

ATTITUDE OF REVIEWER

for Assoc. Prof. Dr. Vejdi Ismailov Hasanov

in the competition for acquiring the academic position "Professor" at the Faculty of Mathematics and Informatics at Konstantin Preslavsky University of Shumen, in area of higher education 4. Natural sciences, mathematics and informatics, professional field 4.5. Mathematics (Computational Mathematics), published in Newspaper of State, issue 55, July 12, 2019

Prepared the Attitude of Reviewer: Prof. Dr. Anton Iliev Iliev

By order NoRD-16-090/11.09.2019 of the Rector of Konstantin Preslavsky University of Shumen I am a certain member of the scientific jury in area of higher education 4. Natural Sciences, Mathematics and Informatics, professional field 4.5. Mathematics (Computational Mathematics).

For the participation in the announced competition for "professor" the documents of only one candidate Assoc. Prof. Dr. Vejdi Ismailov Hasanov from FMI at Konstantin Preslavsky University of Shumen were submitted.

I received the necessary documents on paper and on electronic media.

To participate in the "Professor" competition the applicant submitted 12 scientific publications and 3 textbooks. 5 of the articles and the three textbooks are self-contained, while the remaining 7 articles are co-authored.

The papers submitted have been published as follows: 6 in Impact Factor journals (general IF = 5.769 - WoS), of which 2 articles in Q1, 1 article in Q2, 2 articles in Q3 and 1 article in Q4; 4 in SJR journals and 2 articles in other international scientific journals.

The submitted publications and textbooks have been published after acquiring the academic position of "associate professor" by the applicant, which fulfills the requirement within the meaning of the ZRASRB, the Rules for the implementation of the ZRASRB and the Rules of Konstantin Preslavsky University of Shumen for the implementation of the ZRASRB.

Main scientific and scientific-applied results of the applicant:

The candidate has obtained precise and attenuated estimates for solving certain types of matrix equations under certain conditions.

New ones have been obtained, including improving the results of other authors in the field of: perturbation analysis of positive definite solutions of matrix equations - article no. 1; two iterative methods for solving the nonlinear equation $F(x) = 0$, where F is a Frechet defined and differentiable operator on the open subset D of the Banach space X with values in the Banach space Y . The first method is a generalization of the known Newton method for nonlinear scalar equations, and the second is a modification of the first. It is emphasized that, when imposing additional conditions, the cubic

and quadratic speeds of convergence follow, respectively - article No. 2; new weakened sufficient conditions for the existence of a positive definite solution of a class of matrix equations - article no. 3; perturbation estimates for solutions of a certain class of equations stable for a linear positive operator Π - article no. 4; calculating the maximum positive definite solution of the equation $X + \sum_{i=1}^m A_i^* X^{-1} A_i = Q$ - article No. 5; obtaining perturbation estimates for (respectively positive and maximal) particular solution of an equation - articles with No.No. 8 and 9 respectively; extreme solution for a class of matrix equations - article No. 10; necessary and sufficient conditions for existence of positive definite solutions and for existence of a minimum positive definite solution for matrix equation - article no. 11 and comparative analysis with a number of known estimates for classes of matrix equations - article no. 12.

I give a high mark to the results obtained by the candidate. I have not found "plagiarism" in the work of the candidate within the meaning of the ZRAS in the Republic of Bulgaria.

The author's extensive experience and teaching skills are evident from the textbooks presented by the applicant.

The requirements for the number of points by groups of indicators for the occupation of the academic position "Professor" are covered.

Reflection of the work of the applicant:

The candidate submits a list of 327 citations. Many of the citations are in WoS IF journals, which once again speaks to the seriousness of the candidate's research.

Undoubtedly, the results of Assoc. Prof. Dr. Vejdi Khasanov in the field of Computational Mathematics have been evaluated and used by the world scientific community.

Assoc. Prof. Hasanov is the head of 5 research projects and has two PhD students.

The additional requirements of the FMI at Konstantin Preslavsky University of Shumen for the acquisition of the academic position of "Professor" have been fulfilled.

CONCLUSION

Everything that found in my acquaintance with the documents submitted by the applicant gives me reason to claim that they have received sufficient qualitative scientific contributions that have been received and visibly reflected in the international scientific community. The facts stated in the opinion give me complete conviction that Assoc. Prof. Dr. Vejdi Ismailov Hasanov meets the requirements of the ZRASRB, the Regulations for the implementation of the ZRASRB, the Regulations of Konstantin Preslavsky University of Shumen for the application of the ZRASRB for occupation the academic position "Professor".

My conclusion about the occupation of the announced by the competition academic position "Professor" by Assoc. Prof. Dr. Vejdi Ismailov Hasanov is POSITIVE.

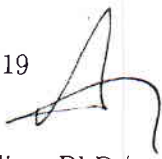
I propose to the Honorable Scientific Jury unanimously to propose to the deeply respected FS of FMI at Konstantin Preslavsky University of Shumen to elect the candidate

Assoc. Prof. Dr. Vejdi Ismailov Hasanov for the academic position of "Professor" in area of higher education 4. Natural sciences, mathematics and informatics, professional field 4.5. Mathematics (Computational Mathematics).

October 31, 2019

Signature:

/Prof. Anton Iliev, PhD/

A handwritten signature in black ink, appearing to be 'Anton Iliev', written over the printed name below.