

STATEMENT REPORT

on the competition for the academic position of
“Associate Professor”

In the Scientific field: 1. Pedagogical Sciences

Professional field: 1.3. Pedagogy of learning in ... (Mathematics)

For the needs at the Sofia University “St. Kliment Ohridski”,

Faculty of Mathematics and Informatics (FMI-SU),

Department of Education in Mathematics and Informatics (EMI),

Competition announced in State Gazette no. 87 (of 19.10.2021) and on the websites of FMI and Sofia University

The statement report has been prepared by: Professor **Maya Miteva Stoyanova**, Ph.D., Deputy Dean (Academic staff) of Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”, in my capacity as a Chair of the Scientific Jury for the competition according to Order No RD-38-592 / 10.12.2021 of the Rector of Sofia University “St. Kliment Ohridski” and decision of the Scientific Jury (evident from the Protocol of the first meeting of the scientific jury of the competition, held on 22.12.2021).

The documents of the following candidate:

Chief Assistant Irina Zdravkova Vutova, Ph.D.

(Department of Education in Mathematics and Informatics, Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”) were submitted in time for participation in the announced competition.

I. General description of the procedure and submitted documents

1. Details of the procedure and documents

I received the candidate's documents in electronic format.

The documents submitted by the candidate I. Vutova in accordance with the competition comply with the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria (ADASRB), the Rules for Implementation of the ADAS in the Republic of Bulgaria (RI-ADAS in the RB) and the Rules on the Terms and Requirements for Acquisition of Scientific Degrees and Occupation of Academic Positions at Sofia University.

The candidate Irina Zdravkova Vutova presented a list of 19 titles for participation in the competition, including 2 monographs or books, 3 scientific studies and 14 publications in Bulgarian and foreign scientific forums. All the documents required by the procedure are presented, from which it is evident that with her scientific achievements Chief Assistant Professor Irina Zdravkova Vutova,

Ph.D., meets the minimum national requirements under Art. 2b of ADASRB, for holding the academic position of “Associate Professor” in the professional field and the scientific field of the competition, as well as documents reflecting her teaching experience.

2. Short CV of the applicant

Irina Zdravkova Vutova was born on April 3, 1974. She graduated from the High School of Natural Sciences and Mathematics in Vratsa in 1993, and in 1998 she graduated from the English High School “John the Exarch” in Vratsa. I. Vutova graduated from the Faculty of Mathematics and Informatics of Sofia University “St. Kliment Ohridski” in 1998, obtaining a master's degree in Mathematics and Informatics. In 2000 Irina Vutova also obtained a master's degree in Business Administration from the Faculty of Economics at Sofia University. In the same year she obtained a Master in Economics and Management in International Student Mobility, graduating from Erasmus University, Faculty of Economic Sciences, Rotterdam, the Netherlands. In 2014, under the scientific supervision of Prof. Dr. Ivan Tonov, Assistant Professor Irina Vutova successfully defended a Ph. D. thesis on “Prognostic and heuristic role of theorems in the school course in mathematics” at the Sofia University “St. Kliment Ohridski”, thus acquiring the educational and scientific *degree “Doctor” in Professional Field 1.3. Pedagogy of teaching in ... (Methodology of teaching in mathematics)*. From February 2005 Irina Zdravkova Vutova is a member of the Department of Education of Mathematics and Informatics, FMI, Sofia University. From 2005 to 2011 she was a full-time assistant, and since May 2011 she has held the academic position of Chief Assistant.

3. General characteristics of the applicant's scientific work and achievements

The scientific works with which candidate Irina Vutova participates in the competition have not been used to obtain other scientific degrees and academic positions. The attached reference under Art. 26 of of ADASRB and the list of scientific papers show that the candidate meets the minimum national requirements (under Art. 2b, para. 2 and 3 of of ADASRB) to hold the academic position of “Associate Professor” in the scientific field and professional field of the competition. Irina Vutova's scientific contributions are original and there are no suspicions of plagiarism.

