Opinion

of the scientific works submitted for participation in the competition for occupying the academic position of "Associate Professor", announced by the University of Plovdiv "Paisii Hilendarski" in area in higher education: 4. Natural Sciences, Mathematics and Informatics professional field: 4.6 Informatics and Computer Science (Information Technology on the Internet)

by Prof. **Angel Atanasov Golev**, PhD
Department "Software technologies" of the Faculty of Mathematics and Informatics
at the University of Plovdiv "Paisii Hilendarski"

In the competition for „Associate Professor", announced in the Newspaper of State, issue 39 of 02.05.2023, and on the website of the University of Plovdiv "Paisii Hilendarski", for the needs of the Department of Software Technologies at the Faculty of Mathematics and Informatics, Chief Assistant Professor Hristo Toshkov Hristov, PhD from the University of Plovdiv „Paisii Hilendarski" participates as a candidate.

1. General presentation of the received materials

By order № РД-21-1599 / 31.07.2023 of the Rector of the University of Plovdiv „Paisii Hilendarski", I was appointed as a member of the Scientific Jury of the competition for the occupation of the academic position of „Associate Professor" at the University of Plovdiv in the field of higher education: 4. Natural Sciences, Mathematics and Informatics of professional field: 4.6 Informatics and Computer Science (Information Technology on the Internet), announced for the needs of the Faculty of Mathematics and Informatics.

To participe in the competition, documents have been submitted by only one candidate – Chief Assistant Professor Hristo Toshkov Hristov, PhD, from the University of Plovdiv "Paisii Hilendarski".

The set of materials for the competition presented by Assistant Professor Hristo Hristov, PhD, is complete and is in accordance with the Regulations for the Development of the Academic Staff of the University of Plovdiv "Paisii Hilendarski".

To participate in the competition, Assistant Prof. Hristo Hristov has submitted a total of 14 scientific publications, two utility model registration requests, a book chapter and a handbook, not used in previous academic procedures.

Hristo Hristov obtained his bachelor's (2003) and master's (2005) degree in informatics at the Faculty of Mathematics and Informatics of the "St. Cyril and St. Methodius" University of Veliko Tarnovo. From 2003 to 2008, he worked as an informatics teacher at the "A. S. Popov" School of Electronics, Veliko Tarnovo, and at the The High School of Mathematics and Natural Sciences "Ivan Vazov", Dimitrovgrad. From 2010 to 2020, he held various positions in a private company, dealing with software development and design.

From 2009 to 2011, Hristo Hristov was a PhD student and part-time assistant at the FMI, University of Plovdiv. In 2016, he received the educational and scientific degree PhD (1.3. Peda-

gogy of teaching in ..., doctoral program Methodology of teaching in informatics and information technologies). He has been an assistant professor at FMI, University of Plovdiv since 2011, and since 2017 he has been the chief assistant in Informatics at the Department of Software Technologies at FMI.

I have known Hristo Hristov for more than 10 years as a conscientious teacher and scientist in the field of informatics and methodology of teaching in informatics and IT. He has extensive experience in software development.

2. General characteristics of the applicant's activity

Chief Assistant Professor Hristo Hristov, PhD has taught the following exercises courses at the Faculty of Mathematics and Informatics: Web design; Introduction to Programming 1; Information technology on the Internet; Web technologies; Web Programming 1; Designing, styling and building web pages; Introduction to Object Oriented Programming with Java; Object Oriented Programming; Analysis, design and programming of software applications; Data Structures and Programming; and others. He also leads courses in the master's specialties of FMI.

Assistant Professor Hristo Hristov works actively with students, having more than 20 successfully defended diplomas at the Faculty of Mathematics and Informatics and has 11 scientific publications co-authored with graduates and students.

The materials submitted for participation in the competition can be divided into the following scientific areas:

- Models and methods for designing and implementing software systems on the Internet – 4 publications;
- Design, modeling and inspection of accessible web content on the Internet - 4 publications;
- Management, Automation and Application Technology Models in Local Area Networks and the Internet – 2 publications, 2 utility model requests and a book chapter;
- Analyzes, classifications and applications of technologies and tools for learning on the Internet – 4 publications;
- Textbooks and handbooks – a study guide.

Some of the candidate's main contributions are in the creation of: Learning Content Management Models; Pedagogical pattern instance model and its implementations; Models for developing web content for users with special educational needs; A model of a vending machine communication system; Categorization of network processes subject to automation; Classification of human-computer user interfaces; Application of a system for identification and assessment of problematic educational situations; Concept for building instances of pedagogical patterns through electronic pedagogical objects; A method for designing accessibility in the creation of dynamic web content in web pages, presented through the life cycle of its model; A learning method for teaching technologies for designing and styling responsive web page views and implementing web site events where a software company practice role-play is simulated; A conceptual framework of an e-learning software system based on pedagogical patterns and instances;

Various software applications have been designed and implemented. Experiments have been carried out proving the applicability of the proposed methods and methodologies.

The presented handbook covers the basics of web design and styling web pages with the CSS GRID Layout System. Suitable for teaching pupils, students, and practitioners with a basic knowledge of HTML. The tool is also used in the training of students in the disciplines "Web Design" and "Web Programming 1" at FMI, University of Plovdiv.

The presented scientific works meet the minimum national requirements for the occupation of the academic position "Associate Professor" and correspond to the subject of the competition.

Nine of the publications are indexed in WoS, 9 publications are indexed in Scopus, 6 of which have SJR. Three publications are indexed in IEEE. Nine of the works have been published in journals. A total of 32 citations of all candidate's publications has been noticed and 10 of them are indexed in Scopus or WoS.

Chief Assistant Prof. Hristov was a participant in 9 international, national and university scientific projects and educational projects.

The candidate has participated in 17 international and national conferences with 19 reports.

Despite the fact that the presented publications are co-authored, there is no doubt about the personal participation and contribution of the candidate in the presented materials. I found no evidence of plagiarism.

3. Critical comments and recommendations

I have no comments and recommendations to the candidate.

CONCLUSION

The documents and materials presented by Chief Assistant Professor Hristo Hristov, PhD, in the educational and research activities fully meet the requirements, conditions, and criteria of the Law on the Development of Academic Staff in the Republic of Bulgaria (LDASRB), the Regulations for the Application of the LDASRB, and the Regulations for the Development of the Academic Staff of the University of Plovdiv "Paisii Hilendarski" for occupying the academic position of "Associate Professor".

The results achieved by him in teaching and research fully comply with the specific requirements of the Faculty of Mathematics and Informatics.

After getting acquainted with the materials and scientific works presented in the competition, analyzing their significance and the scientific, scientific-applied and applied contributions contained in them, I find it reasonable to give my **positive conclusion for the election** and to recommend that the highly respectable Scientific Jury, designated for the announced competition, propose to the Honorable Faculty Council of the Faculty of Mathematics and Informatics at the University of Plovdiv „Paisii Hilendarski" to elect Chief Assistant Professor Hristo Toshkov Hristov, PhD for the academic position of „Associate Professor" in field of higher education 4. Natural sciences, Mathematics and Informatics, professional field 4.6. Informatics and Computer Science (Information Technology on the Internet).

29.09.2023   Signature: ....

                                                                                  /Prof. Angel Golev, PhD/