

ATTITUDE OF REVIWER

**By Svetoslav Ivanov Nenov, PhD
professor at the University of Chemical Technology and Metallurgy - Sofia**

**On the materials submitted for participation in a competition for the academic position
“Associate Professor” of Plovdiv University “Paisii Hilendarski” in scientific area 4.
Natural Sciences, Mathematics and Informatics, professional field 4.6 Informatics and
Computer Science (Algorithms and Data Analysis Models)**

In the competition for “Associate Professor”, announced in the State Gazette, issue 57 of 26.06.2020 and on the website of Plovdiv University “Paisii Hilendarski” for the needs of the Department of Computer Technology at the Faculty of Mathematics and Informatics, applies Senior Assistant Professor Kremena Vasileva Stefanova, PhD from Plovdiv University “Paisii Hilendarski”.

1. General presentation of the procedure and the applicant

By order № P33-4128/25.08.2020 of the Rector of Plovdiv University “Paisii Hilendarski” I have been appointed as a member of the scientific jury in a competition for the academic position “Associate Professor” at Plovdiv University in scientific area 4 Natural Sciences, Mathematics and Informatics, professional field 4.6 Informatics and Computer Science (Algorithms and Data Analysis Models), announced for the needs of the Department of Computer Technology at the Faculty of Mathematics and Informatics.

For participation in the announced competition, documents have been submitted by a single applicant - Senior Assistant Professor Kremena Vasileva Stefanova from Plovdiv University “Paisii Hilendarski”.

The set of materials, deposited for the competition by Senior Assistant Professor Kremena Vasileva Stefanova, is complete and in accordance with the Rules of Development of Academic Staff at Plovdiv University “Paisii Hilendarski”.

Senior Assistant Professor Kremena Stefanova graduated with a Bachelor degree in Mathematics in 2010 and a Master degree in Business Informatics with English in 2011 at the Faculty of Mathematics and Informatics (FMI) of Plovdiv University “Paisii Hilendarski”. In 2012 she was awarded the Education-qualification Degree “Doctor” at FMI of PU in professional field 4.5 Mathematics; Doctoral Program Differential Equations.

The candidate has been a lecturer in Informatics at FMI of Plovdiv University “Paisii Hilendarski” since 2011.

I have no personal impressions of Senior Assistant Professor Kremena Stefanova.

2. General characteristics of the applicant's activities

At FMI Senior Assistant Professor Kremena Stefanova has conducted laboratory seminars in "Introduction to Information Technology", "Information Technology in Mathematics", "Econometrics", "Publishing Systems", "Processing of Digital Images", "Administration of Dynamic Web Systems". She has lectured in "Publishing Systems", "Business Information Systems", "Internet Technology", "Administration of Dynamic Web Systems", "Information Technology on the Internet", "Mathematical Text-processing Programs" and "Data Analysis and Development of Interactive References". Senior Assistant Professor Kremena Stefanova has been an academic mentor to 58 students in the project "Students Practices" of the Ministry of Education and Science, and has 43 successfully defended their thesis graduates at FMI.

For her participation in the competition, she has presented 1 textbook, 3 monographs and 14 publications, of which 12 are in referenced scientific journals and 2 are collections of scientific conferences.

The main research activities of are in the following directions: Computer realization of algorithms for converged methods of differential equations; Computer modelling of discrete neural networks; Architecture and models of business software applications.

Some of the main contributions of the applicant are: computer simulations have been created illustrating the practical application of sufficient conditions for the sustainability of the solutions of discrete impulse neural networks; algorithms and computer realizations (including parallel calculations) have been proposed to solve different kinds of differential equations; a prototype of an e-learning platform has been developed.

Senior Assistant Professor Kremena Stefanova has participated in 7 research projects and 2 national programs. She has taken part in 2 editorial boards, 2 program committees and 3 organizing committees. The applicant has been the scientific and technical secretary of the scientific seminar "Differential equations and applications". She has participated twice with reports in international and national scientific forums with international participation.

The scientific papers presented cover the minimum national requirements for the academic position "Associate Professor".

Of the publications submitted for the competition, 6 are in journals with Impact Factor (total IF: 5.721), and 10 are in journals with SJR (total SJR: 3.593).

A total of 50 citations of the works has been presented, 30 of which are in publications referenced in Scopus and WoS, and 3 are in journals indexed in ZentralBlatt and MathSciNet.

The applicant's contribution to the presented scientific papers is undeniable. No evidence of plagiarism was found.

Critical remarks and recommendations

I have no remarks or recommendations to the candidate.

CONCLUSION

The documents and materials submitted by Senior Assistant Professor Dr. Kremena Stefanova, PhD **comply with all requirements** of the the Development of the Academic Staff in the Republic of Bulgaria Act (DASRBA), the DASRBA Regulation for Implementation, the Development of the Academic Staff at Plovdiv University „Paisii Hilendarski” Regulation and the specific requirements of the Faculty of Mathematics and Informatics for the academic position “Associate Professor”.

The scientific and teaching qualifications of Senior Assistant Professor Kremena Stefanova, PhD are undoubted.

Being acquainted with the materials and scientific papers presented for the competition, having analyzed their significance, the scientific and applied contributions I give a positive assessment and propose to the Scientific Jury to propose to the Faculty Council of the Faculty of Mathematics and Informatics to vote for Senior Assistant Professor Kremena Vasileva Stefanova, PhD to obtain the academic position “Associate Professor” in scientific specialty “Algorithms and models for data analysis”, professional field 4.6 Informatics and computer science, scientific area 4. Natural sciences, Mathematics and Informatics.

20.10.2020 г.

Reviewer:

(Prof. Svetoslav Nenov, PhD)