's claims for scientific and scientific applied contributions. The considered problems in the primary part refer to:

1. Various models have been developed for quality evaluation of various instances - in higher education; objects in any subject area; educational tests; electronic tests and test units; software, etc. Attempts have been made to automate these models. Due to "quality evaluation" is a very modern field (almost as much as football), the publications in it are so numerous that it is difficult for my humble persona to appreciate the contributions of individual authors. We get an indirect assessment from the fact that of the 11 publications presented, 3 are in journals indexed in WofS or Scopus. The last is undoubtedly a testament to a serious contribution in this area.

2. In the field of intelligent analysis of data for learning (known in the world research space as Learning Analytics), models with a set of indicators are developed. The models allows monitoring of learning outcomes (mainly of students for the needs of different stakeholders). Here Dr. S. Gaftandzhieva offers 4 publications, 2 of which are indexed in WofS or Scopus. I believe that the candidate has a noticeable contribution to this topic as well.

3. For the e-learning development, the possibilities for integration of the learning systems with external systems, such as digital repositories, information systems, popular web technologies, etc. have been studied and presented. From the 11 proposed publications, 4 of which are indexed in WofS or Scopus.

4. A package of templates of documents for organization and conduction of e-learning and distance learning, creation of e-resources, e-courses and e-textbooks is proposed. An e-course for training in Spreadsheets is presented, which realize the ideas of e-Learning 2.0 with integrated 11 web tools in 47 learning activities. The candidate applies here 9 publications, 2 of which are indexed in WofS or Scopus.

5. Dr. S. Gaftandzhieva participated in the writing of 1 textbook for students, system designers and application programmers and 12 e-textbooks for online learning, which is too much for her modest work experience (3 years).

5. Significance of contributions to science and practice.

The contributions of Dr. S. Gaftandzhieva, are mainly in the field of Computer models and systems for dynamic quality evaluation, Learning Analytics, Models and systems for e-learning, Pedagogical and social design of e-learning, Textbooks and teaching aids. It should be taken into account that knowledge in these areas is changing (developing) very dynamically and rapidly. Therefore, we cannot talk about scientific contributions to the fundamental theories of professional field 4.6 Informatics and computer science.

It can be concluded unequivocally from the attached list of citations that the achievements of the candidate for Associate Professor are significant and are well known and appreciated by the scientific community.

6. Critical notes and recommendations.

Dr. S. Gaftandzhieva has fulfilled the formal parameters of Regulations on the Implementation of the Development of Academic Staff in the Republic of Bulgaria Act, necessary for the academic position Associate Professor - number of scientific works, number of citations, etc.

As criticism and recommendations for her future work we can point out the following:

1. There are spelling and stylistic errors (missing letters or words, use of unreasonably long sentences, etc.) in some documents for the procedure (reports, publications, textbooks, etc.), compiled by the candidate in Bulgarian language. This critical note is typical for almost all researchers. Therefore, its task is only for the future improvement of the candidate.

2. From all 30 publications proposed by Dr. S. Gaftandzhieva for the procedure, no one is independent. The last raises doubts about her ability to generate independent scientific results and possibly advice future PhD students. I hope that after the successful outcome of this procedure, the candidate will concentrate her efforts in individual or with her graduates or doctoral students research.
3. My last critical note is not to the candidate in the procedure, but rather to the applicant of the procedure (PU "P. Hilendarski") and the Ministry of Education and Science, namely: According to my observations (I assume I mistake) for the last 10-15 years in the state universities of the Republic of Bulgaria, almost all procedures for academic positions are held by candidates who have completed Bachelor, Master and Doctor degrees at the same university. The last inevitably leads to encapsulation, marginalization and feudalization of universities.

7. Personal impressions.

I haven't.

8. Conclusion.

After I got acquainted with the overall teaching and research activities of Dr. S. Gaftandzhieva and having in mind the requirements specified in the Act on the Development of Academic Staff in the Republic of Bulgaria, Regulations on the Implementation of the Development of Academic Staff in the Republic of Bulgaria Act and the Regulations for their application in PU "P. Hilendarski", I give a **positive assessment** of her overall work. I believe that **Dr. S. Gaftandzhieva** is a very strong candidate for support in her application for **the academic position Associate Professor in the field of higher education 4. Natural Sciences, Mathematics and Informatics, professional field 4.6. Informatics and Computer Science (Informatics) at PU "P. Hilendarski". I recommend her most strongly.**

26.10.2020

Member of the Scientific Panel:

Assoc. Prof. Slavcho Shtrakov, DSc.