

## O P I N I O N

by Competition to hold academic position of “**Associate Professor**”

in a Professional direction: 1.3. Pedagogy of Teaching in ...

for the needs Sofia University “St. Kliment Ohridski” – Faculty of Mathematics and Informatics

The competition is announced in the state gazette, Issue 61, from 02.08.2022 and on the websites of the University and the Faculty

The opinion was prepared by: **Assoc. Prof. Dimitrina Ivanova Branekova, PhD, Trakia University - Faculty of Education**, member of academic jury by Professional direction 1.3. Pedagogy of Teaching in... (Informatics and Information Technologies) in the competition according to order № ПД 38-564/30.09.2022, by the Rector of Sofia University “St. Kliment Ohridski”

Only one candidate submitted documents for participation in the announced competition:

**Chief Assist. Prof. Filip Petrov Petrov, PhD**, Sofia University “St. Kliment Ohridski” – Faculty of Mathematics and Informatics

### **I. General description of the presented materials**

#### **1. Application data**

To participate in the competition, Dr Filip Petrov Petrov submitted the following documents:

- CV;
- copy of higher education diplomas "Bachelor's" and "Master's" diplomas and their annexes;
- a copy of a diploma for an acquired PhD;
- certificate of work experience in the specialty; employment contracts – 2 pcs.; occupational license
- lists of publications - a list of all publications and a list of publications submitted for participation in the contest;
- IS-generated list of co-authors
- certificate of fulfilment of the minimum national requirements and the additional requirements of the Sofia University for professional direction 1.3. Pedagogy of Teaching in...
- reference for noticed citations with a full bibliographic description of the cited and citing publications;
- a reference to the original scientific contributions;
- declarations for participation in scientific projects - 4 pcs.
- official note from UMB
- scientific works submitted for participation in the competition;
- summaries of the scientific publications for participation in the competition (in Bulgarian and English);
- a copy of the competition announcement in the State Gazette.

The documents of Dr Filip Petrov for participation in the competition were prepared in full compliance with the normative documents - laws and regulations.

## 2. Applicant data

Dr Filip Petrov has successively held the academic positions of "Assistant Professor" at the Technical University, Sofia, "Part-Time Assistant Ptofessor" at the South-West University "Neofit Rilski", Blagoevgrad, and from 2015 to today - "Chief Assistant Professor" at Sofia University "Kliment Ohridski".

The professional experience of Dr Petrov also includes his work as a mathematics and information technology teacher and as an operator and web hosting technical support team leader.

Filip Petrov has an acquired educational and scientific degree "Doctor" from the SWU "Neofit Rilski" in "Mathematics Teaching Methodology" (2014), an educational and qualification degree "Master" from SU "Kliment Ohridski" in major "Teaching Technologies in Mathematics and Informatics" (2008), educational qualification "Bachelor" from SU "Kliment Ohridski" majoring in "Applied Mathematics" (2006).

## 3. General characteristics of the scientific works and achievements of the candidate

For participating in the competition for the academic position "Associate Professor" Dr Filip Petrov presented:

- Habilitation Thesis - Monograph "Challenges to Informatics Education in Bulgarian Schools" (2021) (181 p.)
- Monograph "Theory of dialog-learning programs", online (2022)
- 1 co-authored article published in a scientific journal, referenced and indexed in the world-famous database of scientific information Web of Science
- 14 articles and reports published in non-refereed journals with scientific review or in edited collective volumes: 3- independent and 11 - co-authored. Out of a total of 15 articles and reports presented, 8 are in Bulgarian and 7 in English.

The candidate's total number of points from the Minimum National Requirements under group "V" indicators is 100, under "G" is 225, with a minimum number of required points - 200.

*Citation of the candidate's publications:* 6 citations are presented, as follows: 2 - in scientific publications, referenced and indexed in the world-famous scientific information database Web of Science, 1 - in a monograph with scientific review, 3 - in a non-refereed publication with scientific review . The total number of points under indicator "D" is 55, with the minimum required - 50. *The candidate meets the minimum national requirements regarding the group of indicators "V", "G" and "D".*

The applicant's scientific activity in the period 2016-2022 is indicated by 3 participations as a member of the team of university projects, 1 participation as a coordinator in a currently active "Modern-@" project, 1 participation as a university project manager and 1 participation as a researcher in a project financed by the National Innovation Fund.

The scientific fields in which the candidate has worked and continues to work and to which his scientific results are related can be systematized in the following areas:

- The problems of informatics training in Bulgarian schools – V.1.
- History and development of programmed training - G.1.
- Informatics and IT training methods - G.6., G.7., G.12., G.14., G.16.
- Technological means to support learning in mathematics and informatics - G.4., G.5., G.9., G.10., G.11., G.15.,
- Applied aspects and software solutions in various fields - G.2., G.3., G.8., G.13.

*The scientific works of Dr Filip Petrov Petrov, meet the Minimum National Requirements (according to Article 2b, Paragraphs 2 and 3 of Law on the development of the academic staff in the Republic of Bulgaria) for occupying the academic position "Associate Professor" in all indicators.*

*The scientific works presented by the candidate do not repeat those from previous procedures for acquiring a scientific title and academic position;*

*There is no evidence of plagiarism in the scientific works submitted for the competition.*

#### **4. Characteristics and assessment of the candidate's teaching activity**

Dr. Filip Petrov's teaching experience is related to the academic positions he held as "assistant professor", "part-time assistant professor " and "chief assistant professor " in three universities, as well as as a teacher in a profiled high school. More than 10 years of the candidate's teaching experience is related to conducting lectures and exercises on compulsory and elective courses in the field of informatics, information technologies, school courses; directing student practices; courses in postgraduate qualification programs for informatics and IT teacher; academic tutor of Mathematics and Informatics and Mathematics and Informatics Learning Technologies.

#### **5. Content analysis of the candidate's scientific and applied scientific achievements**

The scientific production presented by Dr Petrov for participation in the competition and his scientific and applied scientific contributions can be generally systematized in the following directions:

##### *Scientific-theoretical aspects of informatics training*

- A scientifically based concept was developed for the restructuring of the curricula and the educational content in informatics for the realization of a school course in informatics accessible to students.

Basic theories on the origin and development of programmed learning have been studied and systematized. On this basis, the modern understanding and application of dialogue-training programs is defined, which also has a practical implementation through author's works of the candidate and through his management of student projects.

- Theoretically developed and implemented in practice are various models for the organization of educational courses in informatics with both students and students in the education of informatics and

information technologies. Some of the models are supported by the results of experimental work, which served as a basis for their development and optimization.

*Scientific applied aspects and technological means for teaching mathematics and informatics*

- Various technological solutions have been developed and implemented in practice: software and web-based tools for teaching informatics and mathematics, allowing various methodological solutions for the learning process for students and pupils.

## **6. Critical notes and recommendations**

*I recommend strengthening the publication activity of Dr Petrov in Professional Direction 1.3. Pedagogy of learning in... in publications referenced and indexed in global databases, which would also have a positive impact on the citation of his publications.*

## **7. Personal impressions of the candidate**

## **8. Conclusion on the application**

After having familiarized myself with the materials and scientific works presented in the competition and based on the analysis of their significance and the scientific and scientific-applied contributions contained in them, I confirm that the scientific achievements meet the requirements of Law on the development of the academic staff in the Republic of Bulgaria, the Regulations for its application and the relevant Regulations of Sofia University "St. Kliment Ohridski" for the candidate to occupy the academic position of "Associate Professor" in the scientific field and professional direction of the competition. In particular, the candidate satisfies the minimum national requirements in the professional direction and no plagiarism has been found in the scientific works submitted for the competition. *I give my positive assessment to the application.*

## **II. GENERAL CONCLUSION**

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 Sofia University "St. Kliment Ohridski" to elect Ch. Assistant Prof. Filip Petrov Petrov, PhD to take the academic position "**Associate Professor**" in Professional Direction 1.3. Pedagogy of Training in... (Informatics and IT).

16.11.2022

Prepared the opinion: .....

(Assoc. Prof. Dimitrina Branekova, PhD)