

STATEMENT

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About a competition for the occupation of the academic position "associate professor" in the field of higher education 1. Pedagogical sciences, professional field 1.3. Pedagogy of teaching in... (Informatics and Information technologies) for the needs of SU "St. Kliment Ohridski".

1. Contest details

The competition was announced in SG № 61 of 02.08.2022. The scientific jury was formed by order № RD 38-564/30.09.2022 of the Rector of SU "St. Kliment Ohridski" based on Art. 4 and art. 25 of the ZRASRB and art. 57 para.(1) and para.(2) of the Regulations for the implementation of the ZRASRB in accordance with the decision of the FS of FMI, Protocol No. 9/12.09.2022. The only candidate for the competition is Ch. assistant professor Filip Petrov Petrov, professor of the main employment contract at SU "St. Kliment Ohridski". The preparation of an standpoint was assigned by decision of the Scientific Jury dated 11.10.2022. There were no legal violations committed during the competition procedure.

2. Candidate details

Filip Petrov Petrov was born on March 26.03.1983. He graduated from secondary education in 2001 at 151 SOUPI, Sofia, profile "Software products and systems".

In the period between 2001-2006, he studied at SU "St. Kliment Ohridski", specialty "Applied Mathematics", OKS "Bachelor". In 2008, he graduated from the OKS Master's in "Teaching Technologies in Mathematics and Informatics".

In 2010, he was enrolled as a PhD student at Southwestern University "Neofit Rilski", Professional direction 1.3. Pedagogy of training in ... (Informatics and Information technologies), PhD program "Methodology of teaching in mathematics". In 2014, he successfully defended his dissertation and obtained the ONS "Doctor".

In the period between 2009-2015, he worked as an assistant at the Technical University, Sofia, FCSU. From 2015 to now, Filip Petrov holds the academic position of "principal assistant" at the FMI of Sofia University "St. Kliment Ohridski".

3. Description of scientific works

The scientific production of Filip Petrov Petrov includes a total of 28 titles (in Bulgarian and English), as follows: dissertation work, monographs - 2, textbooks and manuals for the higher school - 2, 1 textbook and 1 book for the teacher for the secondary school, 22 publications in proceedings of scientific conferences (national and international) and journals.

A total of 18 titles (12 in Bulgarian and 6 in English) have been presented from the entire scientific production for this competition.

I consider the number and quality of the presented scientific publications to be sufficient for holding the academic position of "associate professor". In my opinion, they present the candidate Filip Petrov Petrov as a professional specialist.

4. Scientific contributions

The scientific contributions in the publications submitted for participation in the current competition can be conditionally divided into the following different scientific areas in professional direction 1.3. "Pedagogy of teaching in...":

- The problems of informatics education in Bulgarian schools;
- Programmed education
- Education methods in Informatics and IT;
- Technological resources to support education in mathematics and informatics;
- And more

The problems of informatics education in Bulgarian schools are discussed in the monograph "Challenges to informatics education in Bulgarian secondary schools". An analysis of the current problems in the curricula and teaching content of the school computer science course was made. As a result, a restructuring of the existing curricula has been proposed.

Issues related to Programmed education are discussed in the monograph "Theory of Dialogue-Learning Programs". A literature review of the history of programmed learning and a summary of a large volume of scientific works related to dialog-learning programs has been made. The author's contributions are presented as part of the experience of working on student projects in recent years.

The issues related to Informatics and IT education methods are presented in 5 scientific articles. They present the accumulated knowledge and experience in the direction of reforming the content and organizational part of the candidate's teaching activity.

Contributions and experience in the field of technological tools to support mathematics and informatics learning are presented in 6 scientific publications. A variety of experiments and techniques are described that complement and extend established practice and scientific theory.

In 4 publications, different implemented and scientifically based ideas of Filip Petrov are considered: a system for controlling various electronic components of cars through voice

commands, an analogy between the traditional structure of course assignments, course projects, diploma theses and doctoral dissertations and the main stages in application development in practice at software companies; a method for measuring a zone of inhibition of microbial growth by means of a non-professional digital photograph also described.

The scientific contributions of Ch. Assistant Professor Filip Petrov Petrov, PhD, have a theoretical-methodological and practical-applied nature.

5. Teaching work

In the period 2009 - 2015, as an assistant at the Technical University, Sofia, Filip Petrov Petrov gives exercises on databases, programming and using computers, programming technologies for secure code, etc. and as a part-time assistant at Southwestern University "Neofit Rilski" - in "Linear Algebra" and "Analytic Geometry".

From 2015 to now Assistant professor Dr. Filip Petrov Petrov gives lectures and exercises in bachelor programs in the FMI of Sofia University "St. Kliment Ohridski" in "School Course in Informatics", "School Course in Information Technology", "Fundamentals of Secure Web Programming" and Master course "Programmed Learning", supervises student practices. Conducts "Web Design", "Database", and "Introduction to Programming" courses to students in the Postgraduate Teacher Training Program in Informatics and IT.

6. Language and style. Scientific ethics

The language of the publications is scientific. It meets the requirements that are set for this kind of research. The posts are well structured. The figures are of the required quality and successfully integrated. The rules of the scientific ethics have been followed. The citations are correct and accurate.

7. Notes and recommendations

I recommend the author that the presented theoretical propositions and new ideas to find their practical solution through the publication of guides for students and teachers in Informatics and Information Technologies, with the aim of providing modern training to students and greater efficiency of the educational process.

8. Conclusion

The documentation submitted for participation in the competition, the scientific contributions of a theoretical and practical-applied nature, and the candidate's activities as a teacher at SU "St. Kliment Ohridski" meet the requirements for occupying the academic position of "associate professor".

The research and training activities satisfy the requirements of the Law for development of the academic staff of the Republic of Bulgaria and the Regulations for its implementation, as well as the regulations of the SU "St. Kliment Ohridski".

Based on the above, I recommend the scientific jury to propose to the competent authority for the selection of the Faculty of Mathematics and Informatics at SU "St. Kliment Ohridski" to elect Ch. Assistant Professor Filip Petrov Petrov to take up the academic position of "docent" in professional direction 1.3. Pedagogy of training in.... (Informatics and Information Technologies), announced in SG No. 61 of August 2, 2022.

Sofia, 15.11.2022

Prepared the statement:

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