4. Description and evaluation of the candidate`s teaching experience

During the period from October 1998 to January 2005 Irina Vutova was a part-time assistant at the Department of Geometry at the FMI of Sofia University. In parallel, she was a teacher of mathematics at the Miguel de Cervantes High School for Spanish (2000-2002) and the Alphonse de Lamartine French Language High School in Sofia. In the academic year 2009/2010 she was a part-time lecturer in mathematics (in English) at the Department of Foreign Language Teaching at Sofia University. From 2011 to 2017 she was a teacher of mathematics at Doris Tenedi High School, Sofia.

As already noted above, from February 2005 Dr. Irina Zdravkova Vutova has been a member of the Department EMI, FMI, Sofia University. From 2005 to 2011 she was a full-time Assistant, and from May 2011 she has been holding the academic position of Chief Assistant Professor. She has taught Exercises in Analytical Geometry, Linear Algebra and Analytical Geometry, Geometry, Practicum in Mathematics, Methodology of Teaching Mathematics, Current Pedagogical Practice, elective courses at FMI, Sofia University: Introduction to Mathematics, Educational Documentation, Management in Education (in MP “Technologies in the teaching of mathematics and informatics”), as well as a number of classes in Hospitality in mathematics. As far as I am informed, Chief Assistant Professor Irina Vutova, Ph.D., is a respected lecturer.

5. Detailed analysis of the scientific and applied achievements of the candidate contained in the materials submitted for participation in the competition

From the documents of the candidate it can be seen that Chief Assistant Professor Irina Vutova has a total of 46 scientific papers, 7 of which are monographs or books, 3 are studies in scientific journals, 13 are publications in scientific journals, 18 are articles in proceedings of scientific conferences and 5 are textbooks. There is a list of 23 citations of the candidate's scientific results. The research papers presented at the competition are related to the teaching experience of both mathematics' teachers and the university students. The scientific contributions of those works are both theoretical and practical and are in the field of mathematical education, specifically in geometry, entertaining mathematics, mathematics in primary school and history of mathematics. We pay special attention to the required by criterion B monograph “Theorems, analogy, heuristics or theorem - hypothesis - theorem prim” (presented by Irina Vutova) in which she argues that by means of the cognitive methods generalization and analogy theorems can be a “heuristic source” of new (hitherto unknown) mathematical knowledge, including hypotheses and theorems. I accept the contributions presented by the candidate as original and essential for the development of mathematics education at school and university level. Chief Assistant Professor Irina Vutova, Ph.D., has presented her scientific results at various national and international scientific forums. She has been a member of 11 scientific research projects.

6. Critical notes and recommendations

I have no critical remarks about the candidate. I would recommend Chief Assistant Professor Irina Vutova, Ph.D., to be more active in the scientific and administrative work of the Department of “Education in Mathematics and Informatics” at FMI, Sofia University.

7. Personal impression of the applicant

I have known Chief Assistant Professor Irina Vutova, Ph.D., for many years as a colleague at FMI, Sofia University. My observations are that she is hardworking, and professional both in her teaching and research work.

8. Conclusion on the application

Having become acquainted with the documents and scientific papers presented in the competition and on the basis of the analysis of their importance and the scientific and applied contributions contained therein, I **confirm** that the scientific achievements meet the requirements of the ADAS in the Republic of Bulgaria, the Rules for its Implementation and the corresponding Rules at the Sofia University “St. Kliment Ohridski” (FMI-SU) for the occupation by the candidate of the academic position “Associate Professor” in the scientific field and professional field of the competition. In particular, the applicant meets the minimal national requirements in the professional field and no plagiarism has been detected in the scientific papers submitted for the competition.

I give my **positive** opinion to the application.

II. GENERAL CONCLUSION

On the basis of the above said, I **recommend** to the Scientific Jury of the competition to propose to the competent body of choice of the Faculty of Mathematics and Informatics at Sofia University “St. Kliment Ohridski” to select Chief Assistant Professor Irina Zdravkova Vutova, Ph.D., for the academic position “Associate Professor” in professional field: **1.3. Pedagogy of learning in ... (Mathematics)** to the Department of Education in Mathematics and Informatics at the Faculty of Mathematics and Informatics at Sofia University “St. Kliment Ohridski”.

Date: 02.02.2022

Signature:

Prof. Maya Stoyanova, Ph.D.