## **OPINION**

by Angel Atanasov Golev, PhD, professor at the University of Plovdiv "P. Hilendarski"

about the materials submitted for participation in the competition for the academic position "Professor" of Plovdiv University "Paisii Hilendarski" in the field of higher education 4. Natural sciences, mathematics and informatics, professional field 4.5. Mathematics (Mathematical Analysis)

In the competition for "professor", announced in the State Gazette, issue 94 of 12.11.2021 and on the website of Plovdiv University "Paisii Hilendarski" for the needs of the Department of Mathematical Analysis at the Faculty of Mathematics and Informatics, as the only candidate is Assoc. Prof. Hristo Stefanov Kiskinov, PhD, from Plovdiv University "Paisii Hilendarski" ".

## 1. General presentation of the received materials

By order № RD-21-298 / 10.02.2022 of the Rector of Plovdiv University "Paisii Hilendarski" I was appointed a member of the scientific jury of the competition for the academic position "Professor" at Plovdiv University in the field of higher education 4. Natural sciences, mathematics and informatics, professional field 4.5. Mathematics (Mathematical Analysis), announced for the needs of the Department of Mathematical Analysis at the Faculty of Mathematics and Informatics.

For participation in the announced competition, documents have been submitted by a single candidate - Assoc. Prof. Hristo Stefanov Kiskinov, PhD, from Paisii Hilendarski University of Plovdiv.

The set of materials for the competition presented by Assoc. Prof. Hristo Stefanov Kiskinov, PhD, is complete and is in accordance with the Regulations for Development of the Academic Staff of Paisii Hilendarski University of Plovdiv.

To participate in the competition, Assoc. Prof. Hristo Kiskinov has submitted a total of 24 scientific publications and one textbook, not used in previous procedures.

Assoc. Prof. Hristo Kiskinov graduated from Paisii Hilendarski University of Plovdiv in 1988 as a mathematician specializing in computer science. In the Faculty of Mathematics and Informatics of the same university in 2012 he received the PhD degree (4.5. Mathematics, doctoral program Differential Equations).

Assoc. Prof. Hristo Kiskinov, PhD, has been a lecturer at the Faculty of Mathematics and Informatics at Plovdiv University "Paisii Hilendarski" since 1989. He has held the positions of Assistant, Senior Assistant and Chief Assistant. Since 2014 he has been an Associate Professor of Mathematics (Mathematical Analysis) at the Department of Mathematical Analysis of FMI, and since 2019 he has been the head of this department.

I know Hristo Kiskinov for more than 40 years. We have common interests in some areas of informatics and mathematics.

Assoc. Prof. Hristo Kiskinov, PhD, is an established scientist and a specialist in mathematics. He does very well with teaching and administrative activity.

# 2. General characteristic of the applicant's activity

Assoc. Prof. Hristo Kiskinov led the following lecture courses with various specialties in the Faculty of Mathematics and Informatics: "Mathematical Basics of Informatics", "Discrete Mathematics", "Discrete Mathematics in Business", "Discrete Structures", "Theoretical Informatics", "Methods for Translation", "Programming of Post and Turing Machines and Insolvable Algorithmic Problems", "Chaos Theory and Computer Applications". He has led seminars and laboratory exercises in other disciplines: "Operating Systems", "Programming (Fortran)", "Programming (Pascal)", "Programming (Basic)", "Professional Practice in Informatics" and "Information Technologies".

The materials presented to participate in the competition may be divided into the following scientific fields:

- Functional and Real Analysis 7 publications;
- Fractional Differential Equations and Systems with a Delayed Argument 14 publications;
- Mathematical Modeling and Application of Mathematics 3 publications.

The main contributions of the applicant are in the areas of: Impulsive Differential Equations in Banach Spaces; Fixed Points in Uniform Spaces; Abstract Integral Equations in Metric Space; Properties of Conformable Derivatives in Banach Spaces; Properties of the Conformable and Fractional Derivatives; Sufficient Conditions for Existence and Uniqueness of the Solutions of Differential Equations and Systems with Delayed Argument; Models of Monod Type for Bioreactors; Functions of Cumulative Distribution.

The textbook "*Introduction to Discrete Mathematics*" is designed for students studying disciplines "Discrete Mathematics" and "Discrete Structures" for most of the Bachelor's specialties in the FMI and is a result of the long teaching activity of Assoc. Prof. Kiskinov.

The presented scientific works cover the minimum national requirements for the occupation of the academic position "Professor" and respond to the theme of the competition.

From the presented publications, 9 publications have 4 co-authors, 10 have 3 co-authors and 5 have 2 co-authors. The candidate is the only author of the textbook presented. In journals with an impact factor have been published 11 articles. All publications are indexed in at least one of the world's leading databases with specialized scientific information.

Noted are 131 citations, not used in previous procedures, and 66 of them are indexed in Scopus or WOS.

The applicant has 9 participations with reports in international and national scientific forums with international participation.

Assoc. Prof. Kiskinov participated in 6 national and university research or educational projects.

Assoc. Prof. Hristo Kiskinov is a referent for Mathematical Reviews (MatSciNet) with 33 references and Zentralblatt Math with 19 references.

Despite the fact that the publications presented are co-authored, there is no doubt about the applicant's personal involvement and contribution to the applied materials. I have not detected plagiarism data.

### 3. Critical remarks and recommendations

I have no remarks and recommendations to the applicant.

#### **CONCLUSION**

The documents and materials presented by Assoc. Prof. Hristo Stefanov Kiskinov, PhD, **meet all** the requirements of the Academic Development Low in the Republic of Bulgaria (ZRASRB), the Rules for the Implementation of the Low and the Regulations for Development of the Academic Staff of Plovdiv University "Paisii Hilendarski" for holding of the academic position "Professor".

The results achieved by the applicant in the teaching and research activities **fully** correspond to the Additional Requirements of the Faculty of Mathematics and Informatics.

After acquainted with the materials and scientific works presented in the competition, an analysis of their significance and scientific, scientific-applied and applied contributions contained in them, I find it reasonable to give my **positive assessment** and recommend the scientific jury to prepare a report to the faculty Council of the Faculty of Mathematics and Informatics for the selection of Assoc. Prof. Hristo Stefanov Kiskinov, PhD, at the academic position "Professor" at Plovdiv University "Paisii Hilendarski" in field of higher education 4. Natural Sciences, Mathematics and Informatics, professional field 4.5. Mathematics (Mathematical Analysis).

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	(Prof. Angel Golev, PhD